# State of Maine Department of Conservation 

Maine Land Use Regulation Commission

Public Hearing

October 2, 2007 and October 3, 2007

Zoning Petition ZP 709, TransCanada

Held at the Sugarloaf Grand Summit Conference Center Carrabassett Valley, Maine
(The hearing commenced on October 1, 2007 at

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8:46 a.m.)
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THE CHAIR: Good morning, everyone. I guess I have the gavel, it's official, we can start.

We'll get started. I'm sorry we're a little late here. We're trying to get some procedural things taken care of. Are we all set to go, TransCanada?

MS. BROWNE: Yes.
THE CHAIR: All of the intervenors?
MS. PRODAN: Chairman Harvey, it's my understanding that those chairs are available for the attorneys for the intervenors.

THE CHAIR: If they wish. That's up to them, so you can sit wherever you like.

Are you all set, Catherine?
MS. CARROLL: I am.
THE CHAIR: Good morning, ladies and gentlemen. My name is Bart Harvey, and I'm chairman of the Land Use Regulation Commission, and I'll be the presiding officer for the hearing today.

Members of the Commission with us this morning -- and I think there's some more coming later -- Gwen Hilton and Steve Wight, Rebecca Kurtz. I think Steve Schaefer will be joining us later this morning.

In addition to the -- we have Amy Mills, who is our counsel from the attorney general's office; Catherine Carroll, the director of LURC; Scott Rollins; Diana McKenzie, the senior planner who is filling in for Marcia Spencer-Famous, who is not able to be with us today; Melissa Macaluso, who is somewhere here making all the arrangements; and our court reporter today is, Lisa Fitzgerald. And I assume, given the look of the crowd here, you all ought to know these people by now, you've been here enough to do this.

Today's hearing is being the held pursuant to the provisions of Title 12 MRSA , Section $685-A$, and the hearing will be conducted in accordance with Chapter 5 of the Commission's rules for the conduct of public hearings.

The hearing is being conducted to receive public testimony in the matter of Zoning Petition ZP 709 submitted by TransCanada, Maine Wind Development, Inc., to rezone 2908 acres in Kibby and Skinner Townships, Franklin County, from a mountain area protection subdistrict to a planned development subdistrict to develop a wind power facility.

Within the planned development subdistrict, the wind power facility would include 44 turbines on the south side of Kibby Mountain and the Kibby Range, access roads, and utility lines.

Outside of the planned development subdistrict in Kibby Township, the wind power facility would include access
roads, utility lines, a substation, and a maintenance and operations building.

The 115-kV transmission would be located in Kibby, Jim Pond, Wyman Township, as well as organized towns of Eustis and Carrabassett Valley, and would connect to the grid at the Bigelow substation.

The purpose of today's hearing is to allow the petitioner, intervenors, and government agencies to present summaries of their prefiled direct testimony and evidence to whether the development proposal meets the criteria for amendment to land use boundaries as specified in Title 12 MRSA, Section 685-(8)-A of the Commission's statute and the relevant provisions of the Commission's Land Use Districts and Standards.

We will first hear from the Commission staff, who will provide a brief overview of the proposal and administrative history. We'll then ask the petitioner to provide a summary of the proposal in their prefiled testimony.

Following the petitioner, the intervenors and interested parties will present summaries of their prefiled testimony.

The State soil scientist and representative of the Maine Public Utilities Commission and the Maine Department of Inland Fisheries \& Wildife will be available to answer questions about their review comments.

At the conclusion of the testimony from each witness, cross-examination may be conducted by the Commission, its staff, by the petitioner, and by the intervenors. Commission and staff members and counsel for the Commission may ask questions at any time.

Before the testimony is presented, anyone requesting time for rebuttal at the end of the hearing should indicate their wish to do so and the request will be taken under consideration as the hearing proceeds.

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

In addition to being transcribed, we will be recording the proceedings, so I would request obviously you have to use microphones and speak clearly so that we can all hear you.

Just to remind you, all questions and testimony must be relevant to the Commission's criteria for rezoning and criteria for approval of the project. Irrelevant and unduly repetitious material will be excluded.

The record for this hearing is going to remain open for ten days for written comments for the parties until

October 15 and for an additional seven days, until October 22 nd for rebuttal, or as determined by the presiding officer, if we need to change that after we do this.

Written public comments will be entered into the record until October 22 nd. After that no additional evidence or testimony will be allowed.

If you wish to receive a copy of the final action taken by the Commission as a result of this hearing, you can leave your name and address with our staff.

I'm going to swear -- I'm going to -- we'll swear all the witnesses in today. We've got a couple of procedural things to do, so I think I'll wait for the swearing until we've got those taken care of.

I'm going to ask Catherine to give a summary of the administrative history of the project and to offer the exhibits that we have, at least as of this time, for the record.

MS. CARROLL: For purposes of the record, I'm going to provide a distilled version of an administrative history, a four-page administrative history. I'm going to make this a lot quicker and less painful for everyone.

I have available copies, extra copies, of the hearing schedule, and this staff statement, this four-page staff statement, in which I'm not going to read in its entirety, and I also have extra copies of the exhibits listed. Anyone who cares to get those, they can grab copies from Diana down here
on my left.
Zoning Petition ZP 70 and preliminary development plan for the Kibby wind power project. On April 13, 2007, TransCanada, Maine Wind Development, Inc. -- also known as TransCanada -- which is a wholly owned subsidiary of TransCanada Corporation, submitted a petition to rezone approximately 2900 acres in two parcels on Kibby Mountain and Kibby Range in Kibby Township and Skinner Township, Franklin County from a mountain area protection subdistrict and a general management subdistrict to planned development subdistrict for the purpose of constructing the 132-megawatt Kibby wind power project.

The petition to rezone included a preliminary development plan for the construction of 44 wind turbines, 17.4 miles of new gravel access roads, 19 miles of upgrades of existing roads, $34.5-\mathrm{kV}$ transmission lines connecting the turbines at the proposed Kibby substation, 27.7 miles of above-ground 115-kV transmission line, and associated facilities and activities.

Each turbine tower would be 263 feet tall with an additional 147 feet to the tip of the rotor blade for a total height of 410 feet.

A portion of the $115-k V$ transmission line associated with the project would be in the organized Towns of Eustis and Carrabassett Valley.

The permit application for this portion of the line is being reviewed by the Maine Department of Environmental Protection and the Towns of Eustis and Carrabassett Valley and is not included in the review by the Commission.

During construction approximately 218 acres would be cleared above 2700 feet in elevation. After construction approximately 29.4 acres above 2700 feet in elevation would remain unvegetated.

The total area of proposed wetlands impact, temporary plus permanent, within this planned development subdistrict would be approximately 1.6 acres. For the transmission line, the total area of conversion of PWL-3 to PWL-1 and PWL-2 would be 38.17 acres.

The matter being considered at this time is the rezoning of the parcel on Kibby Mountain and Kibby Range and the associated preliminary development plan. A final development plan and the intended permit to construct the facility would be considered only if the rezoning is approved.

Exhibit Nos. 1 to 14 are submitted to the file.
Again, you can all reference the list of exhibits dated September 29th, '07, in which we have extra copies. This staff statement, the four-page version, is -- has been submitted as Exhibit 9 into the public hearing record; is that correct --

Thank you.
THE CHAIR: Thank you, Catherine. Now, before we get
started with the presentation of TransCanada, we've got a couple of procedural things to deal with. One is obviously -I think all the parties are aware we had some objections raised concerning the conservation packages that were part of the proposal and the contribution being made to the Town of Eustis.

I guess that we would -- to dispose of that before we get started, so everybody knows where we are, and I guess that since I would ask the chief objector, who is Ms. Prodan, to make a few brief comments on her concerns; and then allow Juliet to make her rebuttal.

How is that? And I'll make a ruling on that one.
MS. PRODAN: The concern of Friends of the Boundary Mountains was simply that it did not seem to us that the compensation package, the conservation package, and the community benefits packages, there didn't seem to be any criteria applicable to even taking them up during the hearing. Although there certainly is some interesting information in there, $I$ don't think that a lot of time should be spent on it, but it's really up to the Commission whether they want to hear -- I mean, we're not going to continue with our objection if the commissioners do want to hear a lot of information on that. We would just want to be able to also cross-examine on that if that is discussed.

We still don't think it's particularly relevant to your decision.

THE CHAIR: Thank you, Pam. Juliet.
MS. BROWNE: Thank you, Chairman Harvey. We agree that we don't intend to spend a lot of time on this issue. There are obviously other issues that are more central to your decision making process, but it is part and parcel of the project, and I think it's important that the applicant be entitled to provide the full picture of the project.

You oftentimes hear about the economic benefits of the package, the tax payments, and the post-benefit package is in line with those types of economic benefits of the project, which I think are important, and I don't think that each piece of the project has to be narrowly tailored to a specific review criteria.

There are also -- there's a piece of the conservation package that involves not developing some of the ridgelines in the immediate area of the project, and that actually does directly go to the best reasonably available site criteria. So that's one piece that can be pretty narrowly tailored to a specific review criteria.

But again, $I$ don't think the Commission has to do that with every piece of information that comes before it. A project is a project in its entirety, and I think the Commission's entitled to hear the full range of components of the project. Again, we have limited time, so we don't intend to spend much time talking about it either.

THE CHAIR: Thank you. Any of the other intervenors have something to say on this? Okay. Very good. My turn, I guess, isn't it.

I think -- we've obviously had some discussion with the attorney, our attorney, but I think we're going to -- the way I think we should proceed is we're going to -- obviously all this information is in the testimony at this point, so we're going to allow it to remain in the record.

I think it's our view that it's probably marginally relevant to our review criteria and that we will view it in that context. So we'll leave it at that and with hope that we don't spend hours talking about it, if I could offer some advice to both parties, okay? We want other issues that are very relevant to our criteria as you're all aware. We need to hear about those.

Now, the second issue, we're going to, I guess, do something a little different here and we want you to know about it before we start with the rest of the hearing is that we're -- I'll ask that the parties -- and that all parties -at the conclusion of the hearing, we're going to ask that you be -- provide us, LURC, with your version of the findings of fact in the case and cite. These should be as specific as you can make them with citations to the record, so that you tell us why you think what the facts are and what evidence supports those facts.

Now, we probably -- my toe is being stepped on here, just a minute -- I have some very specific words I have to say.

I have some very specific words I have to say.
Basically what I've been mumbling about is that we need you to do proposed findings of facts and rulings of law. How's that. All you lawyers know exactly what that means.

This will allow us then to move forward in the decision making process. I don't think we've done this before, but these cases are getting very large and will help us work our way through the huge pile of evidence that we have before us.

I believe that basically -- obviously you can't begin to do this until the hearing closes, and we're probably going to give you four weeks as a matter of time unless I hear some huge objections from everybody, it would give you about a month from the date the record closes to submit these findings of fact.

You don't -- I wouldn't ask you to respond to that right now, but if you want to think about that in the course of the hearing, we can talk about that later. We did want you to be aware that we were going to try this approach before we started.

I think we'll leave it at that for now. I will be willing, time issues, if you want to suggest different timing to me, you can.

With that I guess we need to move to swearing in of witnesses.

MS. PRODAN: There was the local interests. Because testimony of the local interests was only provided to the intervenors a couple of days ago, it was mentioned that if we wanted to cross-examine Mr. Wyman, that we make it known at the beginning of the hearing. His panel -- he's on this afternoon. Friends of the Boundary Mountains would request five minutes for him.

The other thing I wanted to mention in regard to the timing today is that although the table one in the hearing schedule dictates the Friends of the Boundary Mountains has 150 minutes to cross-examine TransCanada, if you look in the narrative, it actually says we have from 11:10 to -- I better look at it myself. It only adds up to a shorter amount of time. It's 60 minutes in the morning 11:10 to 12:10, and then from 12:40 to 1:50 in the afternoon, it says 90 minutes, but that only adds up to 70 minutes.

Just so that you're aware, we really don't have 150 minutes today, we only have 130. So we hope there's some tolerance there.

THE CHAIR: You're not going to use all that any way, are you, Pam?

MS. PRODAN: I have a lot of questions. THE CHAIR: All right. Yes, Juliet.

MS. BROWNE: Just a couple of housekeeping matters.

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One of our witnesses, Dr. Colgan, has to leave to teach a
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class, so if possible, if we could do any cross-examination of
him at the beginning so that he could leave at the lunch break,
I know he would greatly appreciate that.

THE CHAIR: I would assume we could accommodate that request. We'll let Ms. Prodan -- is that okay? MS. PRODAN: Yes.

MS. BROWNE: Thank you. Then also I just want to make clear, we had requested an opportunity to cross-examine any agency witness who provides comments, and it's not actually reflected in the schedule, and we would just request a reasonable opportunity to question the two -- Mitch Tannenbaum and Dave Rocque.

THE CHAIR: The plan was that they're going to be here to do that, so if it's not in the schedule, it should have been. That just -- how much time are you willing to give up?

MS. BROWNE: I'll only take a half hour.
THE CHAIR: They're going to be here and be available. If they're not in the schedule, we'll get that corrected.

MS. CARROLL: Available for questioning tomorrow afternoon.

THE CHAIR: Tomorrow afternoon was the plan. MS. CARROLL: The Commission has 15 minutes to
question and Friends of the Boundary Mountains has 50 minutes and TransCanada is not on there.

THE CHAIR: They didn't request time to ask any questions, is that true? I can't speak for Marcia.

MS. BROWNE: No, my letter requested an opportunity to question. We didn't ask a specific amount of time because we weren't clear on how much time --

THE CHAIR: We'll figure something out for you, don't worry.

Anybody else?
I hope that those of you, for some reason you don't get sworn in and you come -- if the attorneys will help me keep an eye on it, we've had people that did come that didn't get sworn in, you'll remind us to do that.
(Witnesses were sworn en masse.)
THE CHAIR: With that, TransCanada you're on.
We're just -- keeping track of time, Juliet, between 10:30 and quarter of 11, you'll probably be wrapping up with this panel, is that true, an hour and a half?

MS. BROWNE: 95 minutes I believe.
THE CHAIR: I don't know how you got five minutes. MS. BROWNE: For a brief opening statement perhaps. THE CHAIR: Okay.

MS. BROWNE: Thank you, Chairman Harvey and members of the Commission and LURC staff. My name is Juliet Browne,
and on behalf of the entire TransCanada and Kibby project team, I want to express our appreciation for the opportunity to be here today and talk about the project and answer questions.

The Commission, as you know, are painfully aware, probably, has received a substantial amount of information on wind power generally over the last really two years.

On more than one occasion you heard from
Chairman Adams from the Maine PUC, you've heard from Commissioner Littell from the DEP, you've heard from John Kerry, and before him Beth Nagusky from the Office of Energy Independence and Security.

Each of them, without exception, has stated that there is a need for wind power in Maine and that there are real energy and environmental benefits that result from wind power in Maine. So because the agencies are tasked with implementing the State's broader energy and environmental policies have spoken to these issues, our presentation today is not going to focus on them.

That's not to suggest in any way that they're unimportant. We believe they're critically important. But as you're aware, your task is probably the more difficult task, which is to decide whether a particular project in a particular location is appropriate and whether it meets your governing criteria.

I think it's worth stepping back for a minute and
looking at what those criteria are. Just walking in today, there's a sign that says, No Development Above 2700 Feet, It's the Law.

Well, with all due respect, that's not what the CLUP states. The CLUP specifically acknowledges the potential for development of wind power and development of wind power in areas above 2700 feet.

It specifically states -- and I believe it's on Page 40 of the CLUP -- that the wind resources are significant and that much of it occurs along high mountaintops and ridges.

It also acknowledges the balancing that must occur between allowing development and harnessing of that resource and the potential to conflict with the values protected by the P-MA zone.

It goes on on Page 58 and 59 of the CLUP to specifically address how to manage that balancing. It identifies a regulatory process for allowing a rezoning from a P-MA zone to a D-PD zone, which is why we're here today and the process that we're talking about.

Interestingly and importantly, as part of that rezoning of areas above 2700 feet, the CLUP identifies four principal factors to consider because they are potentially at risk for the rezoning of a P-MA area: Visual, soils, wildlife, and technical feasibility.

So you will hear from our panelists today on these
four topics, and we've presented in our prefiled testimony information relating to these four topics.

I think what you will hear is that while no site is without constraints, while no project is without impacts, the Kibby site is an excellent site for wind power development, and TransCanada has spent the time and the effort to understand the resources of the site, the constraints of the site, and to develop a project that takes into account those resources and constraints; and is consistent with your governing criteria, it minimizes environmental impacts, it's technically feasible, and that will advance the State's broader energy and environmental goals.

So mindful of our 95 minutes, I appreciate the opportunity to just provide some of this context information, and I'm going to turn it over to Terry Bennett. Our panelists will introduce themselves as they go along, and not every panelist is making a presentation in the interest of time, but they're all obviously available for cross-examination. Thanks.

MR. BENNETT: Good morning, Mr. Chairman, commissioners, Catherine. My name is Terry Bennett and I'm the director of wind energy at TransCanada.

Let me first of all acknowledge the effort and hard work of the Commission. We know it's been a very busy year for you. On behalf of TransCanada I would like to thank you for your time and attention to our project this morning.

I'm responsible for looking after TransCanada's wind development efforts, both here in the US and up in Canada. Over the two and one-half years we've looked at something close to a hundred wind projects, the furthest down in Arizona, New Mexico, California, Oregon, Washington through the Dakotas, Wyoming, and up here in the northeast.

Of all those projects, $I$ would rate Kibby at the very top of the list in terms of its potential. Kibby is an optimal combination of wind resource, site, region, and market. Given that potential, our goal of Kibby is to build a project that all of Maine, but in particular this part of the state, can be proud of and that demonstrates that doing the right thing for the environment can be done without sacrificing one's core values.

One point I would like to stress at the outset is that we do a very conservative approach in our designs and assumptions. We are therefore confident we can deliver on these numbers, and there's still room for optimization later during the final design state. We think this is a more prudent approach than to have a very aggressive design at the outset.

I guess it's been just a little over two years since we were last in front of you for a Mets application, so let me spend a minute reintroducing you to TransCanada.

We are, as the slide says, a major energy construction company focusing on pipelines and power
generation. We have approximately 25 billion in assets, we have an A credit rating reflecting our strong financial position. Importantly, a majority of these assets are regulated federally, either by the FERC here in the US or the National Energy Board up in Canada.

With regulated cost of service assets, our financial strength is also durable and more stable than most countries. We have over 50 years of experience building energy projects at TransCanada, here in North America, and around the globe. Corey Goulet, who most of you have met during the site visit, is our vice president of energy projects in charge of construction of all of our power projects, including the six wind projects we're building in Quebec.

Corey's involvement early in the project guarantees continuity from development through to implementation.

TransCanada has been active in New England since the late 1980s and it is the base of our power generation business here in the US. As some of you know, we own Portland's natural gas pipeline, the Iroquois natural gas pipeline. As well, we have over 500 megawatts of hydro facilities on the Deerfield and Connecticut river systems. Less well known, the Ocean State Power Plant is the project that TransCanada built and still owns and operates. Ocean State was the very first independent power project in the United States. We also have a marketing office just outside of Boston.

New England is a good region for wind as well because of the depth of the New England power market and the availability of renewable energy certificates.

So why are we in Maine? We are here because it has the best wind resources in New England, and of course wind is the single most important variable for a wind project. Wind drives energy production, and all the benefits from a wind project flow from energy production.

Throughout this the developer benefits from energy sales, the sales of the RECs, and the BTGs. We don't get any of those benefits unless the wind project runs and spins. For society, those benefits include the displacement of emissions also only happening if the turbines are running.

From LURC's perspective, the strong wind resource has two important benefits: The first is a reduced environmental footprint, the second is a lower cost of energy. That lower cost of energy means a more viable project less vulnerable to changes in capital costs, energy prices, or the price of RECs.

Given the importance of the wind resource,
TransCanada has decided to share the Garrad Hassan report in our application to provide third-party expert verification of the wind resource.

I'll turn things over now to Nick Di domenico, the project manager at Kibby, to talk about the wind resource and the G. H. report.

MR. Di DOMENICO: Good morning. Garrad Hassan was retained by TransCanada --

THE CHAIR: Just introduce yourself for Lisa, please. MR. Di DOMENICO: My name is Nick Di domenico and I'm the project manager on the business development side with TransCanada Energy.

Garrad Hassan is probably the preeminent firm in this field. They're been around since the '80s. We work closely with Garrad Hassan on all of our Quebec projects. We're quite familiar with how they undertake energy yield assessments.

We retained Garrad Hassan early on in the due diligence phase of the project back in the middle of 2004. We asked them to go through the previous Kenetech file and advise as to what the likely nature of the wind resource would be at this site given the historical wind record.

Post -- the diligence period, they also advised on the wind measurement regime, so they advised on the number of towers and location of the towers. As you're aware, we installed three towers that measured wind; and finally, they were retained to undertake an energy yield assessment that was filed with this Commission as part of the file.

This is a slide many of you have seen numerous times before. It's a wind map of New England pulled off the web. The project area is in the boundary mountains in the vicinity of the Quebec border. What's interesting is when you actually
go on-line, you can click on the project area and up it comes.
What is very clear is Kibby Range, the inverted wishbone shows up. Kibby Mountain, with the tip of Kibby Mountain being darker. The areas not developed, basically the C and D ranges, Sugarloaf as well. What's also interesting about this slide is the generally north/south line of the ridges, and those are important just given the wind rose. What these are wind roses from the two Met maps -- three Met maps at the site, and what they show is the wind is predominantly from the northwest. Not only is the wind predominant from the northwest, but the strongest winds are from the northwest.

In an idea wind site, what you would have is winds at right angles to the ridgelines, if you will. So if you had a north/south ridgeline, you would want the winds constantly from the west. This is as good as I've seen a wind rose relative to a ridge alignment.

What this slide shows you is basically the power curve for the Vestas V90, and that's the top curb. The bottom curb is the General Electric 1.5sle. This type of turbine that was used at Mars Hill, it's proposed for Stetson, and what the slide shows is that wind speeds are important.

If you look at the range of wind speeds between 7 and 9 meters a second, and that's where you'll generally find average wind speeds for most sites in North America, the slopes are very steep, so there are very small increases in average
wind speeds result in significantly greater increases in energy.

A reason that's important is when you compare the Kibby site to a site that's 7.5 meters a second using a 1.5-megawatt machine, the comparison here is Stetson. The only reason it's Stetson, it's something that the LURC is aware of, it's an application currently before it. What you see is that Kibby, on a per-turbine basis, was twice as energetic as Stetson.

The reason that's important is that it reduces the size of the footprint. Putting this another way is that to produce the same amount of energy at Kibby [sic] with 8.5 meters a second, you need 88 turbines, or 1.5-megawatt basis, versus the 44 at Kibby. Smaller footprint, smaller environmental impact.

In brief, the Garrad Hassan report basically found that each of the Met towers, the long-term average wind speed were 8.5 meters per second, 10.1 , and 8.9 respectively; it found an average wind speed across all of the 44 turbine locations of 8.5 meters per second; and it concluded that the average annual energy production for a 44-turbine layout net of all losses would be 355,000 megawatt hours per year.

With that I'll turn it back to Terry.
MR. BENNETT: TransCanada acquired the rights to the Kibby site after a nine-month due diligence review in late 2004
and early 2005. We conducted a thorough review of the file of the Kenetech project pictured here. As you can see, Kenetech was a much more expansive project, involving over 600 turbines, 26 miles, and along eight ridgelines, which was permitted in 1994 I believe.

Let me stress that we do not believe for an instant that because the Kenetech proposal was permitted that we believe Kibby is somehow automatically approved. Quite to the contrary. We fully appreciate that Kibby must meet all the requirements of this Commission on its own merits, and we have put in the time, resources, and effort to the that.

The fact that the Kenetech project was encouraging, though, because it indicated that the site was permitable and had local support. More importantly, the wind studies show the strong resource, and the environmental studies revealed no critical issues at the site.

As part of our review, we also met with stakeholders in Maine, including the LURC staff, the PUC, environmental groups, locate authorities. We were encouraged enough by the feedback we heard to proceed with the project. We also carefully reviewed the alternative site analysis conducted by Kenetech back in the early 1990s. Don't forget, at that time they had virtually the pick of their choice of sites across Maine, and they picked Kibby as the No. 1 site. That alternative site analysis was confirmed by TransCanada in its

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own macro review of the state and New England.
    We looked at mesomaps showing that -- Nick just
indicated -- showing the wind speeds across Maine and
New England approximately transmission and other issues that go
to the feasibility and viability of a wind project and
concluded that Kibby was indeed one of the best sites in Maine.
    We've had an open and cooperative effort with the
environmental groups, as stated, Town officials and all
stakeholders involved in the Kibby project. Consultations with
these groups have resulted in site impact minimization, and
Lynn Gresock will talk about that later this morning.
    Also because of these talks, we were able to reach a
conservation agreement. Under that agreement we committed not
to develop two of the four ridgelines that we have exclusive
wind rights to and to develop only the lower portion of Kibby
Mountain as you see depicted here, so the crosshatched sections
in green are the ones where we have foregone our rights, our
exclusive wind rights, up on the Kibby site.
We did that because of the higher environmental
values of those ridgelines and the greater impact from
construction that we would expect, given the steeper slopes
there. This was done despite the higher expected wind speeds
along those ridgelines.
We also agreed to contribute funds to help fund a conservation program on high recreational values in the
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Mahoosuc Mountain Range. I'll point out that this area is the one chosen by environmental groups and not by TransCanada, and I understand it's part of a larger package the State is pursuing.

We have worked cooperatively with the local communities of Eustis/Stratton from the beginning. TransCanada believes strongly that the community closest to the project should benefit directly from it. As discussed earlier, though not required under the CLUP, a community benefit package does go to the heart of the issue of community acceptance.

This package is in line with our wind projects that we developed in Quebec in keeping with our overall corporate philosophy of going beyond the minimum necessary and establish TransCanada's name in the Maine community as a company that wants to contribute positively to Maine.

Beyond those packages, the Kibby project provides other benefits, including property taxes, which are estimated to be over $\$ 1$ million per year, making Kibby the single largest taxpayer in the region. There's also economic spinoffs from the construction and operation of the project, and those are detailed in Dr. Colgan's report, which we commissioned to specifically look at the site at Kibby.

TransCanada has a hire local policy, and I'm happy to say that in our wind projects in Quebec, we have exceeded by a far margin our expectations in that regard. Corey has already
been down to Eustis and met with local contractors to discuss project schedule and contractor qualifications.

All of these factors mean the Kibby project will provide direct and meaningful benefits to the local community, benefits beyond the wider environmental benefit of a clean renewable source of energy.

Let me conclude by saying Maine has set high standards for the development and approval of wind projects. We believe we have met or exceeded those standards as evidenced in our application as we will demonstrate to you over the next two days.

Thank you.
MS. GRESOCK: My name is Lynn Gresock. I'm from AMEC Earth \& Environmental. I've been responsible for managing consulting on this project. I'll talk about a little bit about the project and how the project came to be in this location. Let's just step back for a few moments to understand the site and its context.

The site is located within the boundary mountains in western, not far from the Quebec border. This is a fairly busy graphic, but it shows where the overall project is in relation to the site and surroundings. You can see the two general ridgeline areas, Series A on Kibby Mountain, and Series B on Kibby Range.

You can also see the $27.6-m i l e ~ 115-k V$ transmission
line. This is the area that co-located with the Boralex right-of-way, and then there's a small area along Route 27 that is underground to receive from Bigelow substation. For orientation purposes, here is Route 27 , and here is the border with Quebec.

On this particular map, the gold areas that are highlighted are Tribal lands in the surrounding areas. The areas that are shown in green are areas that were identified as Park Preserves or Conservation land. This particular map also shows peaks in the area, which are the small triangles shown on the map. You can see that there are a number of high-mountain areas in the vicinity. You can also see that the northwest portion of Kibby Mountain, which is the tallest portion of our project ridgeline showing an elevation of 3638 feet, is not actually proposed for development.

Kibby Range shows a peak elevation of 3387 feet, but the turbines actually proposed on Kibby Mountain, which is our A series, and on Kibby Range, which is our $B$ series, range in elevation 2507 to elevation 3210.

Putting the site further into context, this map shows the project location relative to the LURC jurisdiction, LURC jurisdiction being shown in green. You can see from this map that the site is approximate to Route 27 , which is a major State route through the area.

This overlay shows locations within 10 miles of major
roads, and major roads are defined as federal or State highways. The Kibby project turbines, of course, range in distance from Route 27, with the closest turbine being 1.2 miles away, and the one that is most distant, at about 7.7 miles. You can see 201 is here, located about 20 miles to the northeast and that those two highways somewhat frame the site. This next map shows locations that are within 10 miles of incorporated area. Eustis is the closest incorporated Town to the project. The Town line is about 7 miles away, with Eustis Village about 9 miles and Stratton about 14 miles' distance.

There are also several areas in the vicinity that aren't necessarily incorporated. This overlay shows locations within 15 miles of sensitive survey tracks with a population density of greater than 5 people per acre.

You can see that when all of this information is overlaid on the map of Maine, the Kibby wind power project is located in an area of LURC jurisdiction that is relatively close to major roads, it's relatively close to incorporated settled areas, and that there is an area of the LURC jurisdiction that is further away from such features.

Although remoteness is a relatively subjective term, this overlay provides a sense of overall context for the site and the setting.

This next slide shows a closer view of the site and
the setting. Here is Route 27, with the Sarampus Falls rest area shown just at the end of the image.

From Route 27 this property has a number of well maintained forest management roads that are used not only by those who work on the property, but by others who are traveling through or to the area.

Gold Brook Road is the major road through the area, and it tends to appear on maps, such as the DeLorme Atlas, and even in some road maps of Maine.

Other roads at the site, such as Wahl Road, Hawk Road, and Spencer Road also provide good access through the area. The project has the ability to take advantage of existing roads for turbine access to a great extent.

Let's look at the two series one at a time so we can see them better. The B series is the closest to Route 27 and has two access points. The primary access is off an unnamed road directly off of Gold Brook Road. A secondary access will be off the Wall Road, it goes around the side there.

The green on this map illustrates the various proposed project elements. For the $B$ series the project includes a total of 27 turbines. Along the B Series turbine elevations range from elevation 2507 to 3210 , which is the project's highest turbine elevation, with only four turbine locations located above elevation 3000. In fact, seven of the turbines are located at elevations less than 2700 feet.

Access for the A Series is off of Gold Brook Road further north. There are two primary access roads to the A Series turbine site. Several of the turbines can be directly off of Spencer Bale Road here.

The other access to the $A$ series is an unnamed road directly off the Gold Brook Road. Again, the green areas show the proposed new work. In the A Series there are a total of 17 turbines with elevations ranging from 2511 to 3134 feet. Of those, six turbines are above elevation 3000 and five of them are at below 2700 feet.

The higher elevation portion for Kibby Mountain that are further north are not going to be proposed for turbine installation. You can see, the Town line -- you can see that the majority of the project is located in Kibby Township, with just a couple of turbines located in Skinner Township.

About 17.4 miles of new road construction is proposed. About 12.8 miles are associated with ridgeline access and roads between turbines at elevations above 2700 feet, with the remainder at lower elevations.

The other green areas that you can almost see on this map are reflecting various work areas, such as the Kibby substation, the proposed construction management center, which will become the permanent service center, and various laydown and work areas.

The site is private property and active forest
management land. Even this particular base map, which was shown by the property owner in 2005, shows extensive timber harvesting. This is definitely an ongoing activity at the site, and the level of commercial harvesting, both harvesting at the site and using the roadways through the site, has certainly been evidenced by the staff that we've had up there conducting field investigations over the last three years.

This map is a Google Earth image from 2006. It's a little bit more precise and it continues to show the active use of the property for forestry.

The current owner allows open access by the public with certain restrictions. Although the project area isn't mapped as being within Park Preserves or Conservation Land, as you were shown in the first slide, we are certainly aware that most undeveloped areas within Maine have some level of recreational use.

Because we felt it was important to better understand the anticipated levels and types of use, as well as to get some sense as to whether the project could be compatible with that ongoing use, TransCanada undertook two different types of recreational assessments.

The first focused on questions to local community residents and business owners, as well as some identified organization. As indicated in Tobey Williamson's testimony, his anecdotal survey involved conversations with 24 local
business representatives in Eustis/Stratton, 20 local contacts known to use the general area for recreational purposes, six governmental and nonprofit organizations, people who had contacted the project's toll free number, and referrals from those originally identified for participation in the survey. The conversations all used a consistent set of questions, and the results characterized the area as moderately used for recreational purposes. The most frequently mentioned uses of the general area -- and this is more broad than the project site itself -- were hunting, snowmobiling, fishing, hiking, off-road vehicle use, camping, and sporting camps. We were pleased to find that most people surveyed felt that the presence of a wind project in the area would have low or very low impact to those ongoing uses.

The second type of recreational survey was more formal and focused on the site itself and uses occurring there. Recreational uses and attitudes towards the proposed wind project were generally consistent with the information gathered from the local contact survey. One of the interesting things we found was related to the traffic on the roads near the turbine layouts.

When we conducted our on-site surveys, we used traffic counting tubes to the determine the level of use of Gold Brook Road and spot surveys to not only determine what types of vehicles were passing through the area, but where they
were going and why.
We were impressed by the amount of non logging traffic currently using Gold Brook Road and at the number of travelers using that road as a cut-through for destinations further north. This use survey left us with a sense that the project is much more heavily travelled by the local population than we would have guessed based on the level of active forest management at the site.

The Kibby wind power project is well suited for this site, and this site is well suited for a wind project. The roads associated with the project will be similar in character to the existing Gold Brook Road; the turbines will occupy a small portion of forest management land within the existing property.

The property owner will be compensated for the acreage used by the project under existing development agreements, and the project will coordinate with the landowner during construction so that ongoing forest management can continue with as little interference as possible.

Once the turbines are erected, very little daily activity will be associated with the project and very little impacts will be felt by the traditional working forest used at the site. The presence of the project at the site will also not result in any new restrictions and existing uses by others allowed by the landowner except for the fenced area around the

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substation.
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Noise modelling that has been completed shows very low levels of sound at the nearest residential receptor, which is 1.2 miles away. The noise modelling contours provided in the application indicate that sound levels drop off very quickly surrounding the turbines and continue to reduce significantly with distance. Jean Vissering will talk a little bit later about visual impact analyses that have been to demonstrate that views from public locations will be extremely limited.

Following construction the project will not result in significant community impacts on local roadways or services. The minimal effect on existing site uses and on the surrounding, combined with the relatively small footprint of the project -- a total of about 89 acres of permanent impact with only about 29 of those above 2700 feet -- support the project compatibility with the proposed location.

We'll now hear from Don Hudson, who will discuss some of the particular characteristics of the areas about 2700 feet and the extent to which the Kibby site reflects those characteristics.

MR. HUDSON: Good morning. My name is Don Hudson and you have my prefiled testimony, as well as my curriculum vitae. I currently serve as the president of the Chewonki Foundation in Wiscasset, and I'm here today to testify as a private
individual.
I have a good deal of experience in forest ecology and alpine biology ecology, and specifically the plant biology and ecology of mountains in Maine in similar areas in the subarctic and the arctic. I have conducted inventories of birds in undisturbed forests of old growth in Baxter State Park, the Bigelow Preserve, and Mahoosuc Range. That work also included the survey and documentation of subalpine forests and alpine areas.

In preparation for my testimony today I have reviewed the application for TransCanada for the Kibby wind power project, and I have viewed the area proposed for development.

As I mentioned in my prefiled testimony, based on a review of the application and my visit, and in light of experience in the mountains of Maine, this area does not have the attributes more typical of high elevation areas in Maine.

The forests at Kibby Mountain and Kibby Range have different characteristics and values than those that are typically associated with subalpine forests. The slopes of these foothills are gentle, they are not as steep as those of the mountains in Baxter, the Bigelow Preserve and the Mahoosuc Range, for example.

There are virtually no outcrops or exposed ledges, and there are no bare summits with associated alpine vegetation. I found that the forest vegetation has a greater
affinity with lower elevation forests than that typically found in Maine's higher mountains. These woods are typical of the northern coniferous forests of the region.

The subalpine forests of the mid and upper elevations of Baxter, the Bigelow Preserve, Mahoosuc Range, Saddleback and a number of other mountains in Maine are dominated by balsam fir with a scattering of red spruce, birch, and mountain ash for the most part.

The Maine Natural Heritage program's classification of ecosystems in natural communities in Maine defines subalpine forests as those generally occurring above 3000 feet. This forest type has a fragile canopy. Wind damage is common and the canopy appears ragged as a result.

Windthrow can cover acres of ground. Typically you can determine the direction of the prevailing wind simply by looking for dramatic flagging in the treetops: Short branches at the top are all bent away from the direction of the wind.

The fragile character of this subalpine forest is reflected in the mortality in the standing canopy, tree that have died as a result of combination of harsh environmental conditions in the local climate and on the ground.

The forests at the upper elevations of the area in question are dominated by balsam fir and red spruce, the structural features associated with wind damage are not apparent.

In fact, the firs at the top of Kibby Mountain and Kibby Range are not flagged, and there's little windthrow or blowdowns. When I was walking on the mountain, I note the upper boundary between a mid elevation forest and the subalpine forest by a change in the species composition in particular. The evidence of historical forest management most often disappears at the same point on the landscape.

Stumps left by prior cutting operations generally disappear on mountains in Maine at the same point at which the combined topographical and vegetational characteristics of the subalpine zone are encountered.

Ultimately the slopes are too steep, the soil too thin, and the trees too short and spindly, and make harvesting them an economical loss. But here they were harvested clear to the ridgeline.

On Kibby Mountain and Kibby Range, broad-leafed species like maple and birch stand farther up the slopes than they do the elsewhere in my experience, well beyond 2700 feet. In addition, I did not see the degree of mortality amongst the timber that $I$ have come to associate with classical subalpine forests. There has been vigorous and complete regeneration in these ridge top forest since the removal of the original fir forest many decades ago.

These ridge tops exceed 2700 but they do not exhibit the characteristics of the subalpine forests that often occur
at even lower elevations on the slopes of Maine's more rugged steep and exposed grounds. The limit of 2700 is a very good point at which to begin discussing special mountain values from the perspective of a forest ecologist in determining the relative and comparative ecological values.

The 2700 feet should not be thought of as an absolute value. If we were discussing the Bigelow Range, for example, 2400 feet is the point at which the special values that I envisioned by the P-MA designation can be found. In Baxter on the Owl Barren, the wind regime on the slopes of Mount Coe, and on several other mountains, as well as on some slopes in the Mahoosucs, those values may be found as low as 1800 feet.

As some of you know, I have argued before this Commission in the past that the very fragile nature of the subalpine on Saddleback be taken into consideration when considering a proposal for the expansion of the ski area.

There the steeper slopes and sharp ridgeline create the landscape features that I envisioned -- and I think the P-MA. That is precisely these sorts of landscapes, dramatic views that have attracted people to the mountains of New England. Recreation has evolved in Baxter, the Bigelows, the Mahoosucs, and Saddlebacks, and dozens of other mountains in Maine because of these values.

As I mentioned earlier, the forests of Kibby Mountain and Kibby Range have mixed vegetation, more characteristic of
lower elevation forests. The development proposed for these ridgelines does not compromise the sorts of high mountain values that are traditionally associated with other mountains in Maine.

Considering topography, elevation, and forest types, this area might be more properly considered as foothills. They are unlike the steep rugged and exposed slopes that I believe represent the characteristics that the P-MA district is intended to protect.

MS. VISSERING: Good morning. My name is Jean Vissering and I prepared a visual assessment for the Kibby wind power.

I'm going to begin briefly by taking a look at this outline of the methodology for assessing visual impact. I believe strongly that a good methodology will help sort out what are the important visual resources in an area and it will identify how the proposed project will affect those resources, those specific resources, as well as the region as a whole.

You should be pretty familiar by now with the project. In terms of visibility, that's a fairly straightforward piece of the process to identify. We used a 50 -mile radius study area, even though the likelihood of this significantly is unlikely beyond 10 miles, but in this case we felt there was significant scenic resources beyond 10 miles.

There are established methods for identifying visual
character and for identifying the specific scenic resources and their relative sensitivities which is important.

I'm going to be discussing these as I go through my presentation. I'll also talk about some of the key factors affecting the impact assessment. When there are mitigation measures that can be used to reduce visual impacts, if they are determined to be excessive, $I$ do not feel that that is the case here. As you know, my conclusions are that this is a very well sited and designed project and that although it will have some visual impacts, that they are very reasonable and will certainly not rise to the level of undue.

This chart outlines the factors that I consider to be very important in assessing visual impacts. I don't expect you to read this chart. I'm going to be coming back to it, and I'm going to be referring to the six variables on the left-hand column, the documented significant scenic quality, viewer expectation, uniqueness of the resource, duration of view, and proximity -- the project as I described some of the viewpoints around the area.

Looking at a map of the Kibby area, this illustrates the 15 -mile radius. We have Stratton down here, Route 27, which is the only State highway from which there are views other than the transmission line at 15. Of course, there's the two projects, the Kibby Mountain or A series; Kibby Range, the B Series with that distinctive wish bone shape which
interestingly actually helps significantly to reduce visibility of the project.

The crosshatched, the blue crosshatched areas are lakes and ponds. And this is a -- oh, I should point out that the dots are areas where we found views, actually relatively few views throughout this area.

The green shaded areas are all potential views indicated on our viewshed analysis of the project. Now, of course, because they're forested, all of these green areas, the chance of views are very minimal. The places where you find tan shading are generally open areas, such as lakes and ponds where there is the potential for view, although in many cases it turned out as we looked at these -- they have to be field verified -- there were actually very minimal views because of foreground trees; or the other aspect of a viewshed analysis is even if there's the tiniest little tip, an inch of the turbine blade that would be visible behind the landform, it shows up as visible, and we did note several places where that was true. The other thing I want to mention on this map is you will see that this is area very well endowed with lakes and ponds; there are very many of them, and actual visibility from very few of them. If you look at the area up in the very kind of northern and northwestern parts, those are probably some of the more remote ponds with very little visibility.

So I want to begin looking -- starting with the
project site and its immediate surroundings. I'm going to take a look at the Kibby Mountain fire tower, and then we'll look at Route 27. Some of the lakes -- views from lakes and ponds, and residential areas.

You may remember this view of the Kibby Range as we were descending down Gold Brook Road, which is of course a private logging road running alongside the two ranges. I think this is a characteristic view and illustrates that these mountains are relatively low, wooded, generally quite indistinct in their form.

Similarly, you may remember this view when we were in the midst of turbine sites and illustrates well the sort of generally kind of rounded character of the -- this would be the A Series ridgeline at the southern end along Spencer Bale Road.

Up on the northern end, this was another stop on the site visit. Also we were looking towards the various ridges, and this is sort of typical of the profile, very indistinct, gently rolling.

You'll also remember from that northern end of Kibby Mountain where we stopped, we had a glimpse up at Kibby Mountain itself, and this would not be developed as part of the project.

There is a fire tower on the top, a trail leading up. It's a short, relatively short trail, a little Jeep trail, but this is not -- it is a trail that is not heavily used nor is it
part of protected land. Nevertheless, it is proximate to the site, and of course we felt that it is clearly a sensitive site that needs to be assessed. So this is one of the viewpoints that we developed a simulation for.

This is one of the few viewpoints where you can see the entire project. It's also one of the only viewpoints where you will be able to see project roads. Now, some of the roads that you can see in here, such as down on this end. In the clearer version of this photograph you can see some roads down there, they're not part of the project, they're part of existing logging roads.

From the top of Kibby Mountain you get views around to different mountains. There are two other mountains from which there could be views of the Kibby Range that have fire towers on top and therefore potential views. One is Tumbledown Mountain, it's about 4.5 miles away. Tumbledown is, by the way, not the Tumbledown Mountain that is mentioned in the hiking guide books, it's a different one.

The other one is Snow Mountain. I don't have the shot here. Snow Mountain is about 6.5 miles away, but it's on -- but I believe it's on Penobscot land.

So looking at Route 27, you probably recall driving on Route 27 we saw many different mountain ranges -- mountain ridges. Very few of them were Kibby. One of the -- generally we saw quick glimpses of the project ridge and always Kibby

Range. Kibby Mountain is very hard to see from anywhere except up close or very far away.

This is one of the views of longer duration and even it is fairly short, but you're looking at probably a maximum of 10 turbines at this location, and then you'll remember stopping at the Sarampus Falls rest area, where there is a scenic view of the waterfall, and the turbines would be seen to your right.

There would be somewhere between two, possibly up to five, views behind trees. This is the southwestern prong of the Kibby Range coming out here near the falls.

We went off Route 27 and overlooked Natanis Pond. There would be no views from that overlook. As we look at some of the lakes and ponds in the area, I mentioned that the area is very well endowed with lakes and ponds. From many of them there will be no view, in fact, from most of them, especially from the Class 1 lakes and ponds which are identified in the CLUP as among the most inaccessible, probably therefore remote.

We focused on the Class 2 ponds noted in the CLUP appendix because they're identified as being high value, accessible, and relatively undeveloped. I think in the CLUP it says undeveloped, but in fact all of these had some camps around them.

Of the eight Class 2 ponds in the study area, we found four from which there would be visibility. One of these we considered extremely minor, Tim Pond, because it was over 10
miles away and also the visibility was so minimal on a tiny portion of that pond.

Chain of Ponds is one of the more proximate. At minimum, at the very end, as you know Chain of Ponds is a series of ponds. From the upper end, Natanis Pond, where there's a beach and campground, this is one of the areas where there would be the tips of one or two turbine blades seen over that little ridge on the left.

As you continue down the ponds, the views remain more or less the same until you get down to the very end and then you get down to Lower Pond and there you would potentially begin to see the tops of a few turbines there, though most likely they're going to be blocked by trees.

From Jim Pond there are more extensive views around Jim Pond. You can see the Kibby Range through behind foreground ridges, you can also see Snow and Round Mountain from around the pond.

It is -- this simulation is typical of views that would be seen around the pond, and also we know there are two or three camps that are on the pond that would have views similar to this. This is the eastern pond extending towards Jim Pond, and here you see 10 to a maximum of 12 turbines.

Now, of course, Flagstaff Lake is one of the major recreational focal points in this area. The views tend to be between 10 and 20 miles away. It's a very large lake.

This is one of the more proximate views from the causeway on Cemetery Road, which is the northern end of the lake. It's probably a quick glimpse for anyone driving along there, but people do stop and fish.

More typical of the views as you're boating around the lake, those distant ridges tend to come in and out of view, mostly out of view, along with many of the boundary mountains often hidden behind these foreground hills or foreground vegetation.

From the campsites around the Bigelow Preserve, they're largely blocked by foreground trees. This was a low-water time of year, obviously. There is one campsite, the Safford Brook campsite, from which there would be views of the project at about 17 miles away.

There would be no visibility from the Cathedral Pines Campground or from Myers Beach, two popular areas. This is clearly -- around Flagstaff Lake -- one of the dramatic views that you do tend to be focusing on.

In terms of residential areas we know that the closest residence is 1.2 miles from the project. We can't go on private property. We pointed out residences as we drove up Route 27. It looked wooded but we don't know what their views are.

We do know that there are relatively few residences and camps in the vicinity of the project. The place with the
greatest residential concentration is Eustis Ridge. Most of the roads and houses on Eustis Ridge are on the south side of the ridge, they're oriented towards the Bigelows and the Longfellows, but there is one road, Porter, to the north side of that ridge. We identified two or three properties that would have a view similar to this.

We had a couple of open houses and I would always be asking people, what should we go look at? Where are the views of the project? And what's important to you?

This was a view that was identified to us on Flagstaff Mountain Road. There is an opening where there's views for Flagstaff Lake, but also Kibby Range and part of Kibby Mountain at about 11 miles. It's one of the few other places along the road where you can see the project.

The Appalachian Trail is 17 miles away at the closest point. We did prepare simulations from Avery Peak. Just to illustrate how the views would look, you can see that these two, the turbines would be seen with the backdrop of the more distant boundary mountains, and I think probably one of the relevant visible factors here is the dominance, as a focal point, of Flagstaff Lake and the views.

Okay, I apologize but $I$ need to refer to this little graph that was handed out during the Black Nubble hearings because it did mention Kibby, and unfortunately $I$ felt it was extremely deceptive.

I mentioned that in describing a visual assessment process, it helps to sort out the important variables from the irrelevant. And by focusing on one sort of numerical measure, you are arbitrarily pulling something out of the hat that may or may not be relevant, and usually one variable is not relevant by itself, you need to be looking at a number of different variables.

So, for example, if we look at -- if you can remember, it's true that we may be more proximate to a rest area and we're certainly proximate to a scenic highway; however, if you recall those views, the view from the rest area behind evergreen trees, and then very quick occasional glimpses along Route 27. Of course, the views along the Chain of Ponds, which is the water body we assume is being referred to here, the view is very minimal.

So I think that the issue here is being very careful about using a single variable, and the problem, the larger problem, is missing the bigger points of viewer sensitivity levels looking at a roadside where you have perhaps an environment of cars and trucks, some development, as part of that context as opposed to, for example, a National Scenic Trail.

Now, I want to return to this chart. If we look at the six variables, this project would have minimal impacts looking at all six variables. There are no scenic or
recreational areas that are unique or State or national significance within the surrounding area. The visibility from Class 2 lakes and ponds and from the scenic byway are relatively minimal.

One could fairly say that this is a scenic area, but it does not rise to the level of outstanding, an outstanding or unique scenic resource. The major visual focal points, of course, are Flagstaff Lake and perhaps the Bigelows at the edge of the study area, and in terms of the use of the area, there are the uses -- aside from Flagstaff, they tend to be very dispersed, very diverse, a number of different interests in terms of recreational land and mostly on private land.

In general, views of the project are short duration, they occupy -- they're a very tiny part of the project, and/or they're seen at a considerable distance.

So in summary, there will be visual impacts but none would reach the level of undue. The project would not dramatically change the character of the area nor would it block significant views. There certainly would be some modification of the ridgeline, but the views of roads are seen from only one location.

Now, I've had the opportunity to -- we will be handing out this so you can read this in the future -- I've had the opportunity to view many wind sites throughout New England, and this one is unquestionably one of the best sites for wind
energy projects that I've seen from a visual perspective. MS. CINNAMON: Thanks very much, Jean. My name is Christine Cinnamon, I'm the environmental manager for TransCanada. I've been responsible for the regulatory submissions, the environmental due diligence related to the development of the Kibby wind power project.

We have worked very hard as a team to both understand and minimize impacts to natural resources in the project area. From very early stages of project development, we communicated with environmental experts engaged on the project our expectation for an optimized layout that would be constructible, not just according to what the agencies required but also that reduced impacts to the greater extent possible.

This involved constant communication between the environmental and engineering team and requires an immense amount of work upfront prior to even submitting an application.

Despite the time and effort involved, TransCanada is committed to developing projects in this manner given our success using this method and the positive feedback we've received using it in other jurisdictions.

Our application indicates very conservative estimates of impact, and it allows us to be able to say that we can develop the project with actual impacts that would be less than what we've accounted for in the application. It's been very important to us -- again it's the TransCanada philosophy -- to
meet with agencies and stakeholders early and often through the development process to understand and address concerns upfront. We're committed to ongoing consultation through all development phases of the project.

The application and information before you today is a result of the consultation and the development efforts. We are convinced that the minimized footprint and resulting impacts are not unduly adverse. Lynn will now talk to you about the minimized environmental footprint.

MS. GRESOCK: Again, I'm Lynn Gresock from AMEC. I am the project manager for the project, environmental consultant effort. Also with me is Dana Valleau from CRC, who has worked closely with me and has led the project field efforts.

My work supporting TransCanada on the Kibby wind power project began in the fall of 2004 during feasibility review for the project. I've continued to provide management of the environmental consulting services provided for the project since that time and have worked closely with TransCanada, regulatory agencies, and technical specialists to ensure the project was well sited and designed and that appropriate studies to fully understand the potential for impacts are undertaken.

In summarizing the way in which the project has minimized the potential environmental footprint, I'm speaking
not just for myself, but on behalf of the numerous technical specialists who contributed to the project study.

Not only have we utilized numerous internal and external specialists, but we've coordinated closely with State and federal agencies, including LURC, IF \& W, the Maine soil scientist, MNAP, DEP, the US Fish \& Wildlife Service, and the Army Corps of Engineers.

In many instances professionals from those agencies have not only contributed to review and input on protocols and technical studies, but have joined us in the field to experience and contribute to the investigations real-time. For all of their contributions, we thank them.

We worked hard to optimize the project layout and footprint for environmental, engineering, wind resource conditions. Access for the project has been designed to utilize existing logging roads to the maximum extent possible, both for the turbines and along the transmission line.

Siting for additional turbine access has thoroughly considered elevation, ground conditions, and environmental issues to ensure that locations for access roadways and other project features will result in the least possible cut-and-fill or other resource impacts.

The project engineers have worked closely with the environmental team, and we've engaged in a iterative process that continually pushed to minimize environmental impacts at
the site. You'll hear more about that later from Corey Goulet.
Extensive engineering and environmental studies have been completed, and numerous hours have been spent optimizing the location and design of the project. Throughout this effort, TransCanada has consistently directed us to conduct thorough investigations of truly framing issues and impacts associated with the project.

Although there are many details of work that has been conducted, $I$ don't have a lot of time, so I'll make an effort to address a pretty high level some key ecological issues that had been raised with the project. A lot of additional information is available in the written materials, and questions, of course, are welcome.

Potential impacts to birds and bats are a key concern for wind power projects. We were pleased to have avian study information available to us from the former Kenetech project as a starting place for understanding the nature of the area as a scope for additional studies.

We worked closely with LURC, IF \& W, and US Fish \& Wildlife Service to develop protocols for and to implement studies that would provide meaningful information for the assessment and the decision making process.

Because many of the agency personnel had actually been involved in the Kenetech project, there was a high degree of familiarity with the study through the former results. The
agencies were also familiar with the studies that had been conducted on behalf of the Maine Mountain Power project, which continued verifying their sense of what types of studies worked well in determining whether a different project area was significant from an avian perspective.

Also, many of the interested folks have been participating in discussions with various stakeholders with regard to developing potential protocol standards for assessment of wind power impacts on birds and bats. All of this provided a good context for our initial discussions.

When assessing the suitability of the site for wind power, it's important to understand the extent to which migrating birds fly through the area. At a big picture level, this historical information that can be reviewed to see whether a given area as mapped is a major migratory corridor, which this area is not but that only takes you so far.

Although individual species might follow a particular migratory corridor, in general birds migrate in broad fronts influenced by seasonal weather patterns.

So in conducting site-specific studies, you would typically want to understand the number of migrants passing through a given area, the direction they're flying, and the height that they're flying in order to gain an understanding of current use.

The wind power industry has continued to make
technological changes since the early days that continue to reduce potential avian impacts. No longer are wind turbines designed with lattices that would attract perching, guy wire use is avoided, and considerable work has been done to balance the need for safety lighting for avian risk issues. These days, as Professor Wilson noted in his testimony, concern is much more focused on bats, as documented avian impacts have continued to be relatively low.

All that being said, there's still a need to understand whether a particular site poses a unique or unusual risk to birds. The radar studies we conducted for this project have several particular goals based on agency input: To gather ridgeline data, to understand the targets that passed through the areas where the turbines were proposed, to gather some valley data as a snapshot to better understand how the migrants might be travelling through the area -- for example, do they mostly fly through the valleys or are they flying in both areas -- and to select radar locations that captured avian decision points to the extent possible to determine how the flight patterns might be influenced by complex topography in the area, and also important was considering the saddle areas that exist in the various mountains might act as shortcuts that the birds use on their migration.

Because their radar surveys can't identify what the migrants are, we were also asked to add a daytime migrant study
during each season in order to give an indication based on species presence of what particular species might be migrating through during specific periods. Certain species tend to migrate during the day. Raptors are the primary daytime migrants, along with community species that migrate in flocks, such as the Canada geese.

The former Kenetech had characterized daytime migration as well, and we were also asked to conduct similar surveys for both fall and spring seasons.

In general we found the results very consistent with the former Kenetech studies. As expected, the number of migrants to the area is much higher in the fall than it is during the spring when numbers are naturally depleted due to a variety of factors.

Based on forest seasons of data collected at the site, daytime migrants do tend to follow the stream valleys and the numbers do not indicate this is a unique or heavily utilized migration pathway.

Nighttime migrants appear to be crossing the area in a broad front, passing over ridges and valleys in similar volumes. Our more recent studies also indicate that the migrants are flying relatively high over the area, the majority of them well above the height of the proposed turbines.

The results our morning migrant surveys did show some species peaks providing a sense of which night migrants might
have been travelling through the area at given points within the migratory season.

Our daytime migration study indicate a certain ridgeline within the project vicinity, such as the northern portion of Kibby Mountain, that were more frequently used and crossed by raptors. These areas of highest use have been avoided by the project.

When considering the potential for impact, understanding this information doesn't tell the whole story, certainly factors like the very small surface area of the turbines relative to the flyway, the potential for avoidance behavior, and also the changes in migration patterns that will occur year to year all influence avian risks.

We plan to work closely with IF \& W's technical expert to develop a post construction monitoring plan that provides a meaningful way to confirm that the impacts are acceptable and establish appropriate response measures for unanticipated impacts.

As I already noted, bat behavior is much less well understood in relation to the wind turbines. When we had our initial agency meetings, it was requested that we wait to contact our bat monitoring until the Met towers were constructed at the site.

Catalog the measurements to be at locations high enough to more truly represent the actual turbine heights, and
as we detailed in the application, we found very little bat activity occurring at the site. This was consistent with our general understanding of the overall habitat study at the site. Windy, high elevation coniferous forest with few large water bodies, and significant bat impact is not anticipated.

The potential for Bicknell's thrush habitat to be affected was also an initial agency concern. Bicknell's thrush species are recognized by Maine as a species of special concern due to their specialized habitat requirement.

In Maine they're distribution is known to be impacted with sensitive spruce-fir forests within high elevation areas, and the species was observed on portions of Kibby Mountain not proposed for development during fall migrations surveys in 2005 and possibly in the earlier Kenetech studies, as well, although Bicknell's thrush wasn't treated as a separate until 1995.

In order to determine if suitable breeding habitat exists in the project development area, a detailed summer breeding survey was conducted to identify Bicknell's thrush in the area to affect habitat and to estimate potential population density of the species.

Bicknell's thrush were not found breeding in the project construction area, and although dense fir stands are found in the project area, none were determined to be large enough to support a Bicknell's thrush territory.

It has been suggested that the project in this
location would preclude potential future use of the area by breeding Bicknell's thrush. In order for suitable Bicknell's thrush habitat to develop at the project site, a significant area of blowdown in existing areas of spruce/fir forests -- at least several hectares in size -- would have to occur.

The relatively narrow and leaner nature of this project and the relatively small permanent footprint on the ridges makes it unlikely the that presence of the project would affect the development of these conditions in the future.

The potential for northern bog lemming habitat was also considered for the project. Northern bog lemming rely on habitat specifically that includes wetlands where the ground cover layer dominated by studies is sphagnum moss. They are difficult to identify, and in fact, can't be distinguished from other bog lemming without examining their skulls.

Working with IF \& W, it was determined that a trapping study beyond the one that had been conducted by Kenetech wasn't appropriate. If the species are located there, we didn't want to kill them. Instead we focused on habitat identification while doing the other on-site surveys.

Only one area was identified that appeared to be suitable northern bog lemming habitat, which is on the westerly Series B ridgeline. You can see it in the orange areas here.

This area is made up of a series of hydrologically connected wetlands that have a dominance of sphagnum moss as
ground cover. Based on a review by $I F \& W$, both of plans during the meeting and in the field, the layout was revised. You can see that the layout used to go through this area, and now is here, eliminating a road and a couple of turbine locations to avoid not only the habitat areas but a sub watershed area that supports the wetlands complex, this 26-acre area here shown in black and white.

The preservation area includes both upland and wetland and is intended to not only protect the habitat but to make sure the hydrology feeding this potential habitat area is not altered.

During our initial consultant with MNAP, we noted that a portion of Kibby Mountain extending into the area was mapped as fir-heart-leaved birch subalpine forest, which the original mapping area is shown here in purple.

This type of community is State ranked as $S-3$, which is defined as a rare community in the state with roughly 20 to 100 occurrences. Although rare within the state as a whole, this community type is relatively common in cold windy high elevation areas of the state.

However, our field studies did not indicate this community within our project footprint. We requested that MNAP conduct a site visit to make a determination. Based upon that visit, MNAP resized the state mapping, and you can see that in the $U$ shape, the pinky-orange area. Although the very northern
portion of Kibby Mountain still has that mapping designation, no portion of the project was within that subalpine habitat.

MNAP also looked at the numerous occurrences of boreal bedstraw, which is a State-listed species of special concern ranked at $S-2$ that we have identified on our ridgeline wetlands.

An S-2 classification indicates a species is considered imperiled in Maine because of rarity, six to 20 occurrences, or few remaining individuals or acres, or because factors make it vulnerable to decline.

On Kibby Mountain, boreal bedstraw was identified in 23 patches in two general wetland areas, and on Kibby Range it was identified in over 50 patches, mostly in small seeps wetlands. None were located in summit areas of the site and because the species occurs in wetlands, impacts to those areas have been largely avoided.

With only about $1 / 10$ of an acre of wetlands that became boreal bedstraw currently proposed for impact. This particularly unavoidable impact is associated with the primary access for the A Series, which requires a switchback in order to appropriate grading and curve radius. It's not certain that the plant itself would be impacted, but even so, MNAP has determined that this level of impact would not have a significant effect on overall community viability.

Wetland avoidance has been a priority for the project
as well. We worked closely with LURC, the Maine soil scientist, and Army Corps, and DEP to assure consistent delineation approach for wetlands resources, extensive field effort has been involved in the full delineation of resources not only along the ridgeline, but 27.6-mile transmission right-of-way as well.

Direct wetland and stream impacts have been largely avoided. The unavoidable impacts reflected in the current preliminary layout and design total less than one and one-half acres. Of that total, less than $1 / 10$ of an acre of impact was in wetlands designated as $\mathrm{P}-\mathrm{WL}-1$. This is associated with turbine access.

Other turbine access impacts to wetlands include a total of $9 / 10$ of an acre of $P-W L-2$ and about $4 / 10$ of an acre of P-WL-3. These are all very small individual impact areas that just affect the edge of larger wetland systems and would not affect the overall function and value of the wetlands.

Wetland impacts associated with the turbines themselves are very, very small, varying from $P-W L-2$ and -3 , again, associated with encroachment to the very edge of larger wetlands systems. No direct wetland impacts are associated with the collector lines or other wind turbine features.

The transmission line has also substantially avoided direct wetlands impact. Along its entire 27.6-mile length, no $P-W L$ water is impacted and the total of $P-W L-2$ and -3 combined
are significantly less than $1 / 10$ of an acre. Detailed measures have been identified in the application to avoid indirect impacts due to erosion and sedimentation as well.

I understand that during the Black Nubble proceeding charts were presented that compared the Kibby and Black Nubble projects. Like Jean, I'm concerned that the information presented could be misleading and in general I don't believe comparisons should be viewed lightly.

There are just a couple of points I wanted to discuss. The first, resource presence doesn't necessarily translate to significant impact. For example, with 155 wetlands located in our transmission line corridor, 96 of them in LURC jurisdiction, our direct wetland impacts are only 3/100 of an acre, and just because we identify it, $S-2$ species through our detailed recognizance effort, it doesn't follow that meaningful impacts would result.

Secondly, understanding context is very important when you're trying to compare projects. In two regards in particular, a comparable basis for comparison is needed. For example, when we talk about the length of roads or construction disturbance areas or wetlands impact on a per-megawatt basis, the two projects are actually fairly comparable, although the Kibby project is generally located at lower elevations.

You have to consider the context as well as tradeoffs associated within environmental settings. For example, the

Kibby project great wetlands impact reflect to a great degree at lower elevations. As you come down off of the higher mountain areas, wetland presence does tend to increase, and once you have come down off of that area, wetlands presence is generally very similar from most locations within this particular area of Maine.

The last important factor when comparing projects is selecting metrics that are truly reflecting the significant impacts and significant issues. Certain metrics were selected in the comparisons that $I$ saw; other metrics were eliminated from many of the metrics that weren't so our project would fare very well.

So from my perspective, comparisons without the right context don't necessarily tell the whole story and really can sometimes be misleading.

We are proud of the work that we've done to characterize the area and to optimize the project design to make sure the project can be built and operated at the site with minimal impacts to a whole wide range of environmental issues. As we request conceptual approval and hope to move toward the final design effort, as Chris said, the impact minimization will continue to be a key focus of the effort.

MR. COLGAN: Good morning. My name is Charlie Colgan, I'm with the University of Southern Maine, associate director of the Center for Business, we have research there.

You have my prefiled testimony. In the interest of time I will not make a presentation, but I stand ready to answer any questions you may have.

MR. WILLIAMSON: My name is Tobey Williamson, I'm with Barton Gingold, and I did community outreach work on the project, and also in the interest of time $I$ will not be presenting my testimony but will be here to answer any questions you may have.

MR. GOULET: Good morning. Mr. Chairman, commissioners, ladies and gentlemen, my name is Corey Goulet, and I'm the vice president of energy projects for TransCanada.

Jim McKay is to my left, and he led the preliminary design effort for the project. He'll be available for cross-examination later.

I'll try to finish up fairly quickly here as I know Chairman Harvey wants to keep us on track here, so I'll try to limit my comments to 10 minutes or less.

TransCanada has significant experience owning and operating pipelines and power plants. We've got pipelines and power plants located across North America, and our pipelines are located in some of the most difficult terrain and conditions imaginable. We've got over 2500 miles of pipelines in protected areas and over 2000 miles in environmentally sensitive areas.

I've listed a few of the challenging environments
where soil conditions are less than ideal but we've been able to rise to the challenge and construct facilities.

Since 2004 TransCanada has been involved in wind power projects. Currently we won six contracts to build 740 megawatts for $\$ 1.2$ billion worth of wind projects in the Gaspê region of Quebec, which is not too far from the proposed Kibby project.

We own 62 percent of Anse-a-Valleau, I developed the execution strategy, and $I$ sit on the board of directors.

The first project we developed was Baie-des-Sables. 773 turbines as maximum capacity of 110 megawatts. We completed construction last year in just over six months, and the site is now operational and is meeting all our expectations.

Just in the past year we developed the Anse-a-Valleau project. Anse-a-Valleau is very similar to the Kibby project in that it's in a forested area with significant logging development.

Anse-a-Valleau also has similar terrain to the Kibby project, although it's somewhat lower. The lowest road is located about 800 feet below the highest turbine -- I'm sorry, 875 below the highest turbine. By comparison Kibby has a difference of about 800 feet. So we have similar types of terrain that we experience in the construction of the proposed Kibby project.

Finally, the Carleton project just received our permit in the last month or so, and we started construction and we hope to have that project completed next year.

If this project is approved my area will be responsible for the implementation of the project. Phillip Piuze has been the project manager for the thirteen wind projects, and he'll act as the project manager for this project as well.

He'll hire a small office team consisting of a project engineer and administrative staff. He'll also hire a consultant who will complete the final design and conduct the detailed engineering. We'll also need a site team, including a site manager, and a small team of inspectors, health and safety coordinator, and administrative staff.

Prior to conducting the fieldwork we will have to do a geotechnical study. That geotechnical study will be used to complete the final design, but the specific construction techniques to be used will be determined when the site is cleared to where we're able to assess the local conditions.

As such, we'll need this small team of people, including a field engineer, environmental coordinator, and a civil inspector to assess the conditions on site and recommend appropriate construction techniques.

The field engineer will be a third-party consultant who will have local knowledge and unique understanding of the
soils and geotechnical conditions of the area.
As you've heard, we've been involved in this project for a number of years. Obviously we're in the process of a LURC approval process, and we have conducted the preliminary design over the last year or so.

After we've done the geotechnical work and surveys, we'll complete the final design. In order to complete the project by the end of 2009 as intended, we'll have to order the turbines early in 2008. The roads and foundations are proposed to be constructed between April and November of 2008.

The substation would be started mid next year and completed in early 2009; the transmission line will be constructed through the winter of $2008 / 2009$ to minimize the impact. And finally, the collection system will be constructed and the turbines will be erected in the latter half of 2009. A willed commission and start up of those turbines as they're erected in order to complete the project by the end of 2009 . The sign on the right -- the figure on the right is taken from a topographic map that can be seen or found in Appendix 2 K of the application. The darker topographic line indicates elevation changes above 25 feet, and the fainter lines indicate elevation changes at 5 feet.

The red area indicates areas where soil and rock must be removed or cut to build the proposed roads. The green area indicates areas must be filled.

There are two basic types of turbine sites on this project. The one you can see as an example where the turbine site's located on a small hill or a flat area. As you can see from the topographic lines, only a small amount of material in 10 to 15 feet will need to be removed from the top of this site in order to level it off and make it suitable for the construction of the foundation and erection of the turbine.

About two-thirds of all of the turbine sites are constructed in such a manner, and I'll show you a photo of an example in a few minutes.

This is the second type of site where the turbine site is located on a hill. As you can see from the contour lines, the elevation change from one end of the site to the other is about 75 feet. This happens to be the worse case scenario at all the turbine sites.

If we don't require the crane laydown area or assembly area, the actual impact or levelling required is only 25 feet, and you need about 25 feet of cut in this particular situation in order to level off that turbine site.

About one-third of the turbine sites are located on a hill like this.

So let's talk about the turbine site layouts a little bit. This can be found in Appendix 2 K as well. We've selected a turbine site area of about $7 / 10$ of an acre. Based on our experience of other wind projects, believe this is the minimum
that's required to safely and efficiently construct the foundation and erect the turbines.

Turbine manufacturers will indicate that 300 feet by 300 feet -- or almost 2 acres -- are required for these activities, but we've tried to minimize the input and based on our experience we believe it's possible to use less area.

I talked about the crane assembly area. In most cases the crane assembly area will not be required and we'll be actually hauling the crane from one site to another. I'll show a few pictures of that in a minute. But when it is required, it will require another $3 / 10$ of an acre, or one-third of an acre, more exactly for this purpose.

Finally, during normal operation most of the site will be allowed to revegetate and will only require about a quarter of an acre for the continued operation of the site.

This is an example of a project in Pennsylvania. I used this picture because this is an example of good development practices. You can see that the turbine sites are relatively small. This particular site in the middle -- it's four sites actually shown on this picture -- is only about 200 feet in diameter, about two quarters of an acre in size, and you can see visually, even from this elevation, that you can barely see the actual turbine site and very little of the roads on either side linking the various turbine sites.

This is an example of a turbine built on a small hill
that I showed you earlier in a topographic map. This is from our Anse-a-Valleau project, and you can see in the background where there was a small fill and we have cut away the top of that and used the material to fill in the sides of the turbine site.

This site is also only about 200 feet in diameter, or three-quarters of an acre, and you can see from the components of the turbine that have been laid out that it's a pretty tight site, and once you get the large 450 -ton crane on the site, that's about the minimum area you need in order to construct the turbine.

Everyone's seen a picture of this site from the Mars Hill project in Maine. It's interesting to note that there's almost 200 cut feet of cut above the site itself, the turbine site itself, and over 100 feet of fill.

This site's about 300 feet in diameter, or 1.65 acres. I use this to show the limited extent that we're trying to develop in our projects, we're proposing sites that are only about three-quarters of an acre in size. And the top green line you can see there is actually the worse-case cut scenario of about 75 feet. Most of ours are below 50 feet of cut and this is the worse-case scenario. You can see the environmental and visual impact is quite a bit less.

I've also got a few examples of roads that are built on the project. This particular figure is also taken from the
top of Appendix 2 K . You can see this road from the topo lines it's very flat and generally requires very little fill, and it can be constructed without need for much specialized construction techniques.

By comparison, this is a road that's built up on a hill. The hill actually goes from turbine A-11 to A-8, and you can tell from the contour maps, the contour lines, that the road is perpendicular to lines and therefore up the hill.

On the lower part of the hill, or slope, the slope is quite gradual and just a little bit of fill is required; but on the upper part it's a little bit steeper, and you can see that a significant amount of cut is required in this area.

This is a particular concern of the State soil scientist, and we understand the conveyance channelling and level shredders and those types of specialized construction techniques will be needed in order to minimize the environmental impact associated with these types of roads.

Finally, the third type of road that's constructed results in the most challenging terrain -- is constructed in the most challenging terrain. In this particular case, the red indicates areas of cut on the upslope of the road, it's on a side road, if you will, and the green indicates areas of fill on the downside or downslope of the road.

The reasons these are more challenging is because more specialized construction techniques are required to manage
stormwater and groundwater.

I've talked in the last three slides about these construction techniques, and this is a summary of the construction techniques that can be found in the construction of stormwater area in the application.

Most of these are relatively common structures that are used extensively in the road construction industry. However, on Kibby Mountain and on Kibby Range, certain soils are present which are characterized by the shallow groundwater. As such, I've highlighted a couple of techniques, the drainage trenches and the drainage blanket that will be used. The reason it will be used is to prevent the undesired channel flow and associated erosion could be present if we collected the flow and allowed the flow to naturally travel underneath the road surface.

Just an example of a project in Quebec where there's a side slope and a certain amount of cut on top of the hill and a certain amount of fill on the bottom side of the hill. You can see this is a significant digital impact. It's a fairly long run.
(Steve Schaefer joined the hearing at 10:47 a.m.)
On the other hand, at Anse-a-Valleau we were able to construct our roads along ridgelines, and you see that the road has a minor visual impact and relatively minor environmental impact as well.

So one might ask why do we need to construct such large roads and turbine sites. This is just a photo of the type of equipment that's required to build turbines. This is a 450-ton crane that's being transported from one site to another. It has a 33-foot wide track width, and the road is built 34 feet wide to accommodate the travel of this crane from one site to another.

So why do we need such large cranes? Well, those turbines are 26 stories high and that crane has a 330-foot lattice boom that's required to raise the last section of the tower and the 70-ton nacelle.

So in summary, TransCanada has developed a realistic and practical achievable plan to install the Kibby wind power project. There are opportunities to optimize this design and we will take advantage of these to minimize the environmental and visual impact and reduce our costs.

We also have the necessary construction and wind experience to complete the project and meet the expectations of the LURC and other stakeholders.

THE CHAIR: Thank you. You're all done?
MS. BROWNE: Yes. I was just going to suggest, we have copies of the PowerPoint we can hand out now or after you ask your questions, whichever is more helpful.

THE CHAIR: I assume Ms. Prodan will want a copy of all your stuff.

MS. PRODAN: Can you also make the written material that Ms. Gresock was reading from available because it contains a lot of new information.

MS. BROWNE: Actually, all of her information is based on the application and prefiled testimony. I don't think there's any reason to provide her speaking. It's certainly going to be part of the public record.

MS. PRODAN: It was quite expanded while listening to her testimony on the Bicknell's thrush.

MS. GRESOCK: It's all in the application.
MS. BROWNE: It's all in the record, and you can see it in the application of her prefiled testimony.

THE CHAIR: It's all in the record. Let's leave it a that, okay.

MS. PRODAN: We'll settle for the PowerPoint.
THE CHAIR: I'm sorry?
MS. PRODAN: We will settle for the PowerPoint.
THE CHAIR: Okay. Well, you're going to get a copy I guess.

I think for Lisa's sake we need to take about five minutes here to let her take a break.
(There was a break in the hearing at 10:51 a.m. and the hearing resumed at 11:04 a.m.)

THE CHAIR: We're going to let Ms. Prodan go first, and the Commission will follow up later. I guess she basically
has between now and 12 o'clock, and we'll finish up right around 12, a little after, have lunch, and then we'll continue if that's necessary.

You may proceed, thank you.
MS. PRODAN: Thank you.
EXAMINATION OF CHARLIE COLGAN
BY MS. PRODAN:
Q. Good morning, Dr. Colgan. Evaluating wage forecasts, are wages and employment accounted for in the Town in which construction is occurring or in the Town in which the employee lives?
A. The data that $I$ used is based on an employment model. It is placed on employment data, so it's based on the Town on the location of the employment.

Now, this is a little different when it comes to construction employment in that construction employment is reported by the establishment employing the workers, and they are supposed to report them in the location of the construction project as opposed to the location of the employer itself.

So, for example, Cianbro located in Pittsfield, is supposed to report its employment in each of the construction projects it manages in the location where they're occurring.
Q. Did you do any research into the number of skilled workers
living in northern Franklin County?
A. No.
Q. Isn't it true that the closest labor market is in Quebec?
A. Yes, it is true that for the Coburn Gore area, the closest labor market area are to the south in terms of along Route 27, Carrabassett Valley, then Farmington north up to Lac Megantic.
Q. Regarding lodging, what were your assumptions as to where people would be living who are working on this project?
A. Short-term construction projects are projects like this which are seasonal construction projects, the employee -the construction workers will tend to come in and use the local lodging establishments.

The exact extent to which that is going to happen is unclear in part because TransCanada has noted in earlier testimony does seek to hire a fair amount of local employment and local contractors.

So the exact mix of people who will be brought in versus local is unknown at this point.
Q. Are you aware of any housing currently available for a transient workforce in Kibby Township?
A. No, not in Kibby Township; but it's typical in construction projects like this that workers will live and commute some distance.
Q. People could be living in Quebec, could they?
A. Well, the Quebec issue is a little complicated by rules regarding the employment of Canadian residents in the United States, and similar rules with respect to employment of US workers in Canada.

The rules are fairly complex, and I would not have normally assumed that any -- or many, if any at all -Canadian workers would be employed on the project.
Q. In a location like this for your model, can you assume, or did you assume, that TransCanada might be erecting temporary housing for the workers? Did you include anything?
A. No, I made no such assumptions. The location of the employees during the construction phase was assumed to be somewhere in Franklin County.
Q. And you didn't assume anything about -- no new housing sites?
A. No.
Q. Thank you. Regarding the public services, you -- and taxes -- you indicated in your testimony that the location of the project in the unorganized territory Franklin County presents a challenge to the funding of public services, you said the property tax revenues will accrue to the State for use by the unorganized territory service fund; correct?
A. Correct.
Q. Did you make any attempt to factor in the cost of public services to serve this project during the construction?
A. I did not do a physical impact analysis on either the unorganized territory or Stratton/Eustis Township mostly because the -- that was not part of my -- the requested analysis that I did.

As noted in earlier testimony, the company does propose to pay the unorganized territory property taxes, plus make an additional contribution to the Town of Eustis, and I have no reason to suspect that -- I think that the additional payments to the Town of Eustis will cover any minimal additional services that may be required during the construction period.
Q. Are you aware when those payments will begin?
A. It's my understanding that they'll begin once the construction project -- once the project is up and running.
Q. That would be after construction; correct?
A. Yes.
Q. So it sounds like you also would have not made any attempt to factor in the cost of public services to service the project after construction; correct?
A. As I said, I did not do a physical impact analysis on the project; $I$ did an economic impact analysis.
Q. Okay. When you discussed the estimate of the property
bill, tax bill, of at least a million dollars per year and you said that this makes up about two-thirds of current payments, what do you mean by this? Can you explain that a little further?
A. Sure. The $\$ 1$ million property tax bill is estimated by TransCanada. The final property tax bill cannot be estimated any closer than that because property tax assessors have no project, have no facility, to in fact assess. So the million dollars is a ballpark guess.

Take the million dollars as a proportion of the taxes paid in the unorganized territory in Franklin County, which is derived from the total valuation of the unorganized territory times the mill rate, and you get about the two-thirds number.
Q. Okay, thank you. Concerning what I'm calling electric benefits, on Page 5 of your testimony you conclude that any mitigating effects of the more stable prices of electricity from wind power would offset the negative impact occurring from fossil fuel price instability; correct?
A. Correct.
Q. So are you saying that you think that the price of electricity from wind power will be stable even if the price of electricity from fossil fuel is unstable?
A. Relative to the price of wind power in the market will be
more stable than the price of fossil fuel derived energy simply because there is no energy charge to the wind power, where there is an energy charge to the fossil fuels.
Q. Dr. Colgan, are you aware that the price per kilowatt hour is set by ISO New England and is the highest bid price for all generators of electricity, whether the power is generated from wind power, gas, or oil?
A. Yes, this is marginal cost pricing. It's typical of the way in which energy markets are set and entirely consistent with standard economics.

My point was simply that the -- that there are some long-term energy benefits, which have been covered elsewhere, that will accrue to Maine. I cannot say what those benefits are in terms of changes in economic activity. I simply noted them.
Q. So it would be somewhat speculative to say that enough benefits would flow from this one project to offset any negative impacts from fossil fuel price instability; correct?
A. From this one project, as I said, the -- I made no attempt to exactly offset one against the other, but I believe that the offsetting energy -- the energy benefits of wind power will offset some of the detrimental costs of reliance on fossil fuels.

MS. PRODAN: Okay, thank you, Dr. Colgan.
THE WITNESS: Thank you.
THE CHAIR: Excuse me a minute. Juliet what time did Dr. Colgan have to leave now?

THE WITNESS: I've got another hour or so.
THE CHAIR: Okay. I was just -- I can't really let
him go until all the other intervenors have had a crack at him, too, so you may have to do some things here if there are other intervenors that want to ask him questions.

I may have to interrupt Pam once or twice to get that kind of push here.

Are there any other intervenors here who are going to question Dr. Colgan? If not, that's fine.

Commissioners, I will let you have -- Catherine, you keep track of the time here so we don't cut in. Gwen or Steve? Steve, did you have a question?

MR. WIGHT: No.
THE CHAIR: You're going to get off pretty easy.
Again, I would like to get into all kinds of questions about energy pricing, but I'm not sure they're relevant. With that, we thank you.

Pam, please go ahead.
EXAMINATION OF TERRY BENNETT
BY MS. PRODAN:
Q. Good morning, Mr. Bennett. In Appendix 1-E of the
application -- this is the report called 2004 Climate Change and Air Issues Annual Report -- do you know what I'm referring to?
A. I haven't got the report memorized.

MS. BROWNE: If you're going to talk about a

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document --
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MS. PRODAN: You don't have copies?
MS. BROWNE: What is it?
MS. PRODAN: It's Appendix $1-E$ of the application. It's in Volume 2.

MS. BROWNE: I'm sorry, what report is it that you want?

THE CHAIR: Make sure Lisa can hear what you're saying, Pam.

BY MS. PRODAN:
Q. On Page 10 of the report under No. 3, are you all set there?
A. I think I have the reference.
Q. No. 3, it states TransCanada will manage greenhouse gas emissions from our operations on an intensity basis, and greenhouse gas intensity is defined as tons of emissions per unit of production; is that correct?
A. That's what it says, yes.
Q. In the bottom paragraph called Strategy, it is a discussion that says that TransCanada will increase its
ability to deliver natural gas to North American markets while increasing power generation capacity using innovative and energy efficient methods; correct?
A. Correct.
Q. You consider wind energy to be one of those energy efficient methods; correct?
A. Yes, it's a clean energy source.
Q. Would you agree that in order to generate a certain amount of electricity from wind, you would either have to build one turbine in a high wind resource area or more turbines in a lower wind resource area?

Do you want me to repeat that?
A. Yes, please.
Q. Would you agree that in order to generate a certain amount of electricity from wind, you would either have to build one turbine in a high wind resource area or more turbines in a lower wind resource area?

Would you agree with that?
A. I think as a general statement windier areas produce more energy for a given turbine, yes.
Q. So that is consistent with what Mr. Di domenico said earlier this morning that you consider Kibby at 8.5 percent and to be two times as energetic as a site with wind speeds at 7.5 meter per second; correct?
A. Roughly.
Q. Thank you. Going on to Page 11, the side bar states, TransCanada's strategy is designed to limit the growth of our greenhouse gas emissions' intensity, while expanding our pipeline and power businesses; is that correct?
A. That's correct.
Q. Is it true that TransCanada believes that wind energy will play a role in allowing TransCanada to expand its pipeline business?
A. I don't think the two are directly related. I think when managed prudently our GHG emissions -- we're in the power business -- wind is a key component of our power business withstands certain tests in terms of financial viability.
Q. Is it not TransCanada's position that wind power emits no or very little carbon?
A. That's correct.
Q. So wind power is highly carbon efficient; correct?
A. I'm not sure what you mean by highly carbon efficient; but it doesn't produce emissions, yes.
Q. Thank you. Now I want you to go to the 2006 Annual Report, and that's Appendix 1-F. Actually I'm going to look at the notes. Do you have that in front of you?
A. I have the annual report here.
Q. Thank you. Page 84 of the notes to the consolidated financial statement?
A. Yes.
Q. You can see that TransCanada is providing natural gas to fuel the Alberta oil sands project; correct?
A. We have a pipeline -- a natural gas pipeline in Alberta.
Q. And the natural gas goes to?
A. I don't know, I don't work on the pipeline side. I assume it goes to consumers in Alberta.
Q. I guess I would point you to the -- I'm looking for the line here -- I'm looking at the bullets and counting down two, four, six -- the seventh bullet, could you read that out loud, please.
A. Natural gas transmission systems in Alberta owned by TransCanada Pipeline Ventures under a partnership, Ventures, LP, are supplying natural gas to a region of northern Alberta into a petrochemical complex.
Q. So this is a pipeline segment of the corporation that owns and operates this pipeline; correct?
A. I believe so.
Q. Thank you. On Page 68 at the bottom, it mentions under the topic Risks and Risk Management Related to Environmental Regulation that in the US, State-level initiatives are underway to limit greenhouse gas emissions, particularly in the northeastern US and California, and the impact to TransCanada's US States' passage is uncertain; correct?
A. Correct.
Q. Then going on to Page 69 it states that, despite this uncertainty, TransCanada will continue with programs to lower greenhouse gas emission rates; is that correct?
A. Correct.
Q. And the rate referred to here is the rate of greenhouse gas emissions in terms of intensity; correct?
A. I don't see the word rate here.
Q. It's basically the last word in the second to the last sentence of that section, right above on Page 69 where it's above Controls and Procedures. If you just read the top sentence on Page 69 out loud, please.
A. Despite this uncertainty, TransCanada continues with its programs to manage greenhouse gas emissions, assets, and to evaluate new processes and technologies that will result in improve efficiencies and lower greenhouse gas emission rates.
Q. Again, the question is, the rate referred to here is the rate of greenhouse gas emissions intensity; correct?
A. I believe so.
Q. Is there someone else I should be asking about greenhouse gas emissions --
A. I'm in charge of power development, not greenhouse gas emissions or not our greenhouse gas strategy. I can do my best and answer your questions.
Q. Okay, thank you. Are you aware whether the rate of
greenhouse gas emissions intensity could go down for TransCanada at the same time that the total greenhouse gas emissions from the whole business go up?
A. I don't know the math.
Q. Are you aware of the corporate goal of TransCanada to reduce the greenhouse gas emissions intensity as a company?
A. I am.
Q. Okay, thank you. Now I am going to go to Appendix 2-C and the title of that publication is Global Warming in New England. It might actually be under Tab 2-D. It might have been misplaced. Mine was.

Can you please explain -- well, strike that.
On Page 17 of this report, Global Warming and New England, in the discussion of electricity sector -are you there?
A. I believe so, yes.
Q. It states that using the carbon efficiency method of measuring can lead to an increase in absolute emissions if demand for electricity outstrips the gains from efficiency or renewables; correct?
A. I don't see the exact reference but I'll take your word for it.
Q. Do you agree or disagree with that statement?
A. This is not our report but I think --
Q. It's in your -- excuse me.
A. It seems like a plausible statement to me, yes.

This is not our report, it's not published by TransCanada, but it seems like a plausible statement to me.
Q. This report is in your application; correct?
A. It is.
Q. Do you have an opinion as to whether -- if demand for natural gas outstrips the gains from efficiency or renewables, isn't there going to be an increase in global absolute greenhouse gas emissions?
A. I think global greenhouse gas emissions is exactly that, a global issue encompasses all industries and all human activity on the earth. It's a broader question than that.
Q. Now I'm just going to refer to some of the text in the application. It states that TransCanada is developing several large-scale projects across North America.

I don't know if you were responsible for that on Page 120 of the text; is that correct? This is Volume 1, Section I, Page 120.
A. I've got the reference.
Q. The title of the page is Other Projects and Initiatives. What are the three projects listed on this page?
A. The Alaska Highway Pipeline Project, the McKenzie Valley Gas Pipeline Project, and the Keystone Oil Pipeline
project.
Q. And these projects are under development?
A. I'm sorry, there's a Northern Lights Electrical transmission project on the next page.
Q. These projects are under development?
A. That's correct.
Q. What effect will the addition of the pipelines, the three pipelines, have on TransCanada's absolute greenhouse gas emissions?
A. In isolation obviously new pipelines will add to our emissions.
Q. What effect will the addition of these pipelines have on TransCanada's greenhouse gas emissions intensity?
A. I couldn't tell you.

MS. PRODAN: Mr. Di domenico, I have a few questions for you.

EXAMINATION OF NICK Di DOMENICO

BY MS. PRODAN:
Q. You have referred to the premier wind resource at the Kibby project location; correct?
A. That's correct.
Q. You stated that the purpose of this project is to use a premier wind resource to respond to the growing demand for clean renewable energy; correct?
A. Yes.
Q. I'm going to pose just a quick hypothetical and then ask you a question.

Suppose LURC had a developer ask for a rezoning of a protected sand dune area to develop an excavation pit in order to extract what is a premier source of clean sand and there's a market for the sand, a less than premier resource of sand could also be utilized that would not require the rezoning of the sand dune area protected.

You can probably anticipate my question. But the question is, do you think that LURC should take into account that the developer wants access to this premier source of sand even though alternatives exist?
A. I believe that LURC should deal with the issue at hand given all the information provided and that is to deal with the Kibby project, its impacts, whether they are undue or not, and the environmental benefits, and other societal benefits instead of the project.
Q. Does -- are you done?
A. Yes.
Q. Does the fact that the Kibby project purpose is articulated in a way to require the prime wind resource there mean that the project depends on the wind resource found at the location?
A. All project -- wind projects -- fundamentally depend on the wind resource. It is the economic driver of a wind
project, as well as the source of the environmental benefits, or the source of basically the community benefits, yes.
Q. Are you or the other intervenors in this proceeding saying that there are many other wind sites in Maine that are viable and will be developed?
A. I'm aware of that, yes.
Q. Have you read the testimony of Sean Mahoney?
A. Yes, I have.
Q. So you are aware, are you not, that -- if I could quote from his testimony that he said on Page 7 -- As the maps submitted by the applicant indicate, there is plentiful wind resource available in Maine at this and other locations; correct?
A. Yes.
Q. I have a question about the P -MA subdistrict, the protected mountain area subdistrict for you.

Have you read the regulations that LURC has in Chapter 10 concerning the allowed uses in the $\mathrm{P}-\mathrm{MA}$ subdistrict?
A. I've briefly read most of the CLUP, but I relied on my counsel for the interpretation of the CLUP.
Q. That's a good idea. But are you aware that you can't even build a cabin in a protected mountain area subdistrict?
A. I'll take your word for it.
Q. Be sure to check with your lawyer, though.

I guess my question about this is why couldn't someone say that their purpose is to build a remote cabin in a pristine mountain area and petition LURC to rezone the area out of protection saying that because the purpose depends on a pristine mountain area, the project depends on that location?
A. I'm not following your question, I'm sorry.
Q. We already discussed that you've articulated that the Kibby project purpose in a way to require the premium wind resource.

Remember the first question I asked you?
A. Yes.
Q. Why couldn't anyone go before LURC and articulate the purpose of their project to require a resource that is protected and justify the need based on how they've articulated the purpose?
A. I still don't follow your logic.

MS. PRODAN: Okay.
EXAMINATION DON HUDSON
BY MS. PRODAN:
Q. Dr. Hudson, good morning.
A. Good morning.
Q. Are you a soil scientist as well as a --
A. No.
Q. -- life scientist?

Are you aware that there are actually many references in the TransCanada application to areas in the boundary mountains -- in the project area in fact -- where there are outcrops, ledges, steep slopes, shallow soils?
A. Yes.
Q. On your -- in your testimony on Page 3 --
A. Yes.
Q. -- you state that the slopes of the boundary mountains are more shallow and gentle. Few outcrops or ledges can be found.

Have you reviewed the actual soils information filed by TransCanada in this proceeding?
A. Not in detail but in general.
Q. Did you review the text?
A. Yes.
Q. Did you review the median intensity soil survey?
A. Yes.
Q. Did you review Appendices B, C, and E of the soils report?
A. I reviewed the entire application.
Q. Have you read Dave Rocque's comments concerning soils?
A. I don't have them in front of me, and if they were in the application, I reviewed them. I don't have the application committed to memory though.
Q. So you are aware that in the application in Section 5,

Earth Resources, dealing with suitability, Section 5.2.4, it states, There are limitations inherent to some of the soils identified at the site, including seasonally high water tables, shallow depth to bedrock, and steep slopes; do you recall that?
A. Yes.
Q. In Section 5.2.4, steep slopes, some of the steep areas between 45 percent in slope grade and will require substantial grading to develop access roads; do you recall that?
A. I do.
Q. Do you recall the reference in Section 5.31 concerning geological recognizance, and this is within Series A and B ridge development areas, "Field observation during soil and preliminary geological investigation show conditions along the ridgelines primarily consist of a thin mantle of glacial till underlain by bedrock. Angular boulder blocks, overline bedrock, or exposed bedrock; do you recall that?
A. I do.
Q. But in your testimony you say few outcrops or ledges can be found; is that right?
A. Yeah, that's a comparative statement to the other mountains of Maine that $I$ have familiarity with.
Q. But surely there must be quite a few, otherwise, as you
say, few outcrops or ledges can be found, why doesn't TransCanada manage to avoid them?
A. I can't speak to that particular question.
Q. In your conclusion you do refer to the Mahoosuc Range, as well as Bigelow Preserve, Baxter State Park, and you state that -- and I'm quoting -- In these higher mountains, I found all the geological features of hallowed buttresses of outcrops, granite, and rocky barren summits included in the definition of the $P-M A$; is that correct?
A. Correct.
Q. Could you cite in the $P-M A$ definition where these features are stated or applied?
A. I don't have it in front of me.
Q. Did you refer to the $P-M A$ when you wrote this, the $P-M A$ subdistrict?
A. I reviewed, yes.
Q. Are you aware of the LURC subdistrict called the soils and geology protection subdistrict, the $P-S G ?$
A. Not in detail.
Q. Are you aware that there are a number of areas in the Mahoosucs that are zoned $P-S G$, for instance?
A. I don't have a detailed map, zoning map, in front of me, nor did I review it proximate to writing that testimony.
Q. I'm just going to pull out the zoning regulations and have you quickly look at the $P$-MA subdistrict.

Could you please look at that description and -anywhere, actually, in the P-MA subdistrict standards -where the features that you refer to are stated or implied?
A. Well, some of the -- some of the named -- some of the named geological features that $I$ listed in my testimony are implied in the first sentence in the word geology and words geology of the slope.
Q. Is there any reference to talus?
A. No, no. I chose to use words that are commonly used to describe surficial features in high mountain areas.
Q. Is there any references to buttresses of outcrops, granite or rocky barren summits?
A. No.
Q. So none of those references are included in the $P$-MA definition?
A. Correct.

MS. PRODAN: Thank you. I guess I still have a little bit of time before lunch.

THE CHAIR: You don't have to use it. It's not a requirement.

EXAMINATION OF TOBEY WILLIAMSON
BY MS. PRODAN:
Q. Mr. Williamson, in your direct testimony you made reference to recreational access to the areas developed;
correct?
A. I'm sorry, to recreational access development?
Q. In your testimony on Page 6, you said that the turbines would be a destination for ATVs and snowmobiles, according to Scott Ramsay; correct?
A. Yes, Mr. Ramsay said that.
Q. Would you agree that you've represented that TransCanada would not close the new access roadways or the transmission line to public access?
A. Yes.
Q. And those access ways would remain subject to continuation of Plum Creek's open lands policy?
A. Yes, that's correct.
Q. And where the landowners are not Plum Creek under the transmission lines, access to those transmission lines would be controlled by the landowner, not you; correct?
A. That's correct.
Q. In fact, does TransCanada actually have any rights to control recreational access on any of the transmission line?
A. I'm probably not the best person to answer that question but not that $I$ know of.
Q. Okay, but you referred to Plum Creek's open lands policy. What does that say to you about use by snowmobiles and ATVs?
A. My understanding is that snowmobiles are not allowed to use plowed roads; ATVs must use trails that are approved.
Q. So it would not be correct to imply to the public that the access roadways would be open to snowmobiles and ATVs, would it?
A. Well, I don't think -- I did not mean to imply that. There's other ways to get to the project beyond the roads.
Q. If this area is thought to be a destination possibly, how exactly would the turbines be accessed if Plum Creek doesn't allow these types of vehicles on the roads?
A. Well, there was a former ITS trail going to the peak of Kibby Mountain, and I've been told by the members of the Arnold Trail Snowmobile Club that they continue to use trails in and around the area, whether or not they are part of the ITS.
Q. Are you aware of efforts to try to reopen that trail to public use?
A. I'm not, no.
Q. How would you find out an area like this area is used for remote recreation?
A. Can you tell me what you mean by remote recreation?
Q. Well, you did surveys -- you interviewed people basically; right?
A. That's correct.
Q. How would you find out whether an area was being used for
recreation off the roads?
A. Well, the people that I spoke to, some people said there's some hiking that's going on in the area. Is that what you mean?

There's hunters hunting that's going on up there. This is -- all I can tell you is what people have told me.
Q. Okay, so you rely on what people tell you. And that determines -- excuse me.
A. Yes, that was my job for the last two years was to speak with people in the community.
Q. So what people tell you determines how you will try and get in touch with other users; correct?
A. That's certainly one way, ask people I spoke to who else I should speak to.
Q. If someone were coming from an area outside of the community and just using the boundary mountains area without stopping at, say, the market in Eustis or Pines Market or some other location, but just went directly, would people be able to tell you about that user?
A. Not everybody but there were certainly -- I mean, we did other things besides the anecdotal survey that I did. We did do some counting. Maybe Lynn Gresock can answer those questions.
Q. So you don't -- I thought you were in charge of doing the public outreach?
A. I was in the local area, yes.
Q. Did you go up here during deer hunting season?
A. Did I? No, I did not. The focus of my community work was in the local area. I didn't spend a whole lot of time up in that area talking to people because they're hard to run across up there.
Q. Would you know if someone were camping at Natanis Campground and then going into the area -- did you -strike that first question.

Did you go to the Natanis Campground to --
A. Yes, I did.
Q. Did you inquire as to destinations of people who were there at the time that you were there?
A. Yes, I did.
Q. So you approached individual campers?
A. No, I spoke with the owner of the campground.
Q. Would the owner of the campground necessarily know if someone were camping at the campground and decided to bushwhack up this mountain?
A. No, he wouldn't necessarily know that.
Q. When you talked to people, did you use any visual simulations when you interviewed people?
A. Well, at different phases of the project, yes, I did. Early on in the recreational survey we didn't have those simulations.
Q. So for many people you just asked them if they were familiar with wind projects; correct?
A. Correct.
Q. You didn't tell them the height or size of the proposed towers and turbines, did you?
A. I don't recollect; but if people asked and I had the information, I would have provided it.

If I didn't have the information, I made an effort to go get it from TransCanada and bring it back to people.

That was also part of my job to give and take between community members and team.
Q. So if you asked someone if they were familiar with wind power project and they said yes, you didn't find a need to give them any more information, did you?
A. I'm confused about which portion -- are you focusing on the recreation survey or are you focusing on the rest of the outreach that I've done? At different points I provided -- we had a copy of the fact sheet that we distributed quite a few places.
Q. Maybe you could explain how you treated different people you spoke with differently, if you don't mind.
A. Well, early on we did a recreation survey to do our best to understand how people are using that project area.

As the project moved forward, we continued to talk to different people in the community and to share more
information as it became available as the project sort of grew and had more information to share.
Q. So which people did you tell the height and size of the towers and turbines?
A. I've spoken to hundreds of people in the area. I couldn't tell you which ones I told exactly precisely.
Q. How many people that were interviewed do you think would actually have seen a wind power facility like what's being proposed?
A. It's hard to give you a precise number. When Mars Hill went up, I think quite a few people have been up to see that. Some people have travelled around to different places in the country and seen them.

It's hard to give you a precise number.
MS. PRODAN: Thank you. I don't think it would be good for me to start on anybody else because they're somewhat longer in duration. Thank you.

MR. BENNETT: Can I respond to the first set of questions that Pam had? 30 seconds.

THE CHAIR: Sure, go ahead.
MR. BENNETT: I don't know if I'll be particularly helpful because I'm not a greenhouse gas expert and I don't work on the pipeline side of TransCanada.

I just want to explain that TransCanada doesn't own the natural gas supply. It doesn't consume the natural gas at
any other end.

What our job is is to transport it from supply to the demand point.

We are trying -- you know, the words in our mission statement is, we're trying to reduce the intensity of the energy and emissions that are used to get it from Point A to Point B. We're doing that using the best available technology we can.

Obviously that type of technology doesn't allow us to get those emissions to zero, but we're working to reduce those emissions as much as we can. So that's the intensity level.

We don't control either the rate of supply that comes on or the rate of demand on the other end, so whether the overall emissions rate for TransCanada go up or down -- or the levels go up and down -- is sort of beyond our control. We're there to connect markets.

We're doing what we can as part of our corporate philosophy to reduce emission rate it takes by looking at technology and doing what we can on the power generation side by investing in energy efficient generation facilities and reducing emission rates and compression stations along the gas pipeline. Thank you.

MS. PRODAN: I must say that I have a couple of follow-up questions if that is all right. THE CHAIR: You've got 5 minutes.

BY MS. PRODAN:
Q. Mr. Bennett, on Page 8 of the 2004 Climate Change and Air Issues Annual Report, it does say that the three greenhouse gases commonly produced by TransCanada are carbon dioxide, methane, and nitrous oxide; is that correct?
A. Again, $I$ don't have the report here in front of me, but $I$ assume that's correct.
Q. Do you have to assume that, or are you aware that TransCanada's pipelines do emit global warming emissions?
A. I believe they do. Again, I'm not the greenhouse expert here for TransCanada, but there certainly are emissions associated with our compressor stations.

MS. PRODAN: Thank you.
THE CHAIR: I guess that's it. We'll adjourn and try
to return here by 12:30. We'll pick it up then.

*     *         *             *                 * 

(There was a luncheon break in the hearing at 11:55 a.m. and the hearing resumed at 12:38 p.m.)

*     *         *             *                 * 

THE CHAIR: Are we all ready to go?
MS. PRODAN: Yes.
THE CHAIR: It's 12:35, approximately. You've got
until about quarter of 2, Pam, okay.

MS. PRODAN: Well, I thought I was going to have more than that after lunch.

THE CHAIR: My note said 70 minutes.
MS. PRODAN: My note says 90 minutes, 12:40 to 1:50.
THE CHAIR: We had some clock problems with the timing on this. I'm not going to get too excited but somewhere between 70 and 90 minutes. I'll be generous, how's that?

MS. PRODAN: 90 minutes will take it to 2:10.
THE CHAIR: Let's shoot for around 2 o'clock.
MS. PRODAN: Thank you.
THE CHAIR: That should give you plenty of time.
MS. PRODAN: That way if $I$ stop early, I'll look
really good.
THE CHAIR: That's right.
EXAMINATION OF JEAN VISSERING
BY MS. PRODAN:
Q. Good afternoon, Ms. Vissering.
A. Good afternoon.
Q. Ms. Vissering, you participated as a witness in the Black Nubble proceeding; correct?
A. That's correct.
Q. Do you recall on Page 32 of your direct testimony for the Black Nubble project, you wrote with regard to the mountain protection zone that "in examining the resources involved in mountaintops, the Commission notes the fragile
nature of these environments."
Do you remember that?
A. Yes, I do.
Q. Also on the same page you quoted the CLUP and wrote "in discussing the issues involved the plan beginning by noting," actually, your quote was from the CLUP where the CLUP said "mountains and the scenic, natural, recreational, economic, and other values they possess are a limited resource in Maine."

Do you recall writing that?
A. I certainly do.
Q. Yet, isn't that correct that in your rebuttal in this proceeding you took a completely different attack and wrote that among the factors you considered in this proceeding was the -- and I'm quoting here -- "lack of any clear public documentation of the particular scenic or recreational value of this mountain or its surroundings"?
A. Yes, I completely -- I definitely believe that it's the responsibility of LURC to look at the fragile nature of the mountain ridges, areas above 2700 feet, also to assess the scenic impact.

But I also believe that every site is different, and I think one of the important points that I feel is very relevant here is, among many others, is that in the case of Black Nubble there was a clear statement in several places of the CLUP the specific value of the Appalachian Trail.

There is no similar specific statement that has been made about trails for the general area or specific resources in the vicinity of the Kibby project.
Q. With regard to the words "fragile nature" or the words "limited the resource," did you make reference to those values in your testimony in this proceeding?
A. The only reference $I$ made to those specific statements in the CLUP was in the rebuttal to Mr. Kimber's testimony because he cited those, and I do feel that -- as I did with the Black Nubble case -- I think that there are places that are going to be appropriate for some wind energy development.

I think that LURC's responsibility is really to look at those values and to weigh them against the other natural resources, and my, interest scenic values in the area, and make a decision.

Certainly the fragile nature of those landscapes are important and where they apply those values, those values need to be evaluated in terms of the particular nature of the site involved.
Q. Can you show me in your rebuttal testimony where you say you refer to fragile natural resource?
A. No, I didn't. I said I looked in my rebuttal testimony
because I was responding to Mr. Kimber's statement that it was LURC's responsibility to look at the remote values, and I was pointing out that LURC does have a larger responsibility to look at a range of different values within their jurisdiction. I think that is --
Q. So you did not?
A. -- consistent with what I would believe in any of these cases.
Q. So it is correct that in your rebuttal proceeding, in this proceeding, you did not mention anything about the limited resource or the fragile nature of mountains in Maine; correct?
A. I recall -- I can't remember in my testimony -- it would be in my report noting that these are -- that these are important scenic areas.

I think this is something -- and fragile areas -that need to be addressed; but I did not think that in this particular case those were the issues we were dealing with.
Q. In your direct testimony in this proceeding, you stated -and I believe it's on Page 32 -- "it's a scenic but not spectacular landscape with none of the mountains exceeding 4000 feet; correct?
A. Yes, that's correct.
Q. Do you have a professional stake in whether the Commission
places higher value on spectacular scenery?
A. What do you mean by a professional stake?
Q. Are you more vested in the protection of spectacular scenery over the protection of less spectacular scenery?
A. It is a measure that is used in most visual assessment methodologies. When we look at, for example, we heard in the Black Nubble case the US Forest Service methodology, which is the methodology that has been adapted in nearly every assessment, one of the critical parts is to look at the particular scenic values that are involved in the site.

Maine has a landscape that is not unlike Vermont where I come from. Much of Maine is very scenic.

In making these decisions, the kinds of resources that become really important are those that have outstanding scenic values, and there are measures -- I think I described those actually last time in the Black Nubble case -- one of the measures is diversity.

So when you add rock outcrops, alpine vegetation in terms of diversity, you're increasing the level of diversity, as well as just the sort of very steep slopes. All those things tend to increase visual diversity and therefore scenic quality.

So we have -- there are -- I think it is possible to articulate different scenic quality values, which this
range of mountains and its environment and the range of environments in the Black Nubble case.
Q. And you spent a lot of time reading the CLUP; correct?
A. I have certainly read most of the CLUP.
Q. Is there anything in the statements in the CLUP, in the policies or in the discussions, that suggest that LURC has ranked mountain areas and written some of them off based on whether or not they are spectacular or over 4000 feet?
A. No, and I think --
Q. Thank you. On Page 4 of your rebuttal --

MS. BROWNE: I just ask that she not be cut off. I request that the witness be allowed to answer the question fully. She was cut off in mid answer.

THE CHAIR: Go ahead and answer it, please.
MS. VISSERING: I've forgotten now what $I$ just said.
THE CHAIR: Let's allow them to answer the questions so we get some sense of what they're saying.

MS. PRODAN: I just looked at my watch and I panicked. BY MS. PRODAN:
Q. On Page 4 of your rebuttal testimony for this hearing, you say that certain combinations of land form, vegetation and water features were both in natural or cultural features that are particularly distinctive.

This is not the case here; correct? You stated that?
A. Yes, I did.
Q. Is there anything from LURC's regulations -- or in the CLUP for that matter -- that suggest that certain mountain areas under the jurisdiction of this Commission that have particular land forms, vegetation or water features are more worthy than others of the protection afforded under the protected mountain subdistrict?
A. That was the question $I$ was answering.
Q. Not exactly --
A. -- when I got cut off. I'll answer it next.

I think that the point $I$ just wanted to make was that, again, those values are not mentioned, but on the other hand, $I$ think in the case of Black Nubble, the Appalachian Trail is specifically mentioned as a valuable resource, and it does mention, certainly, identify the scenic values as a very important part of that value.
Q. So in this proceeding -- I'm not talking about Black Nubble here -- you are advocating that the Commission use a methodology for judging mountain areas that include visual impacts and consideration of mountains that have certain land forms, vegetation, and water features; correct?
A. I'm a little confused by the question, but clearly I believe that we need to have a methodology that identifies the particular resources that contribute to a region, and
some of those will be resources that contribute to some unique or outstanding qualities, and others will contribute to the general scenic quality.

I certainly don't deny that this is a scenic area.
Q. Again, you did say in your testimony, the rebuttal testimony, certain combinations of land form, vegetation or water features result in natural or cultural features that are particularly distinctive. This is not the case here.

You did say that; correct?
A. I think I'm understanding now what your question is. Okay. That probably was not very well written the way I wrote it.

I did not mean to say that the land forms, vegetative patterns, and water features don't contribute to the quality in this area.

What I meant to say is that the combination, the particular combination, does not rise in this particular setting to an outstanding scenic resource.
Q. When Mr. Kimber wrote on Page 10 of his direct testimony that there are 15 mountains between 3500 feet and 4000 feet, and 22 mountains between 3000 feet and 3500 feet in Franklin County alone, was it correct that you thought that he was not applying valid criteria for making a determination as to which of those mountains were worthy
of protection?
A. Well, $I$ think my concern was that, yes, this is an area with many, many mountains, and many, many wooded mountains of varying heights, some higher than others.

But there are no particular mountains that are identified as having particular values. They all contribute certainly to the character of that area but none of them -- this is sort of -- that is the character of this area, many, many, many mountains that of that kind of slightly lower range, 3000 to 4000 feet, that are characteristic of this area.

I don't see -- I didn't see -- I don't see anything that identifies any particular one of those mountains or anything in that region in terms of the mountains having particular significance.
Q. You wrote on Page 5 of your rebuttal to his testimony, when everything is unique, unfortunately nothing is; didn't you?
A. Yes, that's part of the problem without being able to -if everything had become a focal point -- I'll give you a classic example of strip development -- every business is trying to be a focal point. So what you get is -- I can't say this is a mess, this is a lovely scenic landscape -but ends up standing out and being distinctive.

It's just a wash of signs and buildings. None of
them -- they're all trying to be and therefore none of them are.
Q. Looking at it another way, do you think that an area the size of Franklin County with that number of mountains over 3000 feet is unique?
A. With that -- I think that that is -- I think it is certainly an important area within Maine.

I mean -- but I think that when I look at a landscape -- and I mention this in my rebuttal -- all landscapes do have distinctive characteristics, and we need to be looking at the distinctive character of an area.

When I do a visual impact assessment, I'm always looking at what is it that is distinctive about this particular area, and they all have something distinctive about them.

So if we look -- what I try to do is to look at are there particular resources that are -- that would be effected in a way that really have a drastic effect on the region as a whole, and because of the numerous number of mountains in this area, $I$ think in this particular case we're really having an impact on a very, very small part of that overall resource.
Q. Do you disagree with Mr. Kimber that the mountain region in Franklin County, in fact, western Maine, has statewide
significance?
A. I would think that that's probably true of most regions of Maine, that they have -- I mean, there's the coastal areas, sort of farm land areas.

All of them have their own kind of significance that is important and contribute to the whole, which is Maine. There are -- certainly the general mountain areas are very important and contribute to the scenic quality of Maine.
Q. Are there areas along the coast of this size that have this many mountains over 3000 feet?
A. No, and I think that's my point, that every area has its own kind of distinctive quality. They all contribute to the state of Maine.
Q. But you would acknowledge that the character of western Maine, the mountain county, is then defined by the mountains; correct?
A. I would say that's true, yes.
Q. On Page 3 of your rebuttal, Ms. Vissering, you say there's no protected land within the immediate project area; right? If you want to check that, you may.
A. Yes, I did say that.
Q. So you don't consider the $P-M A$ zone designation to be protected, do you?
A. Here's what $I$ mean by protected I guess. I would -- I was
thinking about parks, the -- they're all protected in a little different way, the Maine Preserve Lands, those kinds of protections that have to do specifically with scenic quality in some way.

In other words, I'm looking at the visual resources, so I'm looking for protected land that is protecting some visual impact.
Q. So you don't consider the $P$-MA zone designation to be particularly protective of scenic resource; is that right?
A. The protected land is -- I do think that it is -- I think it's probably fair to say that it is protective of some of the high scenic values. It is applied to every elevation above 2700 feet as opposed to something that is a particular resource, such as Mt. Blue State Park, or some of the Maine Preserve Lands.

I think your point is fair in the very general sense but I think that the -- setting aside of a particular piece of land as a park, as a specific park or trail, it's very particular to the particular area involved.
Q. In your direct testimony for this proceeding you refer to Chapter 315 of the DEP regulations; right?
A. Yes.
Q. Do you believe that the DEP rules are the legal criteria for evaluating this project by LURC?
A. I'm less familiar with how your proceedings work here. My
understanding is that it is not -- these are not the criteria that are used except in the incorporated towns, but I may be wrong about that.
Q. Well, are you aware going back to what is included in LURC's statute in the criteria for approval for rezoning that there actually are some applicable sections in DEP's statute?
A. I guess -- yes, I did realize that.
Q. So you realized that were some that were applicable to LURC starting at Section 480-A, Title 30-A, going to 480-B that apply to LURC; correct?
A. Generally, yes.
Q. Well, let's start with 480-A because this is the findings and purpose declaration.

MS. BROWNE: Are you talking about NERPA?
BY MS. PRODAN:
Q. Again, in LURC's statute in Section 685-B-4-A, there are some applicable sections and this was referenced in the criteria for the project list we got.

Starting at Section 480-A, this is the purpose and findings and purpose declaration for the statute regarding protection of natural resources.

Can you read the first paragraph for $480-A$, please.
A. The legislatures finds and declares that the State's rivers and streams and great ponds, fragile mountain
areas, fresh water wetlands, significant wildlife habitat, coastal wetlands, and sand dune systems are resources of State significance.

These resources have great scenic beauty and these characteristics unsurpassed recreational, historical, and environmental value of present and future benefit to the citizens of the State, rapid degradation and some cases the destruction of these critical resources producing significant adverse economic and environmental impacts and threatening the health and safety and general welfare of the citizens of the State.
Q. In the interest of time, could you please read the last sentence of 480-A?
A. The one that begins the legislature further?
Q. Yes.
A. The legislature further finds that the cumulative effect of frequent minor alterations and occasional major alternations of these resources poses a substantial threat to the environment of the economy of the State and its quality of life.
Q. Now, could you please read the definition of fragile mountain area, which is under $480-\mathrm{B}-3$ ?
A. Fragile mountain area. Fragile mountain areas mean areas above 2700 feet in elevation from mean sea level.
Q. And then I would ask you to read this last section
finally, 480-E-1. Just the first paragraph should be enough.
A. The Maine Land Use Regulation Commission shall issue all permits under this article for activities that are located wholly within its jurisdiction and are not subject to review and approval by the Department under any other article of this chapter.
Q. Thank you. Would you agree that the Kibby project area includes areas over 2700 feet?
A. It does include areas over 2700 feet, yes.
Q. Would you agree, then, that they are fragile mountain areas?
A. I would agree that they are technically classified as fragile mountain areas. I don't necessarily agree that they in fact are fragile mountain areas.
Q. You stated on Page 16 of your testimony than when a resource is identified in local, regional, or State planning documents, it implies a public consensus as to the value and importance of that resource; correct?
A. I'm sorry, would you repeat that?
Q. Sure. You stated on Page 16 of your direct testimony that when a resource is identified in local, regional, or State planning documents, it implies a broad public consensus as to the value and importance of the resource; correct?
A. Yes, that's correct.
Q. Can you think of any stronger statement of broad public consensus as to the value and importance of a resource than a finding made by the Maine legislature that fragile mountain areas are resources of State significance?
A. I think that, first of all, this is -- we've been reading one aspect, of course, of the values, and I do think that these are very important values that need to be taken very seriously by the Commission.

I think that there are clearly other values that have been specifically stated in the CLUP that recognize that there may be appropriate times in which these resources need to be considered for other uses.

The problem with these -- when I speak of sort of something of kind of agreed-upon consensus -- this is clearly, clearly one level fairly that's applied to a fairly broad area of the state and recognizes scenic values and fragile values.

At the same time, from a visual point of few, with looking at wind energy projects -- and you're looking at where the wind resources -- they're very likely going to impact some of these areas, so you have -- I think that you have to make some decisions as to what sort of balances here.

But when I'm looking at doing a visual assessment, I think that there are certain resources for which rise --
which rise to the level of a particular value for their specific scenic and recreational values.

This is a general scenic value and ecological value. I look at specific, and what we refer to in the legislation in Vermont has been a clear written community standard with respect to aesthetics. It can't be a broad goal, we need to protect the rural character of the area.

So when I'm looking through the CLUP, I'm looking at resources for some specific guidance as to what are resources that really stand out that have been mentioned by name.

The fact that there are many of these ridgelines --
Q. Excuse me, Ms. Vissering --

MS. PRODAN: Mr. Harvey, I'm just going to restate the question.
Q. Can you think of any stronger statement of broad public consensus as to the value and importance of a resource than a finding made by the Maine legislature that "fragile mountain areas" are "resources of State significance"?
A. Well, I think I answered that earlier.
Q. So you would still say that there is a lack of any clear public documentation -- that's the wording you used in your testimony -- of the particular scenic or recreational value of this mountain or its surroundings; correct?
A. No, I think what I -- I'm not the one to make the
interpretation of this, but this is clearly the value that is the higher value -- there has been a strong recognition of the value of these areas, but that it is also true that there have been other values that have also been stated that there may be certain situations where there are perhaps a higher value for use in a few instances of high elevation terrain, and I think these are -- I don't think that this is a blanket absolute no.

There was clearly stated in the CLUP that there may be instances where there really is some other values that have to be considered and they have to be weighed on an individual basis in terms of the particular resources involved in the particular setting.
Q. Ms. Vissering, you are a landscape architect; correct?
A. That's correct.
Q. My dictionary, can I give you the definition and see if you agree with that?

American Heritage Dictionary, third edition, A landscape architect is one whose professions is decorative and functional alteration of the planting of grounds, especially at or around a building site?
A. Well, I like to do that, too.
Q. Is it safe to say that --
A. Excuse me --
Q. -- generally the work of a landscape architects deals with
the built environment?
A. I think -- actually I think that a better definition would be the integration of the built and natural environment is really the focus.
Q. Do you have any training in evaluating the value of remoteness in landscapes?
A. Well, my training is really, and my focus has been on visual values, and I think the concept of remoteness kind of seeps into it to some extent. I think remoteness is a broader aesthetic recreational and almost perhaps a spiritual kind of concept.

It is one that I have thought about. I cannot, though, claim to be an expert in this area.
Q. So you can concede that values other than visual can be found in an undeveloped area; correct?
A. Yes.
Q. When you said there would be no undue adverse aesthetic impact within the surrounding landscape, did that include a conclusion about the impact the project would have on remoteness?
A. I did think about the issue of remoteness as $I$ was writing my testimony because $I$ knew that this was of concern, and I believe I did write a paragraph on that in my testimony. I think I addressed it to some extent in my rebuttal testimony.
Q. You say on Page 32 that other ridges were considered for development but rejected in order to retain a project of responsible scale in relationship to the surroundings; correct?
A. Yes.
Q. What document by reasonable scale?
A. Well, in this particular case -- as you heard in the beginning opening presentations -- there had been consideration of what were referred to Series B, C and D as part of the project, and those were rejected for a variety of reasons, but certainly I think one of them was project scale.

Now, scale is a -- from a visual point of view, it's also a visual concept in terms of how the project is perceived in the landscape.

I think I mentioned in my opening presentation that because just the nature of the position of these two ridges in the landscape and the fact that Kibby Range has that wishbone shape, there are very few places where you see the entire project.

So even though this is 44 turbines, there are very, very few places where in which you see 44 turbines. The most you may see is maybe 10; from most vantage points you see at one time around 10 or 12 at most.
Q. On Page 5 of your rebuttal testimony, Ms. Vissering, you
conclude that, "The relatively low elevation of these mountains and their low visibility from critical viewing areas makes them an excellent site for a wind project"; is that right?
A. Yes, it is.
Q. How do you reconcile this statement with your statement in your direct testimony on Page 19 that on these large mountains of Maine the turbines would appear relatively small?
A. Low is a relative term of course. I had been working on the Black Nubble case, in which case we were talking mountains over 4000 feet.

So that is, in terms of this part of Maine, these are relatively low mountains; but on the other hand they are big mountains.

So, in other words, when you look at a wind turbine on a large mountain, it's relative size seems fairly small in relationship to the land form. That's a certain amount of perceptual matter, I guess.

I mean, if you were in eastern Maine, these would be huge mountains, but in this context these are relatively small mountains when you look at compared to the Bigelows and the Longfellows.
Q. I want to ask you about the transmission line. On Page 32, you indicated that the transmission line would be
minimally visible offsite; is that correct?
A. That's correct.
Q. Do you consider a 27.7-mile long transmission line to be a reasonable scale?
A. Well, when I look at the scale, I look at not how actually long it is, but I would look at to what extent would it be viewed in the landscape.

I think the relevant issue from my perspective is, do we experience this along in open meadows along 27 miles, or do we barely see it in the landscape, which I think the latter is the case.
Q. I want to look at the table of views under Tab $C$ of your testimony, if you could look at that, please.

The third page in for vantage point 17 for the next question. This is your simulation from the Bigelow Range; correct?
A. You're looking at the table?
Q. The table, Tab C.
A. I'm there.
Q. Visual simulation 17. You say that clearing -- in the notes for this -- clearing for the transmission line through the Bigelow Preserve may be visible from some vantage points on the Bigelow Range; do you see that?
A. Yes, I do.
Q. But vantage point 17 is looking north; right?
A. Yes, it would not be visible within the view of the simulation. I was just looking broadly in that statement. If you're on top of Bigelow Range and you look in the other direction, you might be looking down and you could possibly see some of the portion of the line clearing area.
Q. How did you go about assessing the visibility of the transmission line for visual impact?
A. Mostly from the -- for the most part I was looking at the visibility at points across the road. I also looked at topography and to see what topographic features would be screening the transmission line from view from important viewing areas.
Q. Were you asked to look for visual impacts from the transmission lines from any particular vantage points?
A. No, I was not. I made some assumptions that probably the trails in the Bigelow Range where there was some possibility could be one sensitive viewing area for that.
Q. From vantage point 17 looking north, is this one of the locations where you say all of the towers and turbines would be visible?
A. From -- that is true. From the -- from the Bigelow Range we're talking, I think that is about 18 miles away. I believe that it's really, really, really tiny at that distance but you could probably see -- that would be one
of those where you could see all of the turbines.
Q. I think in your presentation this morning you showed the site from Avery, the visual site?
A. Yes, I did.
Q. From Avery Peak; correct?
A. Yes.
Q. Actually, you have in your testimony Photos $17-\mathrm{A}$ and $17-\mathrm{B}$, correct, that don't have a simulation but have the view; correct?
A. Yes.
Q. Could you turn to those? They're under your Tab G. MS. BROWNE: In the testimony?

MS. PRODAN: Yes, Jean's direct testimony, Tab G. THE WITNESS: I've got it.

BY MS. PRODAN:
Q. Are you at Photo 17-A?
A. Yes.
Q. From this vantage point it says in the caption, the ridge appears lower than the background ridges; correct?
A. Yes.
Q. Flipping to $17-\mathrm{B}$, is that still true with $17-\mathrm{B}$ also?
A. Yes.
Q. So we see from West Peak and Avery Peak the Kibby project ridgelines are below the background ridges?
A. Yes, that's correct.
Q. In a situation like this where the ridges appear lower than background ridges, this means that the towers and turbines, which are white, would contrast with the background; correct?
A. Yes. It would be one of the reasons you would be able to see them, they only reason, because they're white.

I think this is a really great distance, and I have no experience looking at these from such a great distance in actuality. I think I may have said once you get at these distances, it's definitely getting very far away.

I do know, as I testified in the Black Nubble case, that from about 10 miles away, almost 10 miles away, the Glastenbury fire tower in Vermont looking at the existing Searsburg turbines, you can -- I mean, they're really hard to pick out, but you can see those turbines.

One has to assume that with probably the larger turbines would also be physical very faint lines. If you didn't know what you were looking at, it would be very hard to pick them out. On a very clear day $I$ would think that they will probably show up.
Q. Let's go back to the boundary mountains. What do you think is the viewer expectation of someone that has read the AMC Maine Mountain Guide that refers to the wilderness area around Kibby Mountain?
A. The expectation? Well, I hate to speak for the
generalities of somebody picking up one of those guides.
Q. Withdraw the question then.

Is this one of those -- is this area, the project area, not an area with hardly any structures?
A. I apologize, could you repeat that?
Q. Sorry, I'll rephrase it.

Isn't it correct that this is one of the few areas that you've looked at in your visual assessments with hardly any structures?
A. Which area?
Q. The Kibby Mountain area.
A. And you're saying is it one of the --
Q. In your experience doing assessments, isn't this one of the few areas that you have seen with hardly any structures?
A. Well -- one of the few areas -- I would certainly say that the two experiences I've had looking both for the Black Nubble project and this one have certainly relatively few structures.

This is a very different kind of landscape, certainly, than I'm used to in Vermont. We have towns -much more sort of settled landscapes; so yes.
Q. So it's one of the most undeveloped areas you have worked on, isn't it?
A. One of the most undeveloped -- there are some pretty wild
areas around the Deerfield project -- Searsburg now -Deerfield in Vermont.

It's very different but it's certainly -- you have a lot of National forestland around there, a wilderness area.

It's a little hard for me to make that general comparison but $I$ would certainly -- I would certainly not deny that this is an area that does not have -- is not dominated by structures. It is not a predominantly built landscape.
Q. Back in the Redington proceeding over a year ago, did you not point out that with regard to the area near Redington that even though -- I'm quoting here -- there's quite a bit of evidence of logging, but logging is a sort of a loose cavern of different vegetative colors. It's not a structure and that's a big difference, I think.

Even where you don't have that area where very little is going on, you still don't see -- from most places along the trail -- you don't see structures, you see this sort of developing pattern of vegetation.

Do you recall your testimony --
A. Yes, absolutely. And if you recall in my testimony, I have never used -- I have never said that I think that the logging patterns in this -- and the forestry patterns -in this area -- in the Kibby project, either -- influenced
my visual assessment. That was not an argument that I made in this case either.

I would agree that these are kind of different -these are different types of uses. They are -- now, there is a fair amount of -- I think to the general degree as you approach the general Kibby area, you are experiencing a very different landscape from one on the Appalachian Trail where you are coming off the road and you are in pretty much a wooded, a pretty protected landscape for up to the 34 miles of that section.

Whereas here, to approach, for example, the -- to approach, for example, Kibby Mountain, you're driving along Gold Brook Road and we all saw what Gold Brook Road is like.

So the expectation going into that area is a series of little short hikes, which you access via a landscape that does include a lot of truck traffic.

It may not be developed with structures, but it's a different experience than hiking along a trial where you do have the clear expectation of being pretty much in a landscape that you're either in trees or seeing gorgeous views.
Q. You would agree that the viewer expectation in the Kibby project area is that one is not going to be seeing any structures; correct?
A. You're certainly not seeing structures but you certainly are seeing large log piles up in that area.

I think there -- I think I will stick to what I said before because I think in general, when you're on the Appalachian Trail, you have a very different experience than you do approaching those trails -- approaching those trails, for example, at Kibby Mountain.

You're right, there are no built structures there -well, we did pass one. There's an old camp there, that kind of thing, but by and large it's not a landscape that is a residential area or a built area in terms of buildings.
Q. So seeing a part of the towers, blades, or turbines would undo the expectation of not seeing large built structures, wouldn't it?
A. Well, that -- I mean -- I guess in that statement you're assuming that that is an expectation in that landscape, which is -- that is what the reason that people are coming to that landscape.

I think that is probably true for some people who come up into that area. There's clearly -- and I'm sure you've heard that there are people who are interested in coming up into that area for a remote experience, but on the other hand, there are -- as I mentioned earlier, the uses are very diverse in terms of people coming up here
and that use is very low and I think that you continue to have that expectation as you're going to be on a road with a lot of logging equipment, a lot of logging kind of equipment, and that sort of thing up in that area as you approach the few trails that are up there.
Q. In your direct testimony you say that wind generation facilities are not places with a lot of activity, don't you?
A. Yes.
Q. Are you expecting there to be a lot of downtime when the turbines and blades are not operating?
A. Oh, I didn't mean that they wouldn't be operating. The turbines will be turning, but what $I$ meant by that, for example, if you think of a residential development, you have people -- people -- lawn mowers, constant coming and going of traffic.

I'm sort of guessing that the Kibby wind project will be a lot like the Searsburg project or other projects that I've seen where there's very little -- I mean, you have maintaining it and you have occasional maintenance.

These are very, very un -- there's not a lot of traffic associated with them, there's not a lot of lawn mowing or dog barking or the kinds of things you would have with a residential development.

That's what $I$ meant is they tend to be very quiet,
and I've been around a lot of them. Occasionally they do make noise, but generally they're very quiet.

If you're in the trees, you know, fishing, hunting, fishing on streams, hunting in the woods, you could be wandering around bushwhacking up one of the mountains. You could spend a lot of time in that country back there and be completely unaware of them.
Q. In terms of visual impacts, if you are there and looking at them, they do move, don't they?
A. Oh, yes.
Q. And the blades are moving, the tips are moving at what, 200 miles an hour, something like that; correct?
A. Yes, although they appear very slow.
Q. And the blades and turbines will change direction with the wind blows; correct?
A. They don't reverse direction, but they will turn into the wind.
Q. So there will be visual activity in a portion of the landscape where there was none before; correct?
A. I'm sorry, again?
Q. So would you agree that there will be visual activity within the landscape where there was not any activity like that before?
A. If you are talking about the blades, the turning blades, yes, there would be that kind of activity.
Q. Thank you. And back to the table of views, Appendix C, why did you choose these locations for views and not others?
A. We -- I had used a number of techniques for determining where to find viewpoints. There were several different levels. There was sort of -- we had a number of people who know this area very well that were working on this project, and many of them are Maine guides and they spent a lot of time guiding in this area and know a lot of people in this area.

So I had the benefit of being able to hear from them initially where are the places that people care about in this area, and people in this area that know back country know everywhere that you can see, get a viewpoint.

So I selected the ones that I thought would be -- in an area like this you can't look at every single viewpoint but, for example, they were very limited along the major roadways and many roadways. I drove a lot of the roadways to get a sense of the terrain and where you could see things from.

We did have two open houses, and I constantly asked people, well, where should I go look, what do you care about, where should I -- and people pointed out areas that they said I should take a look at. So I relied on that. Then, of course, the issue of the ponds, we realized
that from some of the more remote ponds there was no visibility, as I mentioned in my presentation, so we selected a Management Class 2 ponds because they seemed to have been identified as having particular value. They seemed to me that in this landscape they were one of the key resources.

So that was a focus.
Q. A number of vantage points that are quite proximate to the project Map 1, such as Aziscohos Mountain, Spencer Bale, Antler Hill? You did not evaluate them, did you?
A. I selected mountains that I knew to have -- or I heard had views at the top, and actually when I asked, I spoke specifically with Friends of the Boundary Mountains at the open house, and I said, well, where should I go to take a look, Kibby Mountain is where you should go.

So that's what I did and I felt as though the -- I think that was probably the worse-case scenario being very close, looking out, and then probably the views from Snow and Tumbledown, which are the only other two that have a fire tower so you could get a view in the vicinity, were probably going to be -- they're further away, the impact would not be as great as Kibby.
Q. When you evaluate potential views, do you consider the value of views that may be in the future important, such as many of the mountains in the region that you didn't
visit because they don't have names or trails that people use?
A. No, I do not consider -- unless there's some specific plan for a trail going to the top of a mountain, and then I'm not sure that $I$ would take it as seriously as an existing trail.

I didn't -- I never heard of any plans for trails up into the mountains, but $I$ think that you have to work with the recreational resources that exist.
Q. Did you take into account any lighting of the turbines or blades in your analysis?
A. I did in my -- I do discuss lighting in the -- in my testimony.
Q. Have you been to the project area at night?
A. I -- let me think if -- at night -- no, I think I have not been at night.

MS. PRODAN: Thank you.
Mr. Goulet, I want to ask you questions about your rebuttal comments.

EXAMINATION OF COREY GOULET
BY MS. PRODAN:
Q. You referred to -- Mr. Goulet, in your rebuttal comments you objected to Mr. Kimber's characterization of the project as massive and permanent, didn't you?
A. Yes, I did.
Q. Can you please give us an example of what you think of that's a massive and permanent impact?
A. Well, I think the reason that $I$ made the comments $I$ did is because these impacts are no more massive or permanent than the logging activities that are currently undertaken there, and I think Mr. Kimber mentioned the fact that these were more massive, more permanent activities than are currently being used for which the area is currently being used.
Q. So do you think that in Maine the effects of logging are permanent?
A. No.
Q. So you do understand that trees grow back in Maine; correct?
A. I understand that, yes.
Q. You are from Alberta, aren't you?
A. I am.
Q. Do you consider the oil sands development to have massive and permanent impacts?
A. I believe that the oil sands has some impact. It's localized to the area around the facilities themselves. I don't know if you would characterize that as massive or not.
Q. Are they permanent?
A. Some of the ponds associated with them will be relatively
permanent, yes.
Q. In your testimony -- I can't remember whether it was in your rebuttal or direct -- but you indicated you expect operations of the Kibby project to cease in the future; is that not correct?
A. That's expectation. At one point it will finish its commercial life and it will cease.
Q. Will you agree that if the turbines are built, they'll be there until they're taken down, if they ever are taken down?
A. They will be removed when the project ceases to be commercially viable.
Q. One of the other things that you focus on in your comments is how small this project is; is that correct?
A. You'd have to point me to the quote.
Q. Do you feel that this is a small project and the impacts?
A. I think given the wind resource and the energy that it produces, it has a relatively small footprint.
Q. So you are talking about footprint when you talk about the impact -- the permanent impacts of the project; correct?
A. Relative to the energy that it produces, yes.
Q. Let me ask you this: Do you consider that the Empire State Building has a relatively small impact on the landscape compared to other buildings that are not skyscrapers?
A. You know, having only been in New York a couple times and it's changed a little bit in the probably 10 years that I've been there, I would say the Empire State Building has relatively little impact relative to all of the other buildings in the area.
Q. Besides the approximately 30 acres in the protected mountain area subdistrict that would be permanently impacted, in your testimony it indicates that the construction would require -- excuse me, that was actually in the application, I don't know that it was in your direct testimony -- but based on the application, there will be three rock crushing plants at 3 acres each; is that correct?
A. I believe that's correct, that's in the application.
Q. And a temporary material handling and storage area -actually there could be several -- totalling 20 acres; is that correct?
A. I don't have that right in front of me but $I$ believe that's the correct number.

MS. PRODAN: Mr. McCrea, does that number sound correct to you?

MR. McCREA: Again, $I$ don't have the number directly in front of me, but it sounds like it and that number is quoted in our submission.

BY MS. PRODAN:
Q. Thank you. Then there would also be the temporary laydown areas also and the number is 18 acres; correct?
A. That's correct.
Q. So we're at 247 acres just with these construction areas, and these have to be levelled; correct?
A. If the ground isn't already level, then there may be some levelling required. I think these areas -- there's a table in the application that shows all of the affected areas, both temporary and permanent, and these areas you just quoted are included in the temporary areas to be affected by the project.
Q. Let me just clarify that these areas to support the construction that have to be levelled are going to remain in the levelled condition; isn't that correct?
A. If they have to be levelled, they'll remain as they're levelled. The plan is to allow these areas to revegetate after the construction is complete.
Q. But you don't expect to restore the original contours of the site where the rock crushing plant is located, temporary storage, or laydown areas; do you?
A. We don't plan to restore the contours if they're altered. I visited the site, I looked at some of these sites. I don't think most of them will require that much levelling.
Q. In your rebuttal testimony you say that the total permanent impacts of the wind power project is
approximately 89 acres, and you base that on the table in Mr. McCrea's testimony at Tab B; is that correct?
A. That's correct. And I think that table was also in the submission.
Q. Does this include the road widenings?
A. I think it does include the road widenings on the existing roads such as Spencer Bale and Wahl, and the Gold Brook Road itself, yes, it does. I think there's some road widenings and there's also some turnoffs, 15 in particular, along Gold Brook Road that are required.
Q. So in the permanent impact areas where you're including roads, are you also including the areas of cut and the areas of fill to support the road?
A. The permanent road impact -- those areas of cut-and-fill will be revegetated and therefore will not be included in that 89 acres.
Q. So the areas that are being revegetated but that have been contoured or built up are not included in your total of permanent impact to the project area; is that correct?
A. I believe that's correct.
Q. When you expect that -- strike that.

When the wind power operations cease in the future, you say the turbines and collection lines will be removed and the site will be allowed to revegetate completely; is that right?
A. That's correct, yes.
Q. At that time will the original contours on the ridges be restored?
A. No, they will not. They will be allowed to revegetate similar to the vegetation that occurs on the logging roads or other access roads to the area that are unused.
Q. How about the 34 -foot wide road structures on the ridgeline, will those remained in the unrestored state?
A. Those will be allowed to revegetate but they will not be recontoured.
Q. Will the concrete associated with the turbine's foundation be removed?
A. The concrete will be removed below the surface of the ground.
Q. Could you explain that a little more?
A. By that, we'll remove the concrete to a foot or two below the existing grade and then material will be placed on top of the concrete foundations and the ground will be allowed to revegetate.
Q. How likely is the idea that the turbines will disappear in another 25 years?
A. I can't speak to the likelihood or not. I anticipate that at some point in the future this project will cease to be commercially operational, and therefore they'll be removed.

Whether that's 20 years, 25 years, or 30 years, I can't speak to. I can't predict what the future's going to be. At some point they'll be removed.
Q. On Page 2 of your testimony you said that it's your responsibility to see that the project meets the environmental permitting requirement; is that correct?
A. That's correct. I've put a project team in place, and one of their objectives is to be sure that they meet the environmental requirements of the project.
Q. And on Page 8 is where your timeline is; correct?
A. I believe that's correct, yes.
Q. You say that you need to order turbines by the end of this year; is that right?
A. We need to order turbines early next year if we're going to make the project goal of completing the construction by the end of 2009 .
Q. It also says there you expect to start clearing and grubbing in the first half of 2008; is that right?
A. That's correct.
Q. In fact, it would be completed in the first half of 2008; right?
A. Yeah, the clearing and grubbing will be associated with the construction of the roads. There might be some clearing and grubbing that extends into the third quarter if this project timeline is maintained, but the majority
will be completed in the first half if we can follow this timeline.
Q. Are you aware that a rezoning approval would just be the first step of this project and a final development plan would have to be submitted and approved by LURC before you can start construction?
A. I'm aware of that, yes.
Q. Are you aware that a number of components of the project are not actually located within the area proposed to be rezoned?
A. No, I understand there's some components that need to be -- that are in different jurisdictions and have to be approved by other jurisdictional bodies.
Q. Well, in terms of permits from this body, have you been made aware of the need for permits for these other components separate from the rezoning process?
A. I'm aware of that, yes.
Q. You're also aware of a need of a permit from the Army Corps of Engineers?
A. I am.
Q. Why doesn't the timeline reflect these regulatory matters?
A. I think I focused on the execution plan in this particular schedule. I didn't focus on the actual approval process.

I think in my presentation today $I$ did show a bar
chart that indicated the approval process would have to go into 2008, and it would take probably the first quarter to complete.
Q. Are you aware of the concern of the Army Corps of Engineers that was made in comments to the staff of LURC that there appear to be no clear discussion of the potential indirect impacts from this project?
A. I'm vaguely aware of those comments, but I can't say that I've read about them specifically anywhere.
Q. Do you plan to take into an account -- or at least do an analysis -- of the indirect or secondary impacts of the this project for the Army Corps?
A. Certainly. We'll do all the analysis that's required from the Army Corps requirements.

MS. GRESOCK: Corey, I hope you don't mind if I address this. This is Lynn Gresock speaking.

We're very aware of the comments that were supplied to LURC by the Army Corps of Engineers. We're also aware that the Army Corps' regulations and the way they address issues are a slightly different regulatory framework with different requirements in the way different sorts of impacts are looked at.

The DEP, of course, also needs to review and has essentially completed their review of the portion that's within their jurisdiction, and their framework differs a little bit as
well.
So yes, to answer your question, when we put our Army Corps application together, we certainly are going to be meeting all of the Army Corps' requirements, and part of doing that we are looking back at the specific comments that they've provided in this case so that we can make sure that we're aware of exactly how we've responded to those concerns in the various conversations that we'll have following up with the application with Jay and others who are involved with that review.

## EXAMINATION OF LYNN GRESOCK

BY MS. PRODAN:
Q. Ms. Gresock, from your testimony, is it correct that you're responsible for assuring that appropriate studies are done to fully understand the potential for impacts?
A. I have been responsible for managing the environmental studies, yes.
Q. And it's important to understand the cumulative impacts of the development, is it?
A. Certain agencies have more or less emphasis on cumulative impacts, but that's certainly something that is frequently a consideration.
Q. So you don't intend to look at the cumulative impacts of the development until after the LURC process is completed; is that correct?
A. I'm not sure what you mean by cumulative impact in this
instance.
Q. Well, the Army Corps of Engineers expressed concern that there's no clear discussion of the potential indirect secondary impacts from the projects.

Are you aware of that?
A. All of those impacts actually have been considered. Although, as you point out, this is largely a rezoning proceeding at this time, TransCanada decided that it was important to do a whole delineation of the wetland resources, not only on the ridgelines but in the transmission line corridor.

Part of our application process to LURC and then as refined through that review process and part of our application process to DEP and certainly refined further through our application with the Army Corps, will all continue to involve all of those considerations.

We are trying to be very careful not to look at any individual elements of the project in a vacuum, and I know the Commissioners don't need to consider, for example, the DEP jurisdictional elements of the project; but we felt it was important to include all of that in the application so that you could consider in your decision making process the entire scope of the implications of the project.

It's all part and parcel of what needs to be known. EXAMINATION OF COREY GOULET

BY MS. PRODAN:

> Q. Mr. Goulet, in Appendix $7-J$, this was one of the avian studies, August 2005 , Section $I$ on Page 1 states that the second -- a second phase is being planned that would include a transmission line to Canada; do you recall that plan?
A. I'm not aware of that plan at all.
Q. Do you want to refer to that reference in the application? MS. GRESOCK: Can you tell me again which document that is?

MS. PRODAN: This is in the application, Appendix 7-J, August 2005.

MS. GRESOCK: Appendix to that, I assume?
MS. PRODAN: No, Section I Page 11.
MS. GRESOCK: Certainly when we had our initial agency conversations about the studies that were required for this project, TransCanada firstly hadn't decided whether they were going to move forward with the project at all since they were still in feasibility review, and secondly --

MS. PRODAN: Excuse me, $I$ just want to clarify. Mr. Goulet, you don't have any knowledge of this? MR. GOULET: No, I don't.

MS. PRODAN: Okay, thank you. Go ahead, Lynn. MS. GRESOCK: Secondly we're still in the process through that early evaluation phase of assessing various

Q. But it's less than 5 miles to the boundary, is it not?
A. It's actually equidistance. That interconnection would be in the Megantic sub which is equidistant to the Bigelow sub.
Q. What are the issues that you refer to, the regulatory issues?
A. The issues associated with permitting the line on either side, you'd require Presidential permit for the transboundary nature of that line, and the economics would be inferior.
Q. So the decision was at least in part because of the expected requirements of an environmental impact statement, wasn't it?
A. No, it was principally because the economics would be inferior.
Q. Is it TransCanada's position that it would be easier and cheaper to get the transmission line permitted and built through LURC jurisdiction and the small towns of western Maine than to Megantic?
A. No, not at all.
Q. I thought you just said it was economics and regulatory issues?
A. Economics are dollars and cents. The ease of permitting is another thing.
Q. So it's just cheaper to build the transmission line --
A. It's not cheaper to build a transmission line. If you look at project economics, the project in its entirety, they are superior by delivering power into the market at Bigelow, the New England market in Bigelow.
Q. Does that include the cost of payments to effected towns and environmental groups in your analysis?
A. It includes all inflows and outflows of cash, that's correct.
Q. If you do build a transmission line to Bigelow substation, what is there to ensure that with the size of this wind power plant it would not knock out the Boralex biomass plant in Eustis and keep it from coming on-line because of congestion?
A. We've looked at that. Obviously, my concern is that project economics rely on all of our power getting to market.

As this Commission's heard previously, the current line is basically rated at 54 megawatts, this is a 20-mile line between Bigelow and Wyman. It is currently sag limited, so if you retention the line, it's summer rating could be increased to approximately 135 megawatts. In discussions with Central Maine Power, they indicate that the winter rating of the line -- at different temperatures -- would be approximately 170 megawatts.

We looked at the output of Stratton Energy through public documents filed with the Energy Information Administration, so we've looked at the output of the facility over the five years by month.

That facility is approximately is 45-megawatt biomass plant, it's a huge turbine basically. The capacity factor of that facility ranges between 50 percent and 75 percent over the last five years.

We've looked at the energy production expected from the Kibby farm, hourly and monthly, based on information provided by Garrad Hassan, and we're very confident that a handful of hours, the power of both Stratton and Kibby, can find its way to Wyman.
Q. So there still might be a handful of hours in your calculation.

Has a study been done yet to determine?
A. That's an internal study. We've done that.
Q. So there has not been a study done for ISO New England?
A. The system interconnection study, which forms part of the requirement before basically the facility is hooked up into the ISO market, has been undertaken.

It's currently going through a second review at the New England ISO. We would expect it to be completed late this month.

What I can tell you is that study does conclude that
the power from this wind farm can be interconnected without impacting the reliability of the system.

MS. PRODAN: Thank you. Mr. McCrea --
THE CHAIR: Pam, excuse me, it's 2 o'clock.
MS. PRODAN: Mr. Chairman, I received the order and was allocated a certain amount of time, and I brought it to your attention this morning that the written schedule is not correct, and I asked for some tolerance on this.

THE CHAIR: You've had an hour and a half already, so we've had 90 minutes since we've started. I've got a whole bunch of other intervenors I assume who want to ask some questions.

I think we've got to halt it at this point. How much more do you have left, Pam? If you've got a couple of minutes, that's one thing, but if you've got another half an hour or an hour, I'm not going to let it happen.

MS. PRODAN: Well, a lot of it has not been under my control with the responses being --

THE CHAIR: You ask long questions you get long answers as far as I'm concerned.

MS. PRODAN: I just have a couple of questions for Mr. Valleau and Mr. McCrea, that's all.

THE CHAIR: If you can ask a yes or no answer, we'll let it go but don't push it.

MS. PRODAN: I guess I can't -- I've not been an able

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to get yes and no answers.
THE CHAIR: You have to ask the questions in that manner.
On my schedule I have CLF and Independent Energy Producers. Do you have any questions?
MR. MAHONEY: We don't have any questions.
THE CHAIR: How about the Commission, members of the Commission? In that case I'll let the Commission ask some questions. Rebecca, have you got questions? EXAMINATION OF COREY GOULET BY MS. KURTZ:
Q. Mr. Goulet, you had mentioned that the roads -- the road building calendar or time frame -- was from April of 2008 until November of 2008, and the State soil scientist expressed a significant concern about the construction of roads when the soil is frozen or saturated.
I was just wondering how you were going to get around -- how you would address that concern given the timeline that you've developed for building roads.
A. I think Mr. Rocque indicated the suitability of building roads from May to October. I've added about a month on either end. The first month would be kind of localization of the contractor and no real earthwork would probably occur -- or would occur during that time period. The last month in November, at that time the actual
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structure of the road would be constructed, and you'd be out of the soils that Mr . Rocque was concerned about, and you would have dealt with any groundwater, stormwater issues that he talked about, and it might be just associated with putting the final topping on the road. Therefore, $I$ don't think he or any other department would have any concerns with that activity in the November time period.
Q. What Ms. Prodan was sort of getting at, there seemed to be a lot more permits -- seemed to be a lot more steps that need to happen before the work can actually begin. How does that affect your road construction time frame, three or four months or something like that. What would you do, just start and stop building?
A. Yeah, if things got pushed back three or four months, clearly we wouldn't get the construction of all the roads and foundations completed in 2008.

We would end the program in November and restart it in the following April/May time period and complete the work. I guess in a more severe case, we might actually have to push back the entire project one full calendar year.

A lot of this depends on the application process with the other agencies and jurisdictions and when we get the actual permits to do construction work.
Q. Thank you. One of the questions I've always had about decommissioning and I've never asked it -- and I appreciate setting aside funds to actually pull one of these projects down and put it to bed -- but I'm curious, the wind is going to continue to blow. Why does it -what, in your mind, makes it financially unfeasible? Why -- what is the death of this project due to?
A. Usually it's mechanical constraints of the equipment being installed. At some point it will reach their fatigue life and the blades will no longer be able to operate, the towers themselves, the equipment.

At some point the equipment won't function from a mechanical perspective and you'll either have to replace those wind towers, or you'll have to shut down the facility completely.

So it is the mechanical equipment itself that's going to limit the effective life of the facility.
Q. If, let's say, 25 years from now, 25 or 30 the mechanical life is spent but you feel as though you're able to put something up, a newer model or something in it's place, do you foresee the same kind of environmental impacts being reproduced with the construction of what might essentially be a whole new project?
A. Not at all. By then the roads have been built, so it's a matter of some of the areas have been revegetated in
actual 34 -foot road width would have -- the vegetation would have to be removed.

There would be no more, or very little construction, of additional infrastructure necessary to put up the wind turbines.

So you could put up new wind turbines of the same size fairly easily at that point.
Q. So it sounds like the road construction is probably the biggest impact of this entire project?
A. I would say from an environmental perspective, the road construction is the biggest impact, yes.
Q. A couple of times you made reference to letting the site revegetate, and I think Mr. Rocque had expressed a concern about using loam and erosion control mix as a preference for an alternative erosion control measure.

Have you given those, his preferences, consideration?
A. Well, I think we have. An erosion control mix, I believe, was his preferred method of allowing revegetation, and I think we indicated that we would use that as one of our construction tools, if you will, in our toolbox to allow revegetation.

That would be -- the decision on what to use would be made on a specific basis by that engineering field consultant that $I$ mentioned in my presentation.

MS. KURTZ: I think that's it. Lynn, I think you
spoke a little bit about the avian and bird impacts.
EXAMINATION OF LYNN GRESOCK
BY MS. KURTZ:
Q. You reviewed the original Kenetech impact assessment prior to 1999.

I just wondered, you said that generally the data that you have collected and that Kenetech had collected was generally consistent.

I just wondered, what does that really mean?
A. Probably the most significant difference in monitoring technology between Kenetech's day and the current day is that we were able to use our radar data to get some height elevation, and of course at the time when Kenetech did their data collection, that wasn't something that they could do in terms of adjusting the radar.

But you'll see in our avian report that we put the volume information that was collected by Kenetech in the tables to compare it to what we found here.

I think that we would say that the volumes, in terms of usual of the area, are very similar. In terms of the daytime raptor migration, we found that their reports showed similar usage and similar patterns of behavior.

Kenetech had conducted some more broad breeding bird studies than we did for this particular application. It was great to be able to use and rely on that so we could
focus on the Bicknell's thrush, which was the specific species of interest at this point. It was all very, very useful information to have.

As you know, every study that we do can only provide you a snapshot of the conditions in that particular year and that particular season, and so to have the advantage of having for this site two other seasons worth of information was great.
Q. Does it look like the species composition and numbers are the same? Not the same?

MS. GRESOCK: Dana, do you remember whether we saw much --

MR. VALLEAU: The breeding birds -- my name is Dana Valleau. I live in Liberty, Maine and $I$ work for $T R C$ in Augusta. I oversaw all the field studies related to Kibby. The breeding bird surveys that Kenetech did, they did fewer of them scattered over most of their project area, which was much larger, and we focused ours, of course, on our two ridges and primarily on Bicknell's thrush habitat.

But what we saw were similar species composition for breeding birds. They also did morning migrant surveys. We saw similar species composition, and the daytime migrant, the raptor surveys, we documented similar flight paths than they did.

BY MS. KURTZ:
Q. I guess one of the reasons, I'm wondering how populations vary and if there's a way to project how impacts might change. Maybe that's an impossible --
A. Yeah, that's a hard thing to do. There's groups like Partners in Flight that are working to document population shifts and neotropical migrants, for example. That's their primary focus.

Our primary focus was to look for any problems with this site.
Q. I'm glad to see that there would be post construction work done, but I'm just curious, what kinds of remedies or mitigating strategies would be incorporated if the projections of mortality were not accurate?

You can't exactly pick up a turbine and move it. I didn't know if the value of post construction creates more concerns than other projects moving forward, or if there's really -- you can really do anything once the project's in place?

MS. CINNAMON: That's a really great question. Christine Cinnamon with TransCanada.

With respect to post construction monitoring, it's really important that should something be found that we do a root cause analysis so that we understand is this an isolated event, is this something that we can attribute to a project, or
a situation outside of the project.
And so each case must be taken on a case-by-case basis, and that's how would we would expect to respond to any event. We would include all of the relevant agencies in that.

As far as coming up with a strategy to deal with what that would be at this time, $I$ don't think it's appropriate to come up with that unless we knew what it was that was happening. So that's why we've committed to the post construction monitoring and a plan to deal with that involving all the relevant data.

MS. GRESOCK: You're absolutely correct. One of the important values to having the monitoring is to aid the understanding of these types of projects.

I mean, certainly there's a dearth of information that allows us to compare, but it's also true that we're able to take advantage of -- there's a lot of interest in this particular issue, for example, national wind coordinating committee just recently put together a compilation, they call it Mitigation Toolbox, which is a term we find very familiar here where they've begun to compile studies that are available that talk about issues like this and address different strategies.

So we're expecting that when the time comes to develop the details, we won't be necessarily identifying what would happen in an event but we'll have a whole array of

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options to think about within the content of what is particularly happening potentially at the site at that time.
MS. KURTZ: I have one more question. I'm not sure who to direct this to. A number of comments have been made to the original Kenetech and the proposed project, and I think it was 600-plus turbines on eight different ridgelines.
I just wondered, is there any plan -- put the \(C\) and \(B\) Series out of the picture, so to speak -- but is there any plan, thought, thinking about developing the other four ridges that Kenetech originally had wanted to? Whether you've acquired those lands, I don't know.
MR. BENNETT: Terry Bennett, TransCanada. No, there are no plans. We have no wind rights other than the four we talked about here this morning.
EXAMINATION OF TERRY BENNETT
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BY MS. KURTZ:
Q. Those other four ridgelines aren't now in conserved lands. They may be available for sale?
A. My understanding is Kenetech has rights on all of that land. Through partial releases they may have been given up.

So the only wind rights related to Kibby Mountain and Kibby Range and C and D and TransCanada. We have preliminarily ruled out our exclusive right for $C$ and D. THE CHAIR: Speak right up. We're having a hard time
hearing.
A. Sorry. I was just saying that TransCanada only has rights to Kibby Mountain, Kibby Range, and C and D Range, and we've given now through conservation agreement our rights to $C$ and D. We don't own that land to be cleared, but we have the exclusive permanent right to build there. So we know no wind farms will be developed on $C / D$ or at the top of $A$.

We don't have any wind rights on any other ridges associated with the larger Kenetech project.
Q. Could those be acquired though? They're not in the block -- visually --
A. To be honest, I have no idea, whether Plum Creek or some other entity, owns it at this time, so I really can't answer that.

EXAMINATION OF TOBEY WILLIAMSON
BY MS. KURTZ:
Q. I think Mr. Williamson, I understand there were two outreach studies -- environmental impact studies and one was more formalized, I think the traffic strips and things like that and then the one that you did.

I'm concerned, I think, a little bit about the statistical significance of the information you got. Was there a list of specific questions that every single person was asked?
A. To be clear, it's not a statistically sound survey, it was more an anecdotal survey. We got information at the very beginning of the project about how the land was being used.

The survey that was undertaken later was more statistically based. It was basically an opportunity to get out into the community and talk to people about how they're using the land.
Q. So it may have been helpful from TransCanada's perspective to try to figure out what folks mean -- I don't know if it has much validity for us in terms of public support.

That's sort of where I'm going with that. I'm glad you went out and turned your project into -- I don't know if user friendly is the right word -- but I also question whether or not we should gauge that as an endorsement of this project because it's not statistically significant?
A. Sure. And there are two parts to the work that I did and that was the very first part was that informational survey.

The second part was quite a bit longer, and that was just being in the community, talking to people for the last -- well, if you take off the first portion -- it was probably about a year and a half. I spoke to hundreds of people about the project, both opponents and supporters. I would say there was a broad base of support for this
project in the local area.
Q. But I think that --

MS. GRESOCK: Just to make it clear, there was a consistent list of questions that we asked each one of those people. So while it wasn't necessarily a formal survey and not necessarily statistically used, it was something that was deliberately done so that everybody was being asked the same questions and you were getting responses to the same sets of questions; right.

MR. WILLIAMSON: Yes that's correct. BY MS. KURTZ:
Q. Do you have that list of questions?
A. I don't believe it's been submitted.
Q. The other reason -- I just get a little nervous about surveys and questionnaires.

If the general public in Maine were asked, should we make our schools more efficient and reduce weight and everyone would go, yeah, but right now there's a tremendous amount of backlash because we're trying to consolidate schools.

So it depends on how the questions are asked, and it's very important to receive those questions and make sure that the responders weren't being skewed one way or the other or to get a full accounting of what is being proposed.
A. Sure, that's absolutely fair. I can just tell you, throughout the process of speaking with people, I made no attempt to steer anybody in any direction.

That was -- I was -- public education is really the way that we look at it, and what TransCanada expected from me was that $I$ would go out and provide information about the project and bring questions back to the team and the information about the questions back to the public, so that was sort of a two-way street that $I$ helped to create.
Q. Did you record responses?
A. Yes.
Q. So we'll get the questions and responses?
A. Yes.

MS. KURTZ: Terrific. Thank you.
MR. WIGHT: Steve Wight.
EXAMINATION OF CHRISTINE CINNAMON
BY MR. WIGHT:
Q. Christine, you talked to us about how you avoided bog lemming habitat, which brought the question to me -- I think you were the one -- since you don't own the land, when you determine that there's a habitat that shouldn't be touched and you go around it with your project, does that tell us that the owner of the land is also taking that into account and avoiding it? Are we going to have to talk to someone else about that?
A. We've actually worked very closely with Plum Creek to give them the same information that we've been finding, something that Lynn and Dana can attest to. I know Dana, he passed along information and has been careful to avoid areas that we've delineated as being sensitive.

MS. GRESOCK: I wanted to say that there are two important factors, one is that the 26 -acre area is within the area that TransCanada has development rights to; the second factor is that it is about 2700 feet, and so theoretically no activity should be occurring in that area without coming to LURC for permission unless it's allowed within a P-MA zone.

So if harvesting, for example, were to occur in that area, that's something that ought to be before LURC.

And so while TransCanada doesn't own the land, I think there are -- through our communications with Plum Creek and through these other regulatory mechanisms -- some means to ensure that that happens.

EXAMINATION OF LYNN GRESOCK
BY MR. WIGHT:
Q. Absent any issue like that bog lemming habitat, is Plum Creek free to cut the land within the leased areas when they still harvest wood?
A. It's still their land, so as long as it's within an area that they're allowed to do so within other regulatory jurisdictions.
Q. Right. You don't have any say over that?
A. That's correct.
Q. I thought that's the way it was. Thank you.

MR. WIGHT: Who was it that talked about the transmission line capacity?

EXAMINATION OF NICK Di DOMENICO
BY MR. WIGHT:
Q. We've got a 54-megawatt line that could be raised to 130 by how?
A. Actually you have summer rating line of 135 -mva, which for all intents and purposes are 135 megawatts.

Over time, through use or lack of repair, the line is sagged. It's sag limited. There are certain tolerances put into proper utility practices that dictate so much clearance of ground level.
Q. So we're talking sag, like physical sagging of the line?
A. That's correct, physical sagging. To rerate the line, it's original design of 135 mva, you retention the line, you may have to replace the structure over time.
Q. Pull?
A. Pull. The pull is a 115-kV line, it's single circuit each frame, that's what it's rated.
Q. Is there a plan to do that --
A. Yes.
Q. -- retention the line?
A. Yes.
Q. Whose responsibility would that be?
A. We would pay for that.
Q. How much of that now 135 -- what is it?
A. It's 135 in the summer.
Q. Megawatts?
A. Yes, and approximately 170 --
Q. In the winter?
A. -- in the winter.
Q. How much of that will your project use?
A. We would use -- I guess the use would vary depending on the velocity of the wind.
Q. Let's say at its maximum?
A. A 132, say about 130 .
Q. So if you and Black Nubble and Boralex were all on-line, we'd have a problem?
A. If the three are all on-line, I guess for all intents and purposes the plan would be to have a double -- a single existing line replaced with a double-circuit line on a single set of poles, which would accommodate the capacity of all three of those projects.
Q. Whose responsibility would that be?
A. In our view it would be at a minimum a collective responsibility of Black Nubble and ourselves.
Q. So this is the line now that goes from the Bigelow station
to Wyman Dam you're talking about?
A. That's correct.
Q. That isn't CMP's problem?
A. No, it's not. It's their line. The rerating?
Q. Not the rerating -- yeah, increasing the capacity of the line so that the potential producers could all use it.
A. My understanding is that CMP have an obligation to service the load but not generators, so no, that would be a generator responsibility.
Q. So it would be the responsibility of all the generators to get together and fix the line so that they could all use it?
A. I think that would be the commercial outcome, yes.
Q. Is this a competitive issue, the guy who gets there first gets it?
A. No.

MR. WIGHT: Thank you.
Terry, a question for you. EXAMINATION OF TERRY BENNETT

BY MR. WIGHT:
Q. We were told that packages were something outside Mahoosuc, but you did bring up the Mahoosuc project, and I think we ought to hear a little bit about it.

I know that the primary opponent to the last hearings that were held here is now a proponent and is also very
interested the half a million dollars that you've agreed to give to the Mahoosuc project.

I just wondered how all that came about.
MR. BENNETT: Sure, I don't know. Christine might be a better person to answer this. She was involved with the discussions with Audubon.

MR. WIGHT: Great, thanks.
MS. CINNAMON: We went through a lot of discussions with all of the various stakeholders, and part of that -- out of that evolved an interest in a conservation package, if you will.

And so that -- that was -- that's the reason that we have tabled a consultation to understand the interests and concerns of various groups, and in dealing with Audubon and AMC, as well as NRCM, we came to understand that this was something that they were interested in, and we were able to come to agreement with them on a set of projects, potentially, that we could contribute to as well as a sum of money that we could contribute.

## EXAMINATION OF CHRISTINE CINNAMON

BY MR. WIGHT:
Q. What did they give for that?
A. What did they -- it wasn't a matter of giving or taking;
it was a matter of coming to agreement on what the outcome of our consultation with them was. We weren't expecting
anything in return for that.
Similar to our community benefits package, it's something that we do as part of a project in consulting with various stakeholders, again, to understand what their concerns are and what we need to do together.
Q. So if you didn't give that half a million dollars, all of the testimony would be the same from all of the intervenors?
A. I can't speak to what they would say but $I$ would expect that to be the case, yes.

MR. WIGHT: Thank you. That's all I have.
MS. HILTON: I just have a couple questions, so many good ones have been asked so far. My first one is for Jean.

EXAMINATION OF JEAN VISSERING
BY MS. HILTON:
Q. My question is, at what point with respect to scenic resources is mitigation warranted? Could you give me an example?
A. Sure. I have a slightly different view of mitigation as compared to the way some other people use that term, so it may be a little confusing.

I think that in some instances you have a project -and I've certainly been involved in some -- where you certainly have an impact that could be regarded as somewhat excessive, for example, you built -- in a housing
project, in the middle of an open field or you've got the houses located right in the middle of the view, so then you look and see, is there another way we could construct and sort of redesign the project to protect the resources that are valuable resources on the site.

In the case of wind projects, I've certainly been involved in some -- in one I ended up not, for various reasons, working on this project because in this particular case I didn't totally agree with the person who wanted to hire me -- but it was a case in New York where, for example, it was open meadows and it seemed to me there were places in the design of this project where the turbines were really oriented around some of the houses so that they would be completely encircled by wind turbines.

And so those were areas where if I were recommending mitigation, I would say, you know, you need to either move these or you need to remove some of them.

So that can be mitigation when you have a situation where there are excessive impacts to either a particular person or a particular resource, and so you redesign the project.

In some cases mitigation may not be possible if it's just a bad site for a particular use.

In this particular case, $I$ felt that the project really is -- I mean, first of all, I think with wind site
is everything. There are design issues that come up and I think they are important, but getting the right site is critical.

Just looking at the way that the project roads have been designed to sort of essentially be oriented on the sides of ridges so that they are not visible from public viewing areas, I didn't see, given the nature of the views, I saw no places where I felt there would be an excessive number of turbines or location of turbines that were visible from particular viewpoints.

In this case I felt as though the project -- because I think there's been a lot of kind of finessing of this site to really reduce the impacts -- that I didn't feel mitigation was needed on this particular project.
Q. This is a little bit of a -- I'm trying to get a little bit of information from you on this kind of thing in particular, but if you had a situation where it was a high value view from a public road, I mean, would it be possible, would mitigation be perhaps purchasing a scenic easement so that trees are not cut?

You speak a lot of instances where there are views but the reason you can't see the turbines is because there's vegetation there.

If that vegetation was removed through timber harvesting then there's a view. I'm throwing that out and

I'm not even sure whether it's applicable here.
A. Yeah, I'm not quite sure how to answer that. Well, let's say if you had a particular scenic, high value scenic view, a place where people may have stopped to park their cars and they were looking at this view and the turbines were going to be right there.

Now, of course, this is not exactly answering your question, but one of issues, you might say, well, you just plant trees in the foreground. By planting trees in the foreground you ruin the view; right?

So that's a problem. And I would say that would be a situation where I would have some great concerns because the mitigation counters the resource.

So -- but in the case of cutting, the instance of let's say, well, let's say you have -- you have no view and let's say there might be a blowdown and the view would be exposed, that would concern me less.

I think that happens, trees grow back. I would look at -- look at the views we have now and not be too concerned with, well, what happens if we have a blowdown.

MS. HILTON: We talk about post construction monitoring, and I don't know whether this is a question for Lynn, I guess.

## EXAMINATION OF LYNN GRESOCK

BY MS. HILTON:
Q. Do we have any data or information on the behavior of bats or birds with respect to once the towers are in place, are they attracted by the lights?

You've certainly -- have you done any monitoring at your wind farms that you already have in operation that have been in operation for a couple of years?
A. Chris may be able to address what she's seen at their existing facilities, but $I$ guess one of the challenges that we have in general is that wind power in the United States is still a little bit in its infancy, and the difficulties with understanding studies and avoidance behavior, there are just so many types of species and that all act in slightly different ways.

There are challenges associated with developing post construction programs that are meaningful and appropriate. That's one of the challenges we have working with LURC and with $I F \& W$ to figure out what exactly will help to understand truly what might be going on at this site.

The mitigation toolbox document that I mentioned from the National Wind Coordinating Committee that I think was published in draft in May 2007 is a great compilation. It still doesn't lead to a lot of knowns and conclusions. There's a lot -- greater level of comfort with understanding bird issues than there are with bat issues. The National Academy of Science just came out with a
paper this year, as well, a study that they did, and that underscored that same impression that birds -- there's a level of comfort that the total population effect overall isn't terribly, terribly significant. Bats are still a little of a mystery, and there are a lot of studies that are going on in that regard.

We are pleased that we don't have a lot of bat activity at our site because that is so much more of an unknown, but our studies are clearly going to have to identify ways to try to monitor and assess what's going on for both birds and bats.

I don't know, Chris, whether your projects have had any experience with that?

MS. CINNAMON: The one project that we have currently in operation is the Anse-a-Valleau, which you heard from Corey earlier, and that one just started in operation in November of last year.

We're just in the process of implementing the post construction mortality studies. We haven't had any significant results to date, so as far as avoidance type of behavior, that sort of thing, we don't have any data related to that.

As there are more and more projects, they are starting to do these types of studies and it is something we're following very closely so that we can understand it, especially as we go forward.

MS. KURTZ: Thank you.
MR. SCHAEFER: You'll have to forgive me because I wasn't here for the morning. There are a couple of questions that may have been addressed.

EXAMINATION OF COREY GOULET
BY MR. SCHAEFER:
Q. One of them is the assembly of the blades. Is it going to be three blades assembled and the hub lifted, or is it going to be one at a time?
A. Yeah, in this particular case the V90 machines that we're using, they're one blade lift at a time.
Q. The Gold Brook Road, are you going to set up some kind of communications with the logging industry so that commerce isn't interrupted? It's going to be a huge project getting all that equipment up there.
A. Yeah, we've set out similar types of processes at our Anse-a-Valleau project. We have almost an identical situation with one logging road into the area that's used extensively.

We set up flagmen at either end of it, and we use radios for communication. The turnoffs that we talked about using on Gold Brook Road is another means of managing that.

So we'll work with Plum Creek to develop -- and their contractors -- to develop a process by which we can all
use the access road effectively.
Q. The last one is kind of a hypothetical and it involves decommissioning. I'm kind of interested in what might be recommissioning.

The engineering in turbines has been logarithmic for 10 years, and right now I guess we're maxed out at 3 megawatts.

Is there something on the board for a 6-megawatt turbine, and is your equipment and infrastructure designed to handle a bigger turbine if it comes along?
A. Well, first of all, the largest turbine that I'm aware of is about a 5-megawatt machine that's available and used offshore primarily. These types of machines are too large to be used onshore.

The roads and infrastructure doesn't make it possible to move these into position effectively and efficiently.

That's not saying the technology won't change. Who knows, a six-blade design -- but for the time being we wouldn't do that.

Of course, one of the limitations of our installation is the foundation itself. It will be designed to handle a 3-megawatt machine, and regardless of what technology comes forward, that foundation would have to be replaced if indeed it was going to be used for a 5-megawatt --
Q. The weight is the issue?
A. The weight and the forces, quite frankly, on the tower itself.

MR. SCHAEFER: Thank you.
THE CHAIR: I'm not sure whether this is for Terry or Corey.

You both mentioned your extensive development work in Quebec on the Gaspê peninsula, and I was just curious. In all those wind farms that you indicated, were those wind farm locations a result of just an ad hoc decision by a whole bunch of companies that this was a good place to build a wind farm, or did the Province of Quebec -- whoever the representative is -- decide that this is where we ought to focus our efforts and you responded somehow to them on that place?

MR. BENNETT: Yeah, it's the latter, the Quebec government together with Hydro Quebec filled an RFP, a request for proposal, for wind projects for a total of 1000 megawatts back in 2004, and we submitted 740 megawatts worth of

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project -- one }740\mathrm{ megawatts worth of projects.
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EXAMINATION OF TERRY BENNETT
BY MR. HARVEY:
Q. So the province said, we want 1000 megawatts --
A. They wanted 1000 megawatts total of wind projects. They again, incidentally, one month ago had another round for 2000 megawatts worth of wind projects. TransCanada submitted projects for 975 megawatts worth of projects.
Q. Are you aware of any similar process in Maine for that to happen?
A. No, Maine's a little bit of a different market.

California has something similar to the Quebec process where it's not State run but the utilities have sort of continuous RFPs.

Each year they'll ask for either a certain amount of energy or certain amount of megawatts from renewable sources, and the developers -- private developers bid into that process and the lowest price wins.
Q. I guess would it -- would it be your view, then, that for wind power to your project hence others to deliver really effectively what they're supposed to deliver, that we need to have a certain critical mass of them in place.

I mean, one or two isn't going to deliver -- I'm not trying to put words in your mouth, I'm just asking, one or two might not deliver all these benefits that we expect from them.

Do you have a thought on that?
A. I think each project delivers the benefit of the energy that is purchased, every megawatt hour that Kibby produces, for example, will displace a megawatt hour from a fossil fuel plant somewhere in New England.

I think -- an aggregate number of wind projects will do what one project won't do is that it increases the
likelihood that, you know, 500 megawatts or 1000 megawatts of wind projects will actually bump off that high-priced unit that's on the margin -- oil or a gas-fired unit -and bring the price down, thereby really truly significantly decreasing prices in this area.

THE CHAIR: We could have a long discussion about that.

EXAMINATION OF DON HUDSON
BY MR. HARVEY:
Q. Mr. Hudson, you, I thought made an interesting point concerning our $\mathrm{P}-\mathrm{MA}$ district, and I guess your suggestion -- again, I'm not trying to put words in your mouth -- but you -- at least I interpreted your comments -- 2700 feet is kind of an arbitrary -- is an arbitrary number that we just picked because we had to pick something, and it would seem to be the general characterization of those $P-M A$ zones.

I guess your testimony was, in this case, that the elevation above 2700 feet on these particular mountains doesn't necessarily represent what the P-MA was described to be in our rules?
A. Well, I think the way $I$ would put it is that it's clear that the Commission had to draw a line, and there was a very complete deliberation about where the line should be drawn because in fact in Maine on some mountains subalpine
features are found as low as 1800 feet.
Some of those features -- I probably should have elaborated a little bit more in my testimony because I obviously wasn't clear about this -- but, for example, in this site, yes, there are some outcrops, in fact there are ten mapped outcrops on the $A$ and $B$ Series in total.

They're not visible, for example, from the Gold Brook Road in the same way that $I$ think of an outcrop of rock that sort of defines a craggy mountain that has both a scenic and landscape values that in total are designed to sort of keep us off of those special areas.

These mountains are very different and at 2700 feet, as I mentioned, in fact the ground on average does not have a severe grade. Certainly there are some steep slopes, but there are cliffs, there aren't outcrops.

You go on some mountains in Maine -- and I'm sure you have -- in which when you're walking along the ridge, you're on one continuous outcrop all the way down the ridge, whether it's 1800 feet or 3000 feet.

Those kinds of features are not found on this mountain except in scattered position. Therefore -- I had an argument at one point -- just to fill this out -- I had a pretty serious argument with the Bureau of Public Lands when I did the work in the Mahoosucs because I suggested to them that they use 2400 feet as their protection zone,
and since they wanted to be able to cut wood between 2400 and 2700, they didn't want me to put that in a report.

They required me to go back and do a second round of analysis. When $I$ did the second round of analysis in a small little -- with Tom Morrison and Mr. Doak -- they came to exactly the same conclusion that I did, that in fact on that particular mountain those features were visible in an aerial photo from thousands of feet at 2400 feet and not 2700 feet.

I think case-by-case you have to evaluate and that's why I said what I said.

THE CHAIR: Thank you. Just on the question of Bicknell's thrush, we learned a lot about that in the last couple of years.

## EXAMINATION OF LYNN GRESOCK

BY MR. HARVEY:
Q. Did I hear you -- I'm not sure that this is particularly important -- did you say that we didn't know the Bicknell's thrush existed until 1998?
A. It was not distinguished as a separate species from the gray-cheeked thrush, although we have some records from the Kenetech reports, for example, about thrush activity in the area, we don't really know all the facts and gaps because there have been some in the area. We don't know which it was.

THE CHAIR: It's interesting. We learn lots of things while we're studying wind power, don't we.

I think with that we'll conclude our questions and excuse the panel.

MS. BROWNE: Is there an opportunity for any brief redirect?

THE CHAIR: Not really. I didn't allow any time for that and nobody asked.

If you get -- if you have redirect, then I assume that Ms. Prodan will want redirect.

MS. BROWNE: But only on the subject of my redirect.
THE CHAIR: I've got too many lawyers.
MS. BROWNE: If you give me a moment, I may just pass.

THE CHAIR: I'll tell you what I'm going to do. We're going to take a break right now so that the court reporters can take a break, and when we come back we can pursue this subject if you want to.
(There was a break in the hearing at 2:53 p.m. and the hearing resumed at 3:06 p.m.)

THE CHAIR: We had requests before we took a break for questions by the applicant, and I'm going to allow a brief amount of time for that. Obviously Ms. Prodan will have the right to ask questions about the questions.

You may proceed.

MS. BROWNE: Thank you, Chairman Harvey. I will be brief.

EXAMINATION OF TERRY BENNETT
BY MS. BROWNE:
Q. Terry, I wanted to ask you a question. Corey Goulet talked about the timing needed to obtain permits to acquire turbines, and from a business development perspective -- which is your area of expertise -- can you comment on whether there are any restrictions on or constraints on turbine availability and timing issues associated with that?
A. Sure. As I said, Corey was speaking from a project scheduling point of view.

From a business development point of view and a project economic point of view, we have been in discussions with Vestas on the availability of the V90 turbine, and based on our last discussions, they advised us that their 2009 production slots are filling up very, very quickly.

They advised us that if we had a hope of getting a set of turbines for 2009 that we would be well advised to commit to that sooner the better and certainly by year-end to have a realistic hope of obtaining those slots.

From our point of view, that's still a critical issue is that we have the opportunity to confirm our order with

Vestas prior to year-end to lock in the units and the pricing that's been quoted to us.

MS. BROWNE: Thank you.
EXAMINATION OF JEAN VISSERING
BY MS. BROWNE:
Q. Jean, you were asked about a statute that is referred to as the Natural Resources Protection Act, and I just thought there was a little bit of confusion around that, and maybe a little bit on my part; but I would like to ask you to look at 38 MRSA Section 480-C, which is the section of NERPA that identifies the prohibitions.

If you could just read that section.
A. No. 1, Prohibition, A person may not perform or cause to be performed any activity listed in Subsection 2 without first obtaining a permit from department. If the activity is located in, on, over any protected natural resources -resource -- or is located adjacent to any of the following, and that lists various situations.
Q. That just requires you to obtain a permit before you can impact that resource; correct?
A. That sounds right to me.
Q. And then there are some standards for obtaining that permit, under 480-D, and the first is Existing Uses, and could you just read that?
A. The activity will not unreasonably interfere with existing
scenic, aesthetic, recreational, or navigational uses.

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Q. And as part of the analysis that you've done here, to look
    at the existing scenic and recreational impacts of the
    project?
A. Yes.
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MS. BROWNE: Thank you. That's it, Chairman Harvey. Thank you.

MS. PRODAN: No questions.
THE CHAIR: Thank you. That brings us to testimony by local interests in support, and I believe that's the gentleman from the Town of Eustis; is that correct?

Why don't you come forward.
MR. WYMAN: First of all, Chairman Harvey, I appreciate the time you're giving me. I need to make a statement before I read my --

THE CHAIR: Can you tell us your name?
MR. WYMAN: Sorry. My name is Earl Wyman, Jr. I am a selectman for the Town of Eustis but I'm also the chairman of the local interest support group of Kibby wind power. It's kind of hard to change hats and keep one hat on and off. I'll explain to you in a minute.

I would like to make a statement before I go into -I made a summary of my prefiled testimony. I don't think it's necessary for me to read my pretrial [sic] testimony.

THE CHAIR: This isn't a trial.

MR. WYMAN: I understand that, but I think you ought to know something.

I was having a very good time here today listening to everybody, I'm very comfortable with what was going on.

When I come back from lunch one of the Friends of the Boundary Mountains members out stopped me and he made a comment that really upset me and I think you ought to know about it, because I think it's particular to some of their aspects, and knowing me and knowing him all my life, he asked to look at my hands and I thought he had a joke to make.

When I showed him my hands, he said, oh, I thought they would be greener than they are because of all the money that TransCanada is flying around. So that insinuated to me that I'm here on a bribe or a person of TransCanada. I am not. They have never offered, they have never insinuated any type of funding for me. I take my own personal vacation time.

I do my own transportation, I buy my own meals, I pay my own way. They've never given me one cent, so $I$ just wanted to make that clear to you and the rest of the people that may think different.

I'm here on my own, I'm here to support my community, which is very important to me, and the people of the interested support group. Thank you.

In basic summary of my prefiled testimony, I have lived in Eustis for 54 years. I've been involved in the
community in many ways and have a strong passion for our area and the people who live there, so it was not very hard for me to agree to cheer the local interest groups supporting the Kibby wind project.

We need good clean development in this area in order to keep the cost of living at a reasonable rate for everyone who owns homes, camps, and property here. But I'll tell you this from experience: If the selectmen and the majority of the residents felt this project was not a good environmentally sound project, you would need a week of hearings to get through everyone who would be here to oppose it, but that's not the case.

TransCanada has been very open and honest in their meetings with the public and have answered every question and concern that has been asked.

It seems to me they've done everything that needs to be done to comply with what is required to gain a permit for this development of the wind project, and I'm not too sure, but at times I think they've gone above what they have to do for this.

It's time. It's been over 20 years ago I was leading some hearings in Augusta for a week when we wanted to put the biomass plant in the town of Eustis. All the environmentalists at that time did not want to see another smokestack. They did not want no coal, wood, peat moss, don't dam up any more of our

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rivers. Wind power. Good clean renewable resources.
    Wind power, solar power. That was the message then.
It's here, it's time.
    To rezone a particular project, you know as well as I
do, throughout the state of Maine there's rezoning of projects
everywhere. It seems like every time you turn around you read
in the paper that they've rezoned a certain project for a
development or some other entity, so rezoning is not uncommon
in the state of Maine anyways.
Twenty years ago when laws and rules and regulations were made for certain areas, times have changed. Sometimes things have to change along, sometimes zoning rules and law and regulations have to change to go along with it.
That brings me to a couple other points of interest. The benefit package offered the Town of Eustis has been said by some of the opponents to be nothing more than a bribe. Let me tell you this: If the people of our community felt this project was devastating, the tactics would have been refused and more than that amount would have been raised to hire our own law firm to sit over here and oppose this project.
If there was no package involved in this, the people that have signed up on this group would also still be in favor of this project.
We feel that the benefit package is credible from TransCanada, who has done this in other areas -- it's not
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prevalent just in our area -- in projects that they have. It
proves to us they want to be a good community supporter, and
they want to have a good relationship with the community for
years to come.
When you look at the whole picture, the contribution
of upwards of a million dollars in tax money to unorganized
territory, is an incredible asset to those towns and
plantations.
Another point of interest that a local person has
stated in a couple of articles written in their regular -- that
they -- and this might answer some other questions -- power
producing entities will be shut down or scaled back to allow --
for the wind project to come on-line. That is absolutely
false.
proposed by the Kibby wind power project, the Black Nubble
project, and a couple others that are being proposed at this
yesterday from the president of central Maine Power company and
the vice president -- state that when a power plant is built or
another power producing entity is built and the lines are not
capable of handling the power that they need to transfer this
power, they will be upgraded.
In talking with the systems' dispatch people, the

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time.
I was really humored from the statement of the first person when he was up and he stated that we should build another biomass plant. That's another smokestack, an extra 80 to 100 trucks a day over our roads in our small community, which would be added to the 150 to 200 trucks a day that we already have. I can't see any impact there, can you?
TransCanada seems to be a Class A company and wants to do the right thing and be a part of the community. They also expressed interest in working with the local clubs. This is so that they could still use the trails, the snowmobilers. Of course, they are owned by the paper company, but we was concerned that maybe when TransCanada built their transmission line down through, that they would not allow any more usage of that for whatever reason.
They assured us that that was the case. As long as the paper company is in approval of it, then they will approve the use of their transmission lines and their areas for use of the four-wheelers and snowmobilers as they can.
Most of our clubs -- our snowmobile clubs, our four-wheeler clubs -- they kind of do their own contracts with the paper companies, they do all the paperwork and leg work with them, so they have their own separate entities anyway, but we just wanted to make sure that if they came on-line and came into the area, that that wouldn't stop, and they assured that
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it would not. I have no reason to believe that it would.
There's a lot -- there's a lot of public lands in the state of Maine, and every time that the State acquires land and takes land out of the taxpayers it costs the taxpayers a lot of money. We have thousands and hundreds of thousands of acres that are in public lands now. I understand the concern about the Kibby wind power project being devastating to the area. I don't believe it is. I believe the remoteness of this project is an excellent location to at least try a project of this type to make sure it's going to fit in and going to work in the area.

The group of local interests supporting the Kibby wind project is not just a bunch of local people. They are home, camp, and landowners, they are business owners. They are club members, firefighters, rescue personnel, teachers, sportsmen, woodsmen, equipment operators, truck drivers, mill workers, moms, dads, grandparents, and young adults as well. The also work in our stores, they work for the State, and they work in public utilities.

Most of these people wear other hats as well. They belong to committees, they belong to PTC, they belong to planning boards, rec programs, lighting programs, and other committees within our community.

They all have a great deal of love and passion for the community, and that's why they've signed a petition stating
that they are in support of this project, they think it is a good project for our area.

It's also a good time to bring some new business into the area and hopefully afford some of our young people a job that they can stay in the area and work.

I'm a fourth to fifth generation of our community. That is a rare thing now. A lot of people are moving out, a lot of the young kids grow up, there is no good employment. A lot of money, these kids want to make, the type of money they want to make and the things they want to do, it's just not available.

Businesses are not knocking on our doors to come into our area and help relieve our tax burden. With the costs of the schools, the sanitation department, fire protection, and everything else, the cost escalates every year. We have a lot of elderly residents who live in our community, and they would like to keep their own homes for a few more years.

That's about what I have to say and I thank you for your time. If you have any questions, I'll answer them.

THE CHAIR: Thank you, Earl. Does anybody on the Commission have a question?

MR. WIGHT: Thank you for coming forward.
THE CHAIR: Don't run away. I assume that there may be some other people who may wish to cross-examine you.

MR. WYMAN: That's fine.

MS. BROWNE: We don't.
THE CHAIR: Pam, it's up to you.
EXAMINATION OF EARL WYMAN
BY MS. PRODAN:
Q. Good afternoon, Mr. Wyman.
A. Good afternoon.
Q. The question about the community benefits package that $I$ have is in regard to the thousand dollars per megawatt hour per year, was that a negotiated amount or was that just what --
A. No, that was an offered amount. They came to us and said this is basically what we do in other areas, and this was the package they offered.
Q. I saw in the memorandum of agreement in the description about the community benefits package a reference to how that would be calculated. I'll read it and see if that is your understanding of it.

It says the annual payment shall be calculated at the rate of $\$ 1000$ per megawatt of capacity installed and operating of this project during each calendar year of the life of the project, prorated for the fraction of any year during which the project is not continually operating, less any amounts paid by TransCanada, Maine Wind Development, to residents in proximity of the project to address impacts to the project.

Is that your understanding of how that reads?
A. Yes, ma'am, because there are other entities and there are few residents in Jim Pond Township where they come down through that they may be negotiating some type of deal with them as well. We knew that in the beginning of the stages, yes.
Q. So the calculation for the Town of Eustis would have subtracted from it any payment TransCanada would make to others; is that correct?
A. That's correct.
Q. Did anyone from TransCanada say what those impacts might be?
A. Not really. I don't remember specifically. I knew they said they could be anywhere from 5- to 10 - to $\$ 12,000$. I'm not sure.

There were a few figures thrown around, but I think at the time they weren't really exactly sure what they would be but we were pretty fine with anything.
Q. Do you think there might be annual compensation for any landowners on Eustis Ridge?
A. I couldn't answer that. I'm not sure what they have. I know that we have a public acreage of land that runs down through Eustis Ridge that we have given the TransCanada people. It's actually a public lot that's up behind it, and we've given them an easement for their transmission
line. If this is permitted, they have a right to bring a line down across there.

MS. PRODAN: Okay, thank you.
MR. WYMAN: You're welcome.
THE CHAIR: Anybody else? I think Earl you're free to go. Thank you very much.

MR. WYMAN: Thank you.
THE CHAIR: The next is the American Lung
Association. Are they here?
MR. MILLER: Commissioners, members of the
Commission, my name is Ed Miller, I'm the executive director of the American Lung Association here in Maine, and I'm pleased to be here today.

I will not, in the interest of your time, read you my testimony that's been submitted. I'll just summarize a few points I'd like to make in this testimony.

We're here as a public health organization that's got a hundred-year history in this state. The first 50 years that we were in existence in the state, we were fighting a major lung health threat, which was tuberculosis. The second 50 years was spent fighting the next lung health threat, which is smoking. We're still fighting that now.

But the future for the Lung Association to be relevant to the needs of Maine people, we're going to be involved for the fight for healthy air. Unfortunately, this is
a fight that has no boundaries, neither state boundaries or boundaries within your home.

I just want to point out today you may have heard on the news that we experienced eight exceedances of the ozone standard this summer so far. I guess we beg to differ a bit with that. That was compared with two days last year. We beg to differ a bit with that, because that's based on a standard that even the EPA's own scientific advisers do not feel is protective enough of public health.

If we were to apply the standard that the EPA's advisers felt should be in place right now of 60 parts per billion, we would have experienced 38 days -- not eight -- of unhealthy air with virtually the entire state affected at one time or another.

This was not a good summer if you happened to have lung disease, but it is also not a good summer if you happen to breathe, because none of us are immune from the effects of ozone, so this is the foundation for our concern here today.

I understand very clearly that our perspective on this as a public health organization is one of many that you need to weigh in the very difficult decisions that you have to make in these kinds of projects, but it is an important one.

We just feel that doing nothing is no longer an option, that wind has got to be a part of the solution, that we're not talking about one wind farm or two wind farms.

I mentioned to you folks when we were at Stetson that we have this image and hope, quite frankly, that we would be able to address wind power as a community source of energy on a much smaller scale and be able to make that viable throughout the state. Two things worked against it, the economics work against you and the fact that wind isn't in every place works against you. The wind, as you well know, is primarily in this region of the state and offshore. Both of those are obviously very precious resources that we have in this state and ones that you have a special responsibility to address.

We feel that wind is not the only solution to this problem, and clearly we need to do more in terms of efficiency and conservation. Just the simple task that we can do of replacing incandescent light bulbs can have dramatic impacts so that we're not here talking about the need for more and more power plants. But clearly wind power needs to have a part of this solution.

I will end my testimony there and be willing to take any questions from you or others. Thank you.

THE CHAIR: Thank you. Anybody have any questions? You're getting off pretty good here.

Juliet?
MS. BROWNE: No questions.
THE CHAIR: Pam.
MS. PRODAN: Good afternoon, Mr. Miller.

MR. MILLER: Good afternoon.
EXAMINATION OF ED MILLER
BY MS. PRODAN:
Q. You were kind enough to send me the final report for the feasibility study for community wind projects in Maine, which was actually attached to your testimony; correct?
A. Yes.
Q. In that report there's a statement there about the production tax credit.

Do you agree with the statement on Page 64 of this feasibility study that the federal production tax credit is the "mother lode" subsidy for privately owned wind farms nationally?
A. I might not have expressed that, it was not my writing, but I agree that it's a critical part of making wind power feasible in this country, yes.
Q. And on Page 33 there's another -- do you agree with the statement made in this report that your organization helped commission, if all of the projects came on-line in the next three to four years, however, they would collectively overwhelm the existing renewable portfolio requirements of the northeast states?
A. I would suspect given what I feel the integrity of people that put that report together, that would be true. I think it's also pretty unfeasible that that would be an
occurrence.
Q. Thank you. Were you here earlier today when I was discussing the report and TransCanada's application called Global Warming in New England?
A. Yes, I was.
Q. In that report there is a discussion -- quite a bit of discussion -- about alternatives; isn't that right?
A. I must have not read that report.
Q. Let me ask you this: You just said that wind is not the only solution; is that right?
A. That's correct.
Q. Would you agree that it isn't the need of New England to build more renewable energy generation but rather the need to reduce emissions that is most important?
A. That's an interesting question. What you're saying is your -- that our goal is obviously to reduce emissions. That's what the Lung Association is concerned with, absolutely. That's why I mentioned that conservation and efficiency are also part of that solution.
Q. Are you familiar with the concept of an emissions registry?
A. I'm not.
Q. So you -- you didn't actually read that report which references the idea of global warming efficiency -- excuse me, global warming emissions registry; right?
A. Yes, I said that before.
Q. Are you aware if TransCanada currently reports their company-wide emissions publicly?
A. I'm not aware of that.
Q. Would you support corporations being required to report their company-wide emissions?
A. Define emissions that you're talking about. Are you talking about $\mathrm{CO}_{2}$ ? What's the scope of it, all emissions?
Q. Global warming emissions.
A. Sure.

MS. PRODAN: Thank you.
THE CHAIR: Could I ask a question for clarification here. What's this -- the report you referred to, what was that report again, please? Is it in the testimony?

MS. PRODAN: The report that I questioned TransCanada about earlier and Mr. Miller just now is in Volume 2 of TransCanada's application, it's 2-C and it's called Global Warming and New England.

MR. MILLER: There was a feasibility study.
THE CHAIR: You answered that question. The
feasibility study had to do with the community-based projects that you referred to in your testimony.

MR. MILLER: Right, and that's been submitted in the past as well.

THE CHAIR: Anybody else? We've got some time left
here, how come?
I think what we'll do is we will conclude this afternoon and we'll pick up tomorrow morning with the Friends of the Boundary Mountains direct testimony.

With that we'll see you here tonight at 6 o'clock for the public testimony.

So we're going to have a little more of a break than we normally get. We'll take advantage of it. We'll see you at 6.
(The hearing was suspended on October 2, 2007 at 3:33 p.m. and the hearing resumed at 6:08 p.m.)


THE CHAIR: Good evening ladies and gentlemen. I'd like to get started here, and first off, my name is Bart Harvey and I'm the chairman of the Land Use Regulation Commission and presiding officer for the hearing.

Other members of the Commission with us this evening are Gwen Hilton, Steve Schaefer, Steve Wight, and Rebecca Kurtz.

In addition we have LURC staff, Catherine Carroll, our director; Scott Rollins; Melissa Macaluso; and Diana McKenzie; and our court reporter is Lisa Fitzgerald. And I remind you all that when you speak this evening to come up and use the microphone so we can record everything you have to say.

This evening's hearing is being held pursuant to provisions of Title 12 MRSA, Section 685-A and will be conducted in accordance with Chapter 5 of the Commission's rules for the conduct of public hearings.

This evening's hearing is being held to receive public testimony on the matter of Zoning Petition ZP 709 submitted by TransCanada, Maine Wind Development Incorporated, to rezone 2908 acres in Kibby and Skinner Townships, Franklin County from a mountain area protection subdistrict to a planned development subdistrict to develop a wind power facility.

Within the subdistrict the wind power facility would include 44 turbines on the south side of Kibby Mountain and Kibby Range, access roads, and utility lines.

Outside of the planned development subdistrict in Kibby Township, the wind facility would include roads, utilities lines, a substation, and a maintenance and operations building.

In addition, there would be -- a 115-kV transmission line would be located in Kibby, Jim Pond, and Wyman Township, as well as the organized towns of Eustis and Carrabassett Valley and would connect to the grid at Bigelow substation.

The purpose of this hearing is to allow the public to present direct testimony and evidence as to whether the development proposal meets the criteria for approval as specified in 12 MRSA, Section 685-A(8-a) of the Commission's
statutes and Commission's land use districts and standards.
If you want to testify and haven't already signed up on the sheets in the back of the room, I would encourage you to sign up, because I'm going to call people in the order in which they signed up.

All witnesses must be sworn and will be required to give -- before they give testimony to state their name, residence, and business or professional affiliation, the nature of their interest in the hearing, and whether or not they represent another firm or individual or other legal entity for purposes of the herring.

As I said, we will transcribe the proceedings, so you need to speak clearly. All questions and testimony must be relevant to the Commission's criteria for approval of this project. Irrelevant and unduly repetitious material or questions will be excluded.

The record of this hearing will remain open for ten days for written comments until Monday October 15 th and or an additional seven days, until October 22 nd, for rebuttal testimony or determined by myself if we need to make changes.

Written public comments will be entered -- written public will be entered into the record until October 22 nd. No additional evidence or testimony will be allowed into the record after that date.

Persons attending the hearing who wish to be notified
of the final action taken by the Commission as a result of this hearing may leave their name and address with our staff.

We're going to have -- I don't think you're planning a statement, are you, Catherine? Okay.

A representative from TransCanada is going to present a brief overview of the project so everybody will know what's being proposed. After they're done, I'm going to ask all of those who plan to testify, I'll swear you in together, and then we'll start taking your comments.

You're going to do it, Christine? Okay. Why don't you go ahead and do your presentation.

MS. CINNAMON: Welcome to the public session of the LURC hearing for the Kibby wind power project. My name is Christine Cinnamon, and I'm the environmental manager for TransCanada. I'm going to give you a brief overview of the project.

What we have here is a summary of the project elements. The Kibby wind power project is proposed as 44 turbines on Kibby Mountain and Kibby Range. I'll show you exactly where that is in a moment.

There will be a total of 132 megawatts of installed capacity should the project be built. The turbines proposed are Vestas V90 3-megawatt unit with a rotor diameter of 295 feet, and the tower height to the center of it will be approximately 263 feet. That would give an approximate total
height from the top to the bottom from 410 for each tower.
There will be approximately 19 miles of new roads created for the project. There will be approximately 17, a little bit more than that, of existing roads that we can utilize. There will be an electrical interconnection system between the turbines.

Other elements that it will require, step-up transformer, a service building. During construction we'll need concrete batch plants, as well as laydown and various other work areas.

Finally, the project involves a 27.6-mile transmission line.

What this shows you is the general project area in relation to the state as well as -- let me just grab a laser pointer -- that's the project site. We've got Route 27 right here, Route 201 here.

This gives you a little bit closer look at the project area. Again, we're looking at 44 proposed turbines, 17 on the lower portion, southern portion, of Kibby Mountain and 27 on the wishbone-shaped Kibby Range. What you can see also on this map is the proposed transmission line going down to Bigelow.

So what makes this a good site for a wind power project? The winds on these ridgelines are ideal for wind power generation, they are strong and steady. The site is
currently under active forest management with good access available. The project involving these ridgelines, plus a number of others, which you can see here, was previously proposed and permitted to the site. That was developed by Kenetech.

Given our wind data, the previous developer's wind and environmental site information and the previous LURC decision, we decided to pursue this opportunity as a potentially acceptable site for a wind power project.

Many aspects of the site and the surrounding area were studied in order to characterize the existing site uses, the natural resources, and other considerations. I won't go through all of these but this is a sampling of the types of assessments that we did.

Subject near and dear to my heart, the environment. We did an awful lot of ecological field programs. TransCanada, alongside our environmental experts, have undertaken many studies over the past two-plus years that we've been involved. We worked to understand the natural resources in the project area and the potential impacts related to the project features we're proposing. These studies have allowed the environmental and engineering teams to coordinate closely in minimizing the project footprint, and therefore the potential for impacts. Avian and bat considerations are just one of the many things that we looked at, and it is one of the topics that

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frequently come up in relation to wind power projects.
    Historic studies done by the previous developer
indicated that avian risks was low and our studies have further
confirmed this to be the case. As a full suite of recent
ecological analyses, we thoroughly considered bird and bat
movement as well as risks. The project design, and
specifically turbine placement, and the construction methods
will ensure that risks to birds, bats, and other sensitive
natural resources is low.
    This project represents an investment of
approximately 250 to 300 million, which will pay over
$1 million approximately in taxes to the State. We'll pay
approximately $25,000 in taxes to Eustis, again these are
estimates.
We'll contribute to the towns of Eustis/Stratton \(\$ 1000\) per megawatt of installed capacity, for a total of \(\$ 132,000\) per year whether the project generates electricity or not, should the project be built.
The project will need 250 people at the peak of construction, as well as 10 to 12 permanent positions once the project goes into operation. Our mandate is to hire locally whenever possible. We've already been meeting with local contractors, and we're confident that we'll be able to find a lot of the jobs that we need filled right here locally.
Wind power does not generate emissions like fossil
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fuel generation does. Potentially emissions displaced by the Kibby wind power project would be approximately 200,000 tons of $\mathrm{CO}_{2}$ per year, 90 tons of nitrous oxide per year, 350 tons of sulfur dioxide per year.

The project timeline. The application for the project was submitted in January 2007, and the subsequent transmission line was submitted shortly thereafter, and that resulted in this October hearing.

The current plans are to begin construction in 2008 should we get a LURC decision and all other necessary permits that we need for that.

We would start clearing in early winter of 2008. We would stop work during mud season -- or the wet season -- and start road construction in the summer. Again, that's only if we get the permits necessary and in time. We anticipate going into operation later on in 2009.

There are a number of boards around the room. I encourage everybody to have a look at that information.

That's it. Thank you very much.
THE CHAIR: Thank you, Christine. I think the next step will be to swear in all of you who plan to testify, but before that, just to -- as I say, a couple of simple ground rules. One, you've got to come up to the microphone to speak, and I'll try to give you a warning of when you're next in line to come up.

And I would caution you that to make the process go smoothly and not waste a lot of time, if you like what somebody said, we appreciate it if you don't clap or other demonstrations. They just distract from the hearing. They don't add to the weight of what that person had to say and up from this side they can be irritating, so I wouldn't advise doing it. Obviously you can do as you wish, but I'm asking you not to do it and would appreciate your cooperation in that.

With that, I would ask that those of you who plan to testify stand up and we'll swear you all in.
(Witnesses were sworn en masse.)
All right, $I$ notice on my sign-up sheet I've got three here and the others will be brought down, so if you've signed up and it hasn't come down, don't worry.

I notice -- as a matter of courtesy, if we see State representatives, we do allow them -- invite them to come up first if they wish. I notice that Senator Gooley is on the list. Is Senator Gooley -- there he is. Why don't you come down.

SENATOR GOOLEY: Thank you very much for allowing me to go first, although I am going to stay around and listen to the other testimony.

I appreciate the opportunity to appear before you here this evening to give testimony on the proposed Kibby project. I do support the Kibby project.

Currently we do generate enough electricity, electric energy, to meet our needs in the state of Maine but we are heavily dependent on non renewables, primarily natural gas.

I currently serve on the Governor's Wind Power Task Force, and I'm hearing both sides of this issue. One person told me, if not Kibby, then where.

Nuclear power is out of Maine, but a number of such power plants are in the planning stages in the United States. Maine Yankee used to produce 870 megawatts for half of Maine's needs, then after that closed down, natural gas replaced Maine Yankee.

Well, we don't like nuclear, we don't like dams and rivers, and the price of natural gas use is not going to go down.

Now, the governor has keyed in on wind power and the task force is focusing in on 1000 megawatts of wind power in Maine. The task force is an ongoing discussion at this time. I do support wind power at some level in Maine.

We have to move in a direction of increased renewable energy use, including wind, hydro, biomass, geothermal, and solar. We seem to be putting our emphasis on wind right now, but hydro, biomass, and the others need to be in the forefront also.

I have toured the proposed Kibby site and walked the ridges with key personnel from public and private sectors. I
do recognize the ongoing discussion of transmission lines and the grid where the power will go and also the environmental concerns and tax credits.

Now, my understanding is that none of the power would go to Canada. I do believe that we as a society are not really interested in being conservative users of energy. If we can afford it, we buy it, including air conditioners. You can buy an air conditioner at Wal-Mart for $\$ 89,5000$ BTUs.

The big cities to our south are going to be forced -this is my opinion -- the big cities to our south are going to be forced to depend on generation from new and advanced nuclear facilities. That's the way I see it.

Maine's advantage must include a mix of energy programs and a much lesser dependence on natural gas and coal, and I think that Kibby would be a step in the right direction.

I do appreciate your time. I recognize that you have a tough job. I've been up here other times and you do have a tough job and I certainly appreciate your input. Thank you.

THE CHAIR: Thank you, Senator Gooley. Good to see you again.

I believe Representative Carter is here as well. We'll let him go.

REPRESENTATIVE CARTER: I appreciate going quickly. I got off the tractor to come here. I'm going back to get on a tractor tomorrow morning to help my son harvest corn.

I also echo Senator Gooley's statement. I don't envy your task before you. I know you have a very difficult and a very hard task. In whatever decision you make, someone is going to be unhappy with you. We face somewhat the same thing, I think, in the State legislature.

I am him Timothy Carter. I am the representative from Direct 91. I live in Bethel, Maine, but my district does include Kibby and doesn't include Carrabassett but everything from Stratton down to Kingfield through the woods here, but now over in Bethel and Stoneham.

I, too, have toured the site and I've flown over the site of Kibby. One of the first things I want to emphasize, this is an industrial working forest. It is not a wilderness area, it is interlaced with high quality roads that are used to move timber from the harvest to the marketplace.

The other thing I want to emphasize, which I think helps this site, is it is isolated from other settlements. These wind mills are not going to interfere with anybody's home, anybody's business. The only thing that somebody might say, well, we're going to be able to see them here or there, but, then, beauty is in the eye of the beholder, and there's lots of things that we've created. Some people probably don't like the looks of this mountain behind us, but the skiers love the looks of it. I look at Sunday River from where I live. There's only one way we're not going to have some impact on the
environment, that's people cease to exist.

We do have a brain and we're supposed to pick the best choices so the environment will continue to let us live here.

This land is privately owned. As I said, the wood is harvested and this is the way the landowners make money from the land. Approval of the wind project will allow them to make more money from their land, and future wind projects will help landowners make money from their land, and that's why they own the land, and hopefully that will be a way to help keep it as a forest and not into development.

One of the things that's nice about this and a lot of other land that LURC controls, it is open to the public even though it's privately owned. I understand that people moose hunt around Kibby, they hunt partridge around there, and hopefully that can continue. I think the better we treat the landowners, the more likely that is going to continue.

I think that wind power farms can be a benefit to Maine. We need a desirable source of reasonably priced energy. Some people talk about the taxes and how's it's deterring business. I think that the cost of energy in this state is a bigger deterrent to business than is our taxes. That's my own personal opinion.

I think most of the conferences I've been on, energy cost is a very important aspect when any company looks at
moving to an area. They need a supply of energy that needs to be reasonably priced, and it needs to be somewhat that it's not going to go out of the public reach in the future, because that's when they try to make their money.

Hydro is the least expensive but it's very difficult to get it approved. Some people say most of the best hydro projects in Maine have already been developed. The ones that are really efficient and the ones that are really cost effective are the ones like at Wyman and the things that have been in place a long time. If we had more of those, we would have less expensive energy in this state.

Wind power is clean and it is renewable. Its efficiency, I believe, is going to improve with time. At present there are 44 generators going up there, and they're going to generate as much power as the great more number were approved there back in '94 because they're bigger, they're more efficient, and the technology will improve.

Once people start building these, then there will be investment because everybody wants to have the best one on the market to produce the most power for the least investment. So they will become more efficient. That's the way our economy works.

Modern society is based on energy. I used to say this country runs on cheap fuel and cheap food, and cheap food comes from cheap energy. Well, energy in this country is
getting more expensive all the time. But, my son milks 100 cows. He does that with one person. If he didn't use electricity, it would take 10 to do the same task.

There's a guy down in Waterford that wrote a book, Running on Empty, named Howe, and he said if we -- and I talked to him once and went down to see his solar tractor -- but he said, if it wasn't for the use of energy -- coal, oil, and things and the amount we've burned in the last 100 years, 150 years -- we'd still be living like they did definitely around the revolutionary war time and even earlier, and I don't want to live like that.

Kibby is a high quality site. If you look at it on the wind maps, it has good constant wind flows of enough to generate good power, good reliable source. That why it was tried to be developed before. That's why it's trying to be developed now.

There are other quality sites in unorganized territories, too, and I understand at the hearing before in Farmington somebody said, if we approve this, we'll approve anything. I guess like what Senator Gooley said is, if we don't approve this, what are we going to approve?

In not approving this site that has been well researched and well documented and to me it looks like an ideal site to put windmill projects, we're going to discourage other people from even trying to build wind farms in other places
that are high quality places.
Again, I'll come back. The more energy we have -and supposedly it's not the law of supply and demand -- if we have a surplus of it, the price is going to come down. So hopefully industry, the legislature, administration can work together, if we can, generate a lot of electricity to bring the power prices down to consumers.

My son spends about $\$ 1500$ a month now. So I hope you will approve this. I think it is a good site and like Senator Gooley, I want to get home.

Thank you very much for your time.
THE CHAIR: Thank you, Representative Carter. I didn't necessary plan it this way. The one other rule that we usually have at these hearings -- now that the legislature has spoken -- is that we limit everybody, try to keep their talks about 5 minutes.

So that would help us get us out of here at a reasonable time tonight.

I guess the next person -- I'm going to start with Page 1 of my list, and I see Duluth Wing is here. And following Duluth is Adrienne Rollo.

MR. WING: Good evening. My name is still Duluth Wing, I'm still retired, and still live in Eustis, and I'm with the Friends of the Boundary Mountains.

I was a forest ranger for the State of Maine for 38

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years. I spent my first year in Bigelow tower, and then six
years as a ranger, and the last 31 years I was the chief warden, later called a district ranger, working in Eustis under the Department of Conservation.
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My claim to fame is that $I$ have spent a lot of time overseeing these western mountains to detect and fight forest fires and have become very familiar with every ridgeline, watershed, road, and landowner to effectively do my job.

This was only accomplished by using every form of conveyance possible, including aircraft, studying maps, and observing terrain from various fire towers. Ultimately, I was able to visualize every section of this western mountains, so when an emergency arose, I could get a group to the area without delay.

I can still close my eyes and get myself a picture of the area I desire. I guess you could call this my visual impact.

I have seen many undesirable forest fires, windthrows, and clearcuts, and thanks to God, Mother Nature has so far reforested and healed these scars. I wish, however, to never see 400 -foot towers, concrete pads, 34 -foot wide roads bulldozed into the steep mountain slopes and the 26 miles of cleared high tension lines. Mother Nature won't be able to heal these scars.

There should be a law against this sort of commercial
development and there is a law against it. The wind power proponents have indicated that their project won't be seen from many places. I wholeheartedly disagree. As an example, the Town of Eustis boasts three unique and desirable areas -namely, the Cathedral Pines, Eustis Ridge, and Flagstaff Lake.

Recreationalists cannot get a lot of views north from the Cathedral Pines because of the trees, but when they launch a kayak or canoe into the lake, which literally thousands of them do, the most prominent mountains to the north is Kibby Range. Please see the attached picture I took, it's on Page 3 . Here I'm showing the view from the lake with the Cathedral Pines on your left and the Kibby Mountain Range in the back.

I have tried to show how high the towers would be by assuming that the foot of the mountains is 1400 foot of elevation, the top of the mountains are 31-, it leaves 1600 feet that you'll see of the mountain. The wind towers are 400 feet tall, but that would be one-quarter of $16-$, so the wind towers in effect would be one-quarter of the height of the mountain above the mountains. Don't forget, they'll be 44 of them.

As for Eustis Ridge, see the next two attached pictures: One from the corner of Porter Nadeau Road, and one from the Risvera property. They're both of Kibby Range. And don't forget the 13 miles of red pulsating lights you may see
from these locations every night if the zoning has changed to allow the project.

Recently, some folks who live here have said to me, I'm with you on this wind power thing. I ask, then why don't you stand up and be counted? They counter, well the selectmen and even the County commissioners are voting in favor of the project, and I don't want to rock the boat. My answer to this has been, yes, I understand three of our select persons have voted to accept money and yet when the project -- and if and when the project generates the proposed amount of current, and the County commissioners did about the same thing in anticipation of more taxes.

But these are a total of just six people who would like to see the project succeed, and I know of many folks who live in Eustis and Franklin County who are against the project. Some of these people join us here tonight in opposing the project.

This morning when $I$ got out of my car here in the parking lot, I saw an elderly friend of mine, namely John Tangway. John said to me, look at that mountain, as he pointed towards Sugarloaf. I think wind towers wouldn't make that mountain look any worse, do you? How could they spoil it any further? He then said, now turn around and look at Bigelow there across the valley. Which one do you like the best?

Lastly, I like to give credit where credit is due and
say that I'd like to give thanks to the TransCanada folks for spending time with me and understanding my position in this matter. They've been very good to me.

Thank you for the opportunity to present my testimony.

THE CHAIR: Thank you, Duluth. Adrienne -- am I saying that right? Following her is Bill Houston. Bill, you can get yourself ready.

MS. ROLLO: My name is Adrienne Rollo, and I am highly opposed to a wind farm on Kibby Mountain. I've been a resident of New Vineyard since 2000 and a camp owner in Phillips since 1987. I've been visiting the Rangeley Lakes region of Maine since $I$ was a child. It's that lifelong love of the mountains that has brought me here tonight.

I grew up in Massachusetts and what was once considered a small town. During the last 30 years that small town exploded with shopping malls and residential subdivisions and endless traffic congestion. That scenario is representative of most small towns that have fallen to the pressure of heavy development, and I dare say progress.

There was once miles of farmland on the outskirts of Boston, but $I$ challenge anyone to find a farm now. Farmland has become urban sprawl and suburbia until it blends in with the next city's urban sprawl.

I left southern New England in 2000 for the peace and
quiet of mountain life. So I feel that I am qualified to comment on life in southern New England where this proposed wind power will supposedly benefit the masses, and I think I'm qualified to comment on the endless waste in energy of everyday life there.

When I talk about excess waste, I mean huge subdivisions with homes that are at least 3000 square feet or more, every home has a pool, a sauna, a hot tub. You get the picture. Heaven forbid anyone should be expected to conserve energy by turning off their hot tub. Appearances are everything in suburbia.

When I talk about waste, I'm talking about working for 30 years, I started out as a clerk, I became a bookkeeper, then a staff accountant, and finally comptroller before I retired; and I watched company executives travel by limousine just to go meet a client for lunch. The client arrived by limo, too. When was the last time anybody in this room has gone to lunch by a limo?

You know, I would talk to the powers that be about discussing the environmental impacts of these energy wasting activities, and it's just met with humor and amusement. The arrogance is unbelievable. Appearances are everything in the corporate world. That's the way it is there, and it's like that every day all day.

I'm talking about when $I$ worked in downtown

Providence, want to deliver a package across the street? Can't go hand deliver that package. What will anyone think if they see an employee hand delivering a package? Get a courier service to deliver it. Just unbelievable waste all the time.

By sharp contrast what I've learned here in Franklin County is that people live their lives very simply, very conservatively. Excess and waste are not even a part of the equation here.

So do we really want to blow up Kibby Mountain so that wind power can continue to feed the insatiable appetites of those that I know will look upon this new energy source as an endless reason to continue on the path to more excess.

Perhaps one day future generations will look back upon history and say, what a greedy society it was back then.

Of all the places wind farms can be built, why would any developer or power company choose the choicest land, destroy the most stunning beauty of these mountains, and leave the landscape scarred for eternity.

There are so few quiet places left in New England, please don't sacrifice what little is left. I support wind power but not in an environmentally sensitive region. I do support offshore wind farms where the wind is constant, I support wind farms on marginal land. It is simply not prudent to ruin the most environmentally sensitive area of Maine to do it.

And I would like to quote Maine's distinguished senator, George J. Mitchell, who once wrote -- and I quote -"We have an obligation to leave for future generations the very basics of human life on earth: Clean air, pure water, and unpoisoned land."

I'd like to thank LURC for protecting our mountains. Thank you.

THE CHAIR: Thank you, Adrienne. Bill Houston, is he here? And then Lloyd Griscom follows Bill.

MR. HOUSTON: Good evening, my name is Bill Houston, I live in Kingfield. I'm a working registered Maine guide. I work and was raised in Maine my whole life, I teach an outdoor recreational leadership course in Skowhegan, and I've been an environmentalist my whole life. I actually spoke at my high school graduation with an essay called Wilderness Men and Salvation. I want to speak to you tonight on your criteria of the project must fit harmoniously in the environment.

This morning, once again, $I$ was on talk radio in Bangor, as some of you could relate to, my words were used and my voice, no credit, and taken out of context. I said, global warming is real and dangerous, and they said, and the Farmer's Almanac predicts a cold winter. Ha-ha.

So I want you to think fitting harmoniously into the environment more than locally, I want you to think globally, because I believe that an energy project is not an ostentatious

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yuppy's castle on the top of a hill, but a project that will
benefit all, and it has implications far beyond Maine and that
the solutions to our energy projects -- to our energy needs,
excuse me, are going to take many small solutions.
    I want to read a letter, a couple quotes from a
letter that was in the Bangor Daily News this Friday from Julia
Bonds, co-director of Coal River Mountain Watch in Rock Creek,
West Virginia. She says, there is an energy war going on here.
We're being bombed with 3.5 million tons of explosives every
day.
Up to 700 of our mountaintops have been blasted from 400,000 acres of our mountains. Some children slept fully clothed and ready to run during rain events, homes are damaged and covered in coal and silica dust. Our miners die suffering from black lung, from crushed bodies so America can have energy.
The wind dilemma is a class issue. We are poisoned for other conveniences. If your energy comes from coal, which of course some of Maine's does, then it is covered in our blood and it should be dripping from your light switches. War is waged for our energy, yet some people don't want to look at a wind tower.
My words, what do you think they mean when they say our interests in the Middle East that need protecting. Her words, when you flip on that switch, remember one who suffers.
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Take responsibility and fight for renewable energy. Your children's lives depend on it. You can visit her website at ilovemountains.org.

Clearly this project, the Kibby Mountain project, will not be the only solution but it will indeed make a significant contribution. If the power goes out of state, so be it. Wouldn't it be great if we had enough renewable clean energy to export to the entire world.

I personally think to look at a wind tower is a beautiful thing. I can look at it and say, there it is. It's generating clean renewable energy day after day after day.

So I want you to think globally and act locally. I want to change my quote for George Hale so he gets the compete quote. Global warming is real and dangerous, and I say this to everyone in the room, and what have you done to be part of the solution.

Thank you.
THE CHAIR: Thank you, Bill. Lloyd. And following Lloyd is Sam Lovejoy.

MR. GRISCOM: I'm Lloyd Griscom, a resident of Phillips and Madrid, Franklin County.

I feel that Maine's heritage of outdoor activities and mountains offers an economic resource that belongs to us all and is badly needed.

In my opinion, our heritage should not be bartered

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off to private interests that benefit only the few with the
costs borne by the many. We could have a sustainable
nature-based economy in Maine.
Let's put the multi-use pieces together as was done in New Zealand, which has a thriving economy. We should not harm these pieces irreparably before that can happen.
I have an off-the-grid camp with solar and wind power, and I understand what it means to try to live ecologically. My wind power is in scale to the place and causes no harm to others.
I try not to waste energy and even compost to live in balance.
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The Maine brand belongs to us all and reflects the best of our common ground. Please protect it until this can be realized. If you choose to let this non US company project proceed, please require an extensive environmental impact study of what 13 miles of 400 -foot windmills will do to our boundary mountains and surrounding area.

Please deny TransCanada's request to desecrate our Kibby Range for their narrow economic benefit when Maine needs to preserve our brand for the economic good of us all. Thank you.

THE CHAIR: Thank you, Lloyd. Sam, are you here anywhere? Then Gail Merrill.

MR. LOVEJOY: Good evening, I appreciate your letting
me speak tonight. I'm actually from Franklin County, Massachusetts. I'm a County commissioner there, and I'm vice chair of the regional planning agency, so I got at least a little bit of a sense of the daunting task that you folks face right now.

I want to make a couple comments and then make a suggestion for the panel. The first thing is, every time I hear testimony about visual impacts, they're constantly talking about can I see what from where. They seem to leave out the notion that you're either in the natural environment or there's something artificial in the natural environment, in this case, the wind tower.

So when the human mind looks at a panorama, it looks at something -- in the back of its mind and in the front of its mind -- sees as natural. It wiggles, it's smooth, and it goes up and down, and it has rolls in it. It's only when it's interrupted by something that's vertical, something that's hard, something that's a clear line, it's a cell tower, it's a windmill, it's something that interrupts the eye that you actually get to focus on.

So I think if there's anything that's daunting for you folks to be able to decide is, you're going from a natural environmental panorama to something that's going to be dramatically changed, and it's going to be 44 of these dramatic changes.

If you wanted to look at it in an analogy, you're talking about 44, 41-story buildings, skinny, but buildings, on the top of Kibby Mountain.

So when you think of the panorama that's being changed, you're dramatically changing something.

Secondly, I don't know whether the LURC panel can issue conditions, but every time $I$ hear the reference to global warming and people want to support the wind, clean wind, you're faced with this idea that you're saving 200,000 tons of carbon dioxide, which won't be emitted.

Unless you submit a condition to TransCanada that says you are not going to use 132 megawatts of carbon-based fuels, you've done nothing. You've simply supported the change in the panorama, you've allowed the zoning change in the mountains of Maine, but you've done absolutely nothing to deal with the carbon issues that are used as the argument to support this wind project.

The question whether you can issue a condition I think is an important one.

When do you say no? You say yes to this one based on what criteria, where's the no? Because you're facing -- if you want 1000 megawatts of wind power, you're facing eight Kibbys right now if that's the State's commitment. Eight Kibbies in the next two, three, four, five years. That's eight mountains or two mountaintops being looked at here, you're talking about
16 mountaintops.

One thing that I heard, which I did not hear in most of the testimony, are negative impacts. Everything's very positive. Other than the visual impacts that have been stated, it's going to destroy a certain amount of things, I didn't hear anything about negative impacts, the unknowns.

How many tourists are not going to come to the Rangeley/Kingfield/Stratton area if they know that a mountaintop or two mountaintops now have 44 wind turbines. Question, speculation with a clear question.

What are the property value impacts that are going to occur for those properties that do see the windmills? How do people respond and what are the various responses when you put in the windmills? There are going to be negative impacts. There are going to be people who will not come, my wife being one of them unfortunately.

Finally, I would just like to make a suggestion. This issue is so complicated and it seems to me that LURC and the citizens of Maine are being faced with this helter skelter application process where everybody's got opinions running around. I think really, the only way to solve this problem is for the panel to request that TransCanada withdraw their application without prejudice and that LURC then suggest to the governor and to the legislature and to the citizens that everybody -- everybody -- discuss the use of wind power in

Maine and come up with criteria that there is no longer an argument about.

Either you're going to use the mountains of northern Maine to supply power to the urban areas of southern Maine or you're going to use the ocean, or you're going to discuss the tradeoffs.

Right now you're being driven by an application process that pure and simple you can't control, and the only way that I see that you're ever going to solve this problem is if you step back and actually ask the questions, who should own these power plants? Where should they be located? Near their end point, the use point? Where are the needs? How do you decide which mountain is which? Why not the ocean? Who owns and controls the property to these things?

I think these are all questions that the state of Maine and the citizens of Maine have got to ask themselves or basically you're just going to be whiplashed between I've got a mountaintop, you've got a mountaintop, which mountaintop wins, Jim's got three mountaintops now. We've decided to give the Kibby permit, which now sets a precedent, how do we say no to the next mountaintop?

I don't know the answer but $I$ think the only way to come up with one is to allow a process to get engaged in that allows more thinking and not an application-driven process.

So I really appreciate and thank you very much for
your time.

THE CHAIR: Thank you, Sam. I wish I could answer all those questions but they're beyond me, too.

We're talking to Gail. And after Gail is Wendy Glenn.

MS. MERRILL: My name is Gail Merrill, I'm a landowner, a business owner, and a worker in this area for 28 years.

We are here again in our fight to save the magnificent mountains of western Maine and a way of life. These mountains were given protected status for a reason and should remain protected.

We have gone over the pros and cons of wind power. That's not what this is about. It's not about wind power. It is about rezoning a state treasure. It doesn't matter whether the group requesting the rezoning is out of state or out of the country. The scenario is still the same.

It isn't about alternative energy sources, it is about huge corporate tax credits and money. Please do not let political pressures from big corporations convince you to set a dangerous precedent of rezoning protected lands. Please preserve what has always set Maine apart. Please protect what is so important to us all. Save our mountains. Please say no to zoning.

As an aside, when are we going to start thinking
conservation over consumption?
THE CHAIR: Thank you, Gail. Wendy. And following Wendy is Lloyd Cuttler.

MS. GLENN: Hi, good evening. My name is Wendy Glenn, and I've lived in this area for over 20 years. I'm a real estate agent and so I'm familiar with the economic impacts or the potential economic impacts of a wind farm industrialization of the mountaintops in the area.

I have spent over 14 years in the Chain of Ponds area, and $I$ do own property in that area and hold it very dear.

I'm also an avid outdoor recreationalists and I've spent a lot of time exploring Maine and in particular the area in question.

I'm totally in favor of alternative sources of power, alternatives to fossil fuel. We are all individuals, we can all make a difference -- as Gail just said -- conservation, conservation, conservation.

We do not need to destroy our mountaintops or industrialize them to reduce air pollution, and again, there is no hard evidence that wind power will reduce the amount of fossil fuel emissions.

Alternatives being solar power. We do have tax subsidies here. I'd like to see those tax subsidies in a form that make it realistic for people to actually utilize those subsidies and put solar power in being a great enough
percentage of the overall bill putting in solar to make it feasible.

One of the ironies of this whole project is that we are off grid in the Chain of Ponds area, the Kibby area, and we're giving all these tax subsidies to Canada -- or TransCanada -- and we don't have tax subsidies that would allow me, personally, to put in solar power. Mind you, I do not want to be on the grid either.

Again, conservation and increase in efficiency.
As far as TransCanada goes, we are really close to the Canadian border, and there have been discussions about numerous locations for these projects. I think it's been proposed before, and I would like to propose that they do move their project into Canada and use their own mountaintops and not our mountaintops.

Being a camp owner in a LURC jurisdiction, I'm familiar with how strict the Land Use Regulation Commission can be. In working with people year after year after year on real estate sales allowed them to avoid LURC jurisdiction because of the application processes and the strict adherence to the rules that protect our environment.

In your land use districts and standards there are several sections, one is Page 114, soil, geology, and protection of subdistrict: Purpose of this subdistrict is to protect areas that have precipitous slopes or unstable

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characteristics from uses or development that can cause
accelerated erosion, water sedimentation, mass movement, or
structural damage.
We saw natural mass movement right here over at Crocker a number of years ago and the disturbance of these mountaintops could easily, in my opinion, create such disturbances.
We've talked about the mountain protection subdistrict, and they're protected and regulated, certain land use activities in mountain areas in order to preserve the natural equilibrium of vegetation, geology, slope, soil, and climate, to protect water quality and preserve mountain areas for their scenic values and recreational opportunities.
We're counting on you to enforce these rules that are written by you.
A couple of weeks ago at the Black Nubble hearing we saw the Penobscot Indian Nation come up and speak in favor of wind power. As Sam said, when do we say no?
If we rezone Black Nubble and we rezone Kibby, I've heard from numerous sources that the Indians are just waiting for this battle to be fought and there are intentions of putting a wind farm on Snow Mountain, which, if we start developing all these mountains, will dramatically change the character of the western mountains of Maine which to all of us are dear.
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In one of the reports I read, it said that there are not any State or National Parks within 15 miles of the wind project. That is true, $I$ believe, however they mention in another section, somewhere down in little print, that there are three public reserve lands, the closest one being Chain of Ponds, which encompasses land north of Natanis Point Campground and west and east of the lakes and certain spots and south to the northern edge of Lower Pond, which is a mere mile and a half, two miles from this wind project from the turbines, the southern edge of Lower Pond being closer and -- I'm afraid it would be in full view of turbines.

I don't believe -- I'm speaking to the person who did the visual impact studies. She had not been on the pond to be able to view the site from Lower Pond, only from the land, and I don't believe that's an accurate assessment nor can an accurate assessment be made of the visual impact nor the auditory impact of the turbines on Lower Pond from there.

As far as Chain of Ponds being a public preserve land, it's a wilderness -- your wilderness lake assessment that you have says it's a management Class 2 pond and undeveloped water body with exceptional value, according to your guidelines. A 1-A lake of statewide significance with two or more outstanding values, which would be fisheries, wildlife, scenic and physical properties that are all outstanding. You find shore land and cultural significance on this property and
culture significance on our trail, which runs through this area.

Other areas, just to give you an idea that are rated similar according to your standards, are the Moosehead area, the Rangeley Lakes area, Kennebago, Central Lake, Chesuncook, Caribou, Richardson, Attean, and Aziscohos, many of which I'm sure people are familiar with for their great beauty.

I have quite a bit of other information here but some things that $I$ have taken from your report on the public preserve land is that the rocks in that area are 354 to 417 million years old. After a millenia of erosion, the rock that was once buried in hundreds of feet of bedrock is now at the earth's surface. A small portion of the preserved land is underlain by the oldest bedrock in Maine, 1.6 billion year ago prior to the emergence of life in the sea.

The area of Kibby is similar to this, not far from it, only a couple miles. Not a site to support industrial activity.

In closing, I would like to say that I've enjoyed many, many memorable times. I'm concerned about the noise level from the wind from the south, as we've seen from the Mars Hill project. I'm concerned about the night sky, which nobody has been there to witness, and the dramatic effect that all these lights may have on the night sky.

As far as economic impact goes, we know there would
be a short-term benefit. I believe there won't be a long-term benefit.

Dr. Bill Baker, who's also a property owner at Chain of Ponds, has asked me to mention that he is also a member of the National Park Service advisory committee, and if these wind towers go in, he plans on selling as part of the economic impact. He no longer values the property.

My last thing here.
THE CHAIR: Is this your last thing?
MS. MERRILL: This is my last thing. This is a quote that saw in the autumn edition of Nature Conservancy and it says, People take care of the things that they feel belong to them, they take care of what they love. Please protect the mountains that belong to the people of Maine and America.

THE CHAIR: Thank you, Wendy. Lloyd Cuttler, and following Lloyd -- sorry -- following Lloyd is Janet Newberry. MR. CUTTLER: Lloyd Cuttler, selectman Carrabassett Valley where we sit today.

This is the third time in 14 months, I guess, I've had the opportunity to talk to you, and you're probably a little tired of listening to me, and I would be willing to bet that no one behind me is going to change their opinion of the way they feel, because we're the people that really are impassioned by this whole issue, and you have a very difficult decision, not that $I$ feel continues to get easier as time goes
on.

I'm a strong supporter of the windmills. I'm a strong supporter of our way of life. I guess what I really am here to do is not change your mind or change other people's minds, it's to take responsibility for my life, and I'm afraid to say that 99 percent of the people have a life like mine, they drive their cars, they turn on their lights, they have their computers. There are few people here tonight that truly I can respect when they say, we don't want a windmill, because perhaps they read by candlelight and they live in the woods, and they don't -- are not part of the power grid. Those people I can respect.

Unfortunately 99 percent of us are not those people, and we need to be responsibile for what we do. One of the things that $I$ think my generation, other generations, have grown into is not taking responsibility for what we've become and where we're going.

Now when somebody falls off a curb, instead of saying I'm stupid, it's, who can $I$ sue. Well, we have an environmental problem. We have all caused that environmental problem. We have an energy problem. We are all daily part of that energy problem. We need to do something. We need to compromise.

I spoke to you last time. All things being equal, we need to compromise. A windmill to me is a much, much smaller
compromise than a nuclear power plant and blowing up a mountain and burning coal.

A windmill's face to the rest of the world, we, here in Maine, are taking responsibility for the use of our energy. Is it perfect? No. Is it going to solve all the problems? No. But unfortunately there is no solution right now. We need to move towards the solution. We need to continue to develop different sources and be ready to compromise and be ready to take responsibility for the fact that nobody is going to turn the light off, we're going to try, we're going to conserve; but even if we stop using more energy than we do today, we're going to run out of oil. We're going to run out of coal. We have to do something. We're going to run out of air to breathe.

Again, what I'm saying to you is that we need to take responsibility. We cannot live by NIMBY. I hate to say it, but that's really what this is about. We support windmills there, just don't put it here. If you put it here, we'll support it there. It doesn't work that way.

We all have to become part of the solution, and you have responsibility of making us take the medicine. It's not pretty but we have to take the medicine.

I said to you last time, and I really believe this is important, as I look around the state, I used to work for Duluth Wing, I flew across all those mountains that he walked. A lot of them still have fire towers that were left there by
the State.

We have put thousands of cell towers on top of mountains, and we don't think twice of what happens when satellites become our form of communication, and we don't need them.

We can't do that with windmills. I think a viable compromise, something that people can live with, is to have that cost built in that these windmills will be decommissioned if hopefully something else comes along that is pure and clean.

It's not there today but it is very simple to decommission a windmill, to take a tower off the mountain, and allow nature to revegetate. It does it every time there's a fire, it can do it if we destroy the top of the mountain. It's a compromise but it begins us down that road of taking responsibility for our energy glut.

Thank you.
THE CHAIR: Thank you, Lloyd. Janet Newberry, and following Janet is Scott Cunningham.

MS. NEWBERRY: I'm Janet Newberry. I'm also a property owner on Chain of Ponds. The camp that I own now has been in my family for four generations, and it seems to me that one of the issues obviously is economic versus intrinsic value.

I can see, just as an outsider being here part time, that tourism is definitely part of this local economy, and it also seems that it's pretty well habitated with the logging
industry, possibly because of the renewal of the forest on its own.

Turbines, obviously, are going to stay. I think we really have to look at why areas above 2700 feet were protected in the first place, and, you know, do we want to keep that legacy around, do we want to have them free and open as the wooded areas they were meant to be.

It's true there's no electricity currently on
Route 27. Most places there are off the grid, and it's pretty amazing, really, that it stayed that way this whole time. It's on the edge of that huge area of unprotected land in Maine, but the further we encroach on it, the less there's going to be. So that to me is a big concern.

I think that the local businesses will be hurt if people look and see that there are turbines and they don't want to be recreating underneath the shadow of industry that they would create.

So again, I just want to tell you, we appreciate that you protect the mountains and we hope that you continue to do so. Thank you very much.

THE CHAIR: Thank you, Janet. Scott please, is he here? And then after Scott is Larry Warren.

MR. CUNNINGHAM: Thank you. I appreciate the opportunity to speak here tonight. My name is Scott Cunningham, I'm from Eliot, Maine. I'm a business owner, I own
a printing company that prints on recycled paper, uses soy-based ink, and we recycle our waste paper as well.

I'm also a camp owner up at Chain of Ponds with some of the other people here this evening. Having owned a camp on a southern Maine lake for years, my family and I began to lose the sense of escape, that is, development, jet skis and milfoil all degraded what was once a beautiful weekend destination.

We searched extensively for two years, and in 2005 found a turn of the century log cabin in a region that appeared unchanged by time: Chain of Ponds in Franklin County, Maine. Despite the dark condition of the building, the sheer beauty of the location bordering Maine State preserve land was too much to resist. The granite cliffs, the fragrant cedars that line the shores, the abundant wildlife that seems unthreatened by the occasional boater are all testimony to the magnificent wilderness experience enjoyed by all who visit this enchanted area.

Now, however, the planned rezoning of Kibby Mountain and Kibby Range for a wind power facility looms darker than the black thunderheads that roll in over the Chain of Ponds after a hazy summer day.

The proposed locations of the wind turbines, where they can be clearly viewed by camp owners, sportsmen, and recreational boaters on Chain of Ponds, as well as by tourists travelling on a scenic byway, Route 27, illustrates the blatant
disregard for Maine's most precious unspoiled resources by a foreign energy giant, TransCanada.

I do not believe the industrialization of these natural treasures will produce the economic benefits that are being promised. I would have reconsidered the purchase of my camp on Chain of Ponds in 2005 if I had known that this project was even a remote possibility.

People come to this magnificent region because of its rare beauty and unspoiled wilderness. They buy retirement homes and camps here to have the unique connection with the beautiful natural surroundings.

The recent mild winters affecting the local business economy will pale in comparison to the number of hunters, fishermen, hikers, cross country skiers, and yes, real estate investors, who seek better value and natural beauty elsewhere.

With current technological advances, wind plants can be located at lower and less technologically sensitive areas, such as Aroostook County, rather than on mountain ridges where efficiency and reliability of these turbines is unknown.

I am hoping that LURC, as in the Redington project, performs its duties and stewardship and votes against this intrusive environmentally disruptive project to protect this designated preserve land for future generations to enjoy.

Are any profits gained from this wind power facility really worth permanently disfiguring western Maine's most
valuable resources: Mountains.
If the future of Maine's temporarily preserved wilderness is going to succumb to the control of corporate giants, political insiders, and lobbyists that were clearly displayed at the wind power forum that you have met, then Maine as a tourist destination with acres of unspoiled land will be a memory of the past.

THE CHAIR: Thank you, Scott. Larry, are you here? And then after Larry is Fred Hardy.

MR. WARREN: Good evening, my name is Larry Warren. I live in Portland. I'm here to speak on my own account this evening.

Some 30 years ago when the State formed the Bureau of Public Lands, it had some decisions to make as to how to consolidate those public lots, and its primary objective was to consolidate and to trade out many of the public lands in Somerset and Franklin Counties, the lands along Moosehead Lake.

I was a selectman at the time in the Town of Carrabassett Valley and suggested that the appropriate role would be to preserve some of the public lands for Franklin and Somerset and other counties and to select the best and to preserve it.

With Dick Barringer, we sat and talked about the Chain of Ponds, and I strongly urged that the Department of Public Lands acquire the lands on the Chain of Ponds, which it
did.

relationships with people across the Canadian border, whether it's in Quebec, New Brunswick, or Nova Scotia than most of us do with our neighbors to the south, whether it's Connecticut, Massachusetts, Rhode Island, or New York.

My son was educated in New Brunswick, Prince Edward Island, and I have a lot of very close ties and I worked for three years outside of Montreal. Never was I chastised or castigated for being involved in international trade in Canada, in Portugal, in Martinique or Guadeloupe.

I think that the representation that I've seen by TransCanada has been very responsible and outstanding. Their commitments to the communities and their outreach to try to identify projects and opportunities that can benefit future generations of people in this region has been very commendable.

I like what I see and I like what I hear. I would urge you to approve this project and move it forward. Thank you.

THE CHAIR: Thank you. Fred. And following Fred is Nancy Merrill.

MR. HARDY: Good evening, Mr. Chairman and members of the committee. My name is Fred Hardy and I am a resident of New Sharon, Maine. Before I start my formal testimony, I would like to mention that $I$ am a County commissioner in Franklin County and the other commissioners send their greetings, as we have endorsed this project as you've heard before here tonight;
however, I believe it was noted that there's only three of us and three selectmen in one of the towns here, so that's only six people, but in an elected office, if I don't have a majority vote from about 10,000 in one part of the county -- I represent District 2 -- then I wouldn't be here.

As I said, my name is Fred Hardy and I'm a resident of the town of New Sharon. I serve on the board of directors of the Greater Franklin Development Corporation located in Farmington.

I am here on behalf of the board of directors in support of this project. For the past eight years we, as an organization, have had the responsibility of creating new jobs in the Greater Franklin County area, primarily through business attraction.

It is the goal of Greater Franklin to be diverse in the economic development initiatives undertaken to replace the more than 1000 jobs lost over the last decade in the traditional industries of agriculture and the manufacturing of shoes and wood products.

TransCanada's Kibby wind power project will satisfy an economic need in the local area by providing a potential of 10 new permanent jobs at peak and 250 construction jobs over the course of one year in Franklin County. It is estimated that the construction jobs created by the Kibby wind power project will generate annual wages of nearly $\$ 5.5$ million,
which does not include benefits.
The Kibby wind power project is also expected to generate 10 permanent jobs related to the operation of the wind power facility. These jobs are expected to generate $\$ 380,000$, not including benefits.

The jobs created by the Kibby wind power project will provide a weekly salary well above the average weekly wage for the region. This quarterly data regarding wages from fourth quarter of 2006 indicates that the average weekly wage in Franklin County is $\$ 581$. The positions created at the Kibby wind power project would pay approximately $\$ 730$ a week, well above the average wages in the jobs in the Farmington labor market area, which as of July 2007 has an unemployment rate of 6.4 percent.

The indirect impact of the Kibby wind power project's creation of 250 construction jobs on all other industries is estimated to be 125 more jobs in the Maine economy. Therefore, the total employment impact of the Kibby wind power project during the construction phase would be the creation of 375 new jobs on the local area and in Maine, with total wages and salaries reaching nearly $\$ 9$ million.

Given that, the Kibby wind power project will employ 10 operations personnel. The calculated total employment impact would be 40 new jobs in the regional economy. Therefore, the presence of the Kibby wind power project will
result in the indirect creation of 30 new jobs in other industries, for example, vendors, suppliers, restaurants, gas stations, retail stores, and services.

Other local investment, the Kibby wind power project is an estimated $\$ 270$ million project representing a very significant private investment in Franklin County, as well as the state of Maine.

Taxes to the Franklin County unorganized territory fund are expected to be in excess of $\$ 1$ million per year, making this project the largest contributor to this fund.

TransCanada has also developed a community benefits package with the Town of Eustis to give them $\$ 132,000$ per year based on $\$ 1,000$ per installed megawatt, and the taxes on the transmission line running through Eustis will provide an additional $\$ 25,000$ per year.

TransCanada's commitment to purchase from local suppliers will help retain and grow our existing businesses in Franklin County.

Tourism is a leading industry sector in Franklin County. I'm not aware of any study or any report indicating that wind farms adversely affect this industry. In fact, a review of literature indicates that wind farms and tourism are compatible. A study performed in November 2003 examining the potential impacts of a wind farm on the tourism industry in Vermont found that tourist regions whose primary attractions
are nature based also highlighted wind farms, along with lodging, restaurants, canoeing, fishing, and hunting, wildlife viewing, biking, horseback riding, and skiing, as well as other activity.

Wind farms appeared to increase the tourism to certain rural destinations by attracting the curious along with their tourism dollars. It has been noticed that visits have increased in the many areas, and new wind farm attractions have inspired new business development. Wind projects are known to increase tourism in an area.

Natural resource industries have long been the backbone of the economy in the Greater Franklin County area, although still present, the forest product companies are on the decline. Therefore it is important that we seek new opportunities in renewable natural resource based industries.

The Kibby wind power project will strengthen the economy of Franklin County, and it can happen without undue adverse impact on others. A stronger economy benefits everyone.

The Kibby wind power project offers Franklin County a clean industry using a renewable natural resource with excellent wages and benefits for the people of this region. The skills required for these jobs can easily be filled from the available labor force. This is an important opportunity for Franklin County to keep its people earning a living in a
place where that they love to live.
I strongly believe that there is a great need for the Kibby wind power project because it will provide high paying, sustainable jobs, and secondary economic benefits to the Franklin County area, while helping to reduce air pollution and to reduce reliance on fossil fuels.

On behalf of the Greater Franklin board, I ask the Commission to approve this application. I apologize for you somewhat that Alison wasn't able to be here tonight. So I had to fill in for Alison. I have, however, been a resident of Franklin County for all but nine years of my life. In fact, I lived in the town of New Sharon for 47 years. I've been around here for a while.

THE CHAIR: You've been around these hearings for a while, too.

Nancy. And then after Nancy is Steve Bier.
MS. MERRILL: I'm Nancy Merrill and I'm here speaking on behalf of the board of directors for the Franklin County Chamber of Commerce to express our support for the Kibby wind power project.

We're a nonprofit membership organization of business and civic leaders through partnerships and other groups and individuals, seeks to promote economic growth, tourism, civic pride, and cultural awareness.

TransCanada presented to our board of directors and
answer our questions about proposed wind development projects, and we believe that this project and the company that would own it and operate it, TransCanada, would be an excellent addition to Franklin County.

We are, of course, especially interested in the project's economic impacts. The 250 or more jobs during peak construction and the more than 12 permanent jobs that this project would create will be a support for many families in Franklin County and elsewhere in Maine.

Additionally, the Kibby wind project would likely be one of the largest tax payers in Franklin County, and TransCanada initiated an agreement with the Town of Eustis to provide additional funds on a yearly basis that the community can use as it sees fit to improve their quality of life.

This type of clean sustainable economic development sponsored by a socially responsible company is critically important to the future of Franklin County. Thank you.

THE CHAIR: Thank you, Nancy. Steve. Following Steve is Phil Kiendl, I think it is. Sorry if I mispronounced that.

MR. BIER: My name is Steve Bier and I'm a family physician in Farmington, and I've lived in -- the past 25 years -- in Jay. I've been a hiker and environmentalist for all of my adult life, and $I$ wish to speak against this project.

Angus King once said that no fish should leave the
state of Maine with its head on. Governor King was referring to the tired Maine history of selling its goods on the cheap while others made the real money with their own value added process. I believe in the final analysis, the Kibby Mountain project will be seen in this light.

From Maine's earliest days as a colony of

Massachusetts to the present, if this commercial pattern remains, Mainers lose. In the earliest days of our existence as a territory, 90 percent of the state was sold off to private interests who took what they could as fast as they were able. The days of the forest barons are over, and we now have degraded forests and more value to real estate markets than the commercial forests. This has led to a current land swap, which has seen 20 percent of the state change hands in the last decade and the commercial decline of logging as an industry.

In addition, this transformation has led to unprecedented second-home construction in previously undeveloped areas with more gated roads, fragmentation of habitat, and areas previously open to traditional uses, such as hiking, fishing, and hunting now closed. If we are not careful, this is the way of Maine's future.

I believe TransCanada's interest in Maine's wind resources are part of this pattern. Boundary mountains have been logged off and entire hardwood woodlands have been resold
to Plum Creek and now passed along to TransCanada for another level of resource extraction.

TransCanada is not a public interest company. Of course they see opportunity in what is deemed the current energy crisis, and why shouldn't they, I'm a business person, too; but let us not fool ourselves. If there were not profits to be made, they'd be spending their development capital elsewhere. So those of us concerned about the public good of this state should ask, what is in it for us. After all, rezoning is far from an entitled right for them.

Jobs. Their website indicates there could be as many as 250 jobs in the early phases of construction followed by rapid shrinkage, 10 to 20 , to maintain the project. If patterns elsewhere hold, these technical jobs will likely not go to local residents, in any event the number of jobs is relatively small.

Money. TransCanada is offering the Town of Eustis $\$ 1000$ per installed megawatt, or $\$ 132,000$ a year, which is a lot of money for a small town, but in fairness to the cost and benefits, they need to be amortized over the whole state to feel the impact of industrializing the previously protected mountain zone.

The whole state will share in the implications of zoning for precedence. The whole state rises and falls on how our resources are protected or spent. It's not hard to pay off
a town, which begs the question of the costs and benefits of the shared resource.

Green power and climate change. This is potential claimed away, and I feel that the purported damages do not withstand scrutiny. If every advertised kilowatt hour is delivered to users, this still represents only a fraction of a percent of our electrical use and will easily be swallowed up by the ongoing per capita annual increase of 1.8 percent in electrical demand that Maine has been seeing.

Without efforts to regulate Maine's energy demands described by Governor Baldacci as an insatiable beast, this project will have little or no impact on our swelling carbon footprint and no impact on climate change. It will not take a single coal-fired plant off-line, it will not save any mountaintops.

If it looks like carbon is regulated through a cap and trade system, then whatever savings are accomplished here will be sold and used by those as capital somewhere else.

In this context, wind power projects like this are little more than a feel good project at a time when impacting global climate change really calls for a profound societal approach to energy use. Why should we sacrifice a ridgeline when consumption goes unchallenged and unaddressed.

There are other reasons to think that generation capacity will be less than advertised. This project is a
harsh -- is in a harsh alpine environment, and any engineer knows that cold and ice are hard on equipment. What are the maintenance realities of a project of this kind? How much down time will there be? What will be the longevity of the turbines? Does anybody have the experience to know? Though both Maine Audubon and the Appalachian Mountain Club organizations I belong to support this project, the published siting criteria does not. The boundary mountains seem to be at least moderately unsuited and possibly strongly unsuited by most of the criteria, including potential soil damage, impacts on recreational potential, for background country recreation use, habitat fragmentation, view impacts -others have alluded to -- and impacts on a valuable subalpine spruce-fir community.

For reasons that are obvious, the majority of wind farms worldwide are in far different settings. In our country the Midwest is where the real energy boom is happening because the wind resource there is dependable and wind energy and existing uses -- especially farming -- comfortably coincide.

Maine has vast offshore potential estimated at more than adequate to take care of our needs, but that has yet been explored. The Aroostook County wind project, now in its planning stage, is estimated to generate 500 megawatts, more than all the existing proposed wind projects combined.

One wonders, then, why so much money is being put
into a site that is so marginal, controversial, when there are better alternatives. Furthermore, technology rapidly changes, and no longer is it the case that wind power requires Class 3 or 4 wind. The specifications of towers now allows productive installation at 10 to 12 miles per hour average wind speed, and this will allow their placement in lower elevations closer to populations where they should be.

I am not a NIMBY. I want this in my backyard, literally. Once the Kibby turbines are installed, we're going to be stuck with rapidly obsolete technology strung across 13 miles of ridgeline.

The Appalachian Mountain Club study criteria further suggests that projects are made for permanent and verifiable improvement in the region's air quality. Wind power projects lead to replacement of electrical generation and fossil fuel sources. This has not been proven.

So if those are the benefits, what are the costs? The economic costs are a short change in our economic future. Fragmenting value of habitat, creating a precedent of industrial development in delicate protected habitat, and permanently degrading a remote undeveloped resource.

Sunday my wife, a friend, and I hiked across the Kibby Range, and as we sat on the flanks of the western part of the wishbone for lunch and gazed 18 miles to the south and took in a magnificent sweep across the ridges from Moxie, across

Bigelow, to Cranberry, to Flagstaff Lake, then Jim Pond glistening in the mid ground. Between us just the winds. This area is a gem.

Sure the Kibby area is heavily cut. So are the White Mountains, the Smokeys, and what is now Baxter State Park. With necessary visions to see what will be there over time, these areas have become spectacular national recreation resources. I believe Kibby Range could be one, too.

The recent workings of port charting Maine's future spent a great deal of time detailing sprawl and suburbanization that is threatening culture, recreation, and economic prospects of our state.

In their analysis protecting the Maine brand, reputation for unique scenery, wild lands, and lack of development sprawl so typical elsewhere are central to our future. These qualities are the ones that will attract the next generation's business entrepreneurs who come because Maine is beautiful and is a recreational treasure chest.

The Commission's comprehensive lands use plan states that the commission must reconcile the need to protect the natural environment and other important values and uses that cause degradation with the need for traditional resource-based use and reasonable and new economic growth and development.

It is not the task of the Commission to solve Maine's energy problems. Protection of Maine natural resources for the
greatest good is the issue, and I don't feel this project passes your standards. Let's follow Governor King's advice and use our resource for their best now and for the future.

THE CHAIR: Thank you, Steve. Phil. And following Phil is David Maxwell.

MR. KIENDL: Again, I'd like to thank you for the opportunity to comment on this rezoning petition tonight for the proposed TransCanada Kibby wind power project.

My name is Phillip Kiendl, and I am the president of the Chain of Ponds Camp Owners Association. Our camps are located in the area known as The Narrows, which face directly towards Kibby Ridge and Aziscohos Mountain. The camp owners in our association are firmly against any industrialization of this pristine wilderness, and I speak tonight on behalf of those who cannot attend these proceedings.

Our camps and property of the chain were once a part of Megantic Fish \& Game Club, the oldest sportsman's club in North America. Referred to as a preserve in the old records, these camps were built in the late 1800s and early turn of the century. It is an area unlike any other, one that has been protected by the State of Maine for years so that people from Maine and beyond can experience mountains, forests, and the ridgelines that have been untouched by development and human activity.

Chain of Ponds today are virtually the same as those seen by the Army of Benedict Arnold as they marched and portaged their way to Canada. The same area is now being proposed for industrialization, and you, as a land use regulatory commission, must uphold the value the State of Maine put on these boundary mountains many years ago.

The Kibby Range, like all the mountains in your jurisdiction, is zoned against development above 2700 feet. The reason for this is to protect the fragile soils at that height, endangered birds and wildlife that live up there, and the views of the land that is so awe inspiring to visitors. People travel great distances to see this remote and historic region of Maine.

Who will want to come to this area in the great north woods when their view of the sunrise is blocked by a wind turbine, and the full moon rising over Aziscohos Mountain is obstructed by blinking red lights from illuminated a 440-foot tall wind generator? Not the group that visits my camp. These are the visitors who shop and dine in Eustis, who go to Stratton to load up on groceries and clothing in preparation for their time away from the pressures of life in the metro areas.

Not the people who camp at Natanis Point Campground and kayak down the Dead River during spring runoff. This segment of the tourist market is looking for the wild beauty of
an untouched wilderness.
The rezoning of these mountains will drastically affect the economy of this region in Maine because these people will stop coming. The region relies on tourists and revenue from fish and game licenses, retail sales, room occupancy, and meals. This will all be lost.

Our camp owners association, the Chain of Ponds, is made up of a very diverse group of individuals who have all worked tirelessly to restore and preserve the historic nature of our camps.

We are not adverse to the concept of wind power, but the boundary mountains are not the place to begin the industrialization of Maine's ridgelines. Rezone Kibby Ridge and you open the flood gates for utility companies who want to take advantage of tax credits and care little about the scenic beauty and wildlife habitat they will destroy in the process.

For them it's all about the money. It's not about the benefits to the region, because there are none that would justify the destruction of wilderness forests to make way for a permanent, unmovable utility plant on the high ridges of Kibby.

You must weigh the balance of cost versus benefit and the certainty that once you rezone this area, you will be bound to do the same for others in the state.

Wind power plants don't need to be placed on high mountain ridges. The advances in technology make it possible

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to place them in agricultural areas that will not affect
wildlife habitat or wilderness forests.
    Along with the turbines come access roads,
transmission lines, and substations all carved permanently from
wooded mountainsides. For what? Maine already has enough
power, so much power that it sells it to other states. Jobs
will be created, but most will be short term and few are lucky
to go to local people.
    It is up to your Commission to maintain the value
that the State of Maine has placed on these high ridges.
People travel great distances to enjoy the scenery of these
boundary mountains, and the Chain of Ponds Camp Owners
Association implores you to deny the rezoning of this pristine
wilderness, to keep it forever wild, and free for future
generations. Thank you.
THE CHAIR: Thank you. Okay. David.
MR. MAXWELL: My name is David Maxwell, and I've been coming to this area since 1969. I'm a property owner in this area, and I own a house on Eustis Ridge and another cabin down on Flagstaff Lake.
The reason that \(I\) have invested in this area was because of the unique -- I would use that word despite what the visual consultant said this morning -- the unique beauty of these western mountains.
These mountains, ultimately, are the reigning natural
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resource in the northeast. They are precious in that regard
and deserve the protection of LURC.
    LURC's primary mission, as I understand it, is to
protect the natural resources of Maine, and certainly that
includes the area of these western mountains.
    I have heard arguments made during these proceedings
by certain environmental groups, such as the Natural Resource
Council of Maine and the Appalachian Mountain Club, that these
mountains in effect, they might be expendable to the extent
that they are developable.
    I think that has evolved from a sort of
out-of-site/out-of-mind kind of policy that is increasingly
troublesome not only among environmental groups but among
government agencies as well.
In fact, there are many individuals who are not card-carrying members of the Appalachian Mountain Club who enjoy this concept of remoteness and what does that mean? Remoteness.
I understand that's a new word for what some people perceive as wilderness or semi-wilderness or quasi-wilderness, but to the campers, to the hikers, to the people who go back into the area of Kibby and enjoy its many qualities, that is wilderness to them.
So I think that deserves some respect and some acknowledgment that just because an asset is not immediately
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available to public use, it no way diminishes the value of that asset. You must take a long-term view. I think LURC is sensitive to that point.

The other thing that I want to comment on here this evening is the perception that sort of was left here this morning given the testimony of the visual consultant that there would be no visual impact of this project.

I can tell you, as someone who owns a cabin on Flagstaff Lake and the near vicinity of Cathedral Pines Campground where hundreds of campers come every year and bring money into this area, economic boom to Stratton certainly, that this project will be visible, it definitely will be visible, and it certainly will be visible at night as the orange glow lights up the otherwise northern sky and its beauty, starlit beauty.

So that's the kind of desecration I think that we're talking about here that is untenable to many of us who object to this project.

The other thing I would say is that there are tax paying residents here who live in other areas, like on the north side of Eustis Ridge, who said this morning there are only two or three camps up there. There are probably 30 camps and homes up there, people who bought homes in that area in part because of the visual significance of their view there, and that's going to be impacted, and these are tax paying
residents.
Now, it's also been implied that there is no interest among the residents of Eustis and Stratton. I think that's not true, it's not the case. People I've talked to sort of feel this is a done deal, it's already over. Why? Because the selectmen and the County commissioners have supported this project in the absence of any input from the communities.

There's been no public hearings supported by the selectmen or the County commissioners on this issue. They in turn have made their own deals with TransCanada, unbeknownst to the public, to support this project.

For that reason alone, I think that LURC shouldn't support this. It has no real ground root support. Thank you very much.

THE CHAIR: Thank you, David. Let's take about 5 minutes here to stretch our legs and give the court reporter a little break. Try to be back here around 8 o'clock or so.

Thank you.
(There was a break in the hearing at 7:54 p.m. and the hearing resumed at 8:04 p.m.)

THE CHAIR: Folks, do you want to continue or are we all done for the night? The next person on the list is Mel. I'm sorry, I can't read your last name. Come right up, Mel. After Mel is Sara Woods. Please go ahead.

MR. BOUHOULIS: My name is Mel Bouhoulis, I'm a
resident here in Coplin Plantation. I've been here since 1987. I currently work with the school district, SAD 58.

I'm coming to you tonight in favor of the wind power program. I worked a little bit with the Kenetech program in the mid '90s. I think it's a good project. I think it's something that needs to come.

We can't keep pumping petroleum out of the ground and natural gas forever. Alternative energies are going to be mandatory sometime. I think the day will come when you're going to want no 44 towers, but probably a hundred times that many, not necessarily all on the mountains up here. We're going to need alternative energy.

We presently have the military that is bound to petroleum products and nuclear, and every bit that we can do lessens the demand that they have.

I've heard a lot of interesting comments here tonight, and guys have quite a challenge for you. I'd like to take you back if you could take your committee and take it back 50 years, a little bit more than that, and what you would think if we said we were going to take chain saws and some skidders and we were going to start cutting trees from Stratton to Lexington and put a pile of cement down at the end of that, and today we have beautiful Flagstaff Lake because of that project. Somebody approved that.

The same thing is going to happen here. Tourists, I
think, will come for your wind tower, windmills. It's interesting, I recently came back from Germany. There are wind mills all over the place over there. They're not an eyesore, well maintained, and I don't see anything really rotating real fast when I observed those windmills.

I do ask that in your decisions that when you review these proposals that -- I don't know a lot about TransCanada, how large an outfit they are, $I$ assume they're pretty big, a lot bigger than Kenetech was -- but in your review of their proposals, I would engage you to review that should they fall flat on their face, have means to get rid of these windmills on the mountains.

Also, 10 years from now or however long, if they go, oh, let's sell this to Boralex or something like that, let's get out of business, make sure whoever they sell it to has the capability to maintain and keep these things going good, and if they need to decommission them, make sure the funds -- or they're financially capable -- to get rid of these things if they have to.

I think they're providing a piece of equipment, and I think we're going to need a lot of them. The trust is in your decisions in reviewing these projects in detail.

I don't know a whole lot about their project that they have other than 44 is a lot smaller than what Kenetech had. Seems like a pretty good project and I go for it.

Thank you.
THE CHAIR: Thank you, Mel. Sara, are you here somewhere? After Sara is Wendy Wyman, I think.

MS. WOODS: I am Sara Woods, past selectman of
Eustis, a school board member, resident, past business owner in Eustis.

I was before this committee back in the early '90s as a selectman for the Kenetech project. At that time when it was accepted at 400 -something towers, 44 is minimal. This kind of feels like déjà vu. The same people are up against this, almost the same as before. A few different new faces but the same.

These mountains are not pristine mountains. They are a working viable seven-day-a-week business and have been for many years. My relatives are from the Eustis area, and back in the early 1900s we had farms, many farms. Now the farms are gone, the woods have reclaimed all of that pasture land that was used at that time for cattle and cows and so forth.

Yes, we live by tourism. We live by the weather up here. When I first came here from Connecticut 17 years ago, I could not believe that a community would live by the weather because it wasn't the same in Connecticut. We don't live by tourism.

I see many a camper, many an ATV all using these woods roads that were made for businesses, and I happen to live
on Flagstaff Lake myself and we use the lake. We fished at Chain of Ponds. I've been the only boat on that pond for two straight days morning to night, and you can't see anything from Chain of Ponds but the woods right around you. You can't see above the mountains, so I'm really not quite sure how they're going to see towers.

They all use generators up there -- either powered by gas, propane, whatever -- for their power. You're not going to stop power use. I know myself I've gone to the power saving bulbs to help and whatever, but still we have new homes. Half a million dollar homes are being built in the Eustis area, and these aren't for residents, they're for out of staters that come to snowmobile, ATV, ski at the mountain. We're like a bedroom community right now for Sugarloaf.

They do not live there full time. Many of the people I've spoken to in town are for the windmill project, and I mean, if you're going to live by tourism, give them something else to look at.

You know, they come for leaf peeping, they call it, they come for skiing if there's snow. The last two years we had not had snow until April. They're mowing lawns.

We have lost -- three, four restaurants have closed because they didn't have enough money to keep operating. We've lost a lot of residents. Businesses have closed. We need the income that would be generated from this.

Even though I just heard that there were no public hearings, our Town had public hearings. Every one of our selectmen's meetings are open to the public. Everybody in town that was interested had an opportunity to go to those meetings, hear the information, and vote; and they chose not to. They chose to come to this venue to say what they have to say which is okay on their part but it doesn't look good for our community, and there are a lot of people that are very interested in this project. They were interested in Kenetech when they were going to go and that was passed.

I personally don't understand what the difference is and why this procedure goes on again 12 years later.

The people in the area cannot live just on the weather. This project will bring people to town, maybe some of it comes from construction that aren't from here will want to be here. Maybe they'll buy here.

We're in the middle of a consolidation ordered by the State of Maine for school districts because of population, our school-aged children population is dropping. We have two very big businesses in our town, and not all the people employed there live there.

So this income that would come from this project -be it short, $I$ don't think it's going to be that short for the term that it's there -- it may bring people into our town that would be interested in living there because of where we are and
wanting to continue on with this company.
I personally, for myself, as a school board member and as a resident of the community and my family, you know, being here since the late 1800s, I've watched this community. I've watched the businesses come and go, and I've watched the logging come and go.

When I first came, my biggest concern was the clearcuts and 50 log trucks an hour going through town. We don't even have that now.

So, you know, it's necessary as an income thing, and I appreciate you listening to me. Thank you.

THE CHAIR: Thank you, Sara. Wendy Wyman, is she here? And following Wendy is Mike and Wendy Darienzzo.

MS. WYMAN: Good evening. My name is Wendy Wyman, and I just wanted to speak my peace that $I$ am in favor of the wind power project. I think it's a good clean renewable source of energy.

I also wanted to point out, I haven't heard it stated tonight, but in the last -- in recent months it was splashed all over the newspaper that Sugarloaf is getting their -- they have contracted their electricity from wind power, so when people talk about the wind power going down the road and not coming back to the community, it can, if you choose that source of energy.

I just wanted to say that $I$ was in favor of it, and I
hope you all vote that you are in favor of it also. Thank you. THE CHAIR: Thank you, Wendy. Appreciate that. Mike and Wendy, are they here? I don't know if they both wanted to speak or one of them. Oh, here we are. Following that is Richard Batt.
(Witness was sworn.)
MS. DARIENZZO: I guess I'll just speak for myself. I work for a nonprofit private school in the area, and we have two children and would like to stay in the area and have our kids educated and come back to this area and grow their families.

From what I know of TransCanada, they're as ecologically conscious as a large company can be. They've really gone above and beyond, I think, to educate the area, and I think it will be good for the economy and globally I think wind power is the way to go. Thank you.

THE CHAIR: Thank you, Wendy. Richard. Are you here? There he is. After that is Jean Stewart.

MR. BATT: Good evening. This is sort of like an endurance contest.

I am here to advocate that a statewide plan for wind power should first be developed and the Kibby wind project should be evaluated against that plan.

Do not act until there is a statewide plan in place first. Simply put, aim, then fire; don't fire, then aim.

I am Richard Batt, I'm a resident of Wilton, Maine. I waived introduction. I am the president of Franklin Memorial Hospital in Farmington. I have a bachelor's degree in science from the University of Notre Dame and a master's degree in business administration from the University of Chicago.

I'm a member of the Board of the Maine Development Foundation, the Maine Hospital Association, and the University of Maine at Farmington. I was a founder of the Greater Franklin Development Corporation, but tonight I speak for myself this evening.

About six months ago the Brookings Institute, a prestigious national non partisan socially oriented economic research organization released the results of a 1.5 year study of the Maine economy.

This million dollar study indicated that Maine needs to be very careful to make smart business decisions. The Brookings study pointed out that Maine is presently allowing development decisions that in the long run threaten to hurt the very way of life that makes Maine so special.

Here are some quotes from the Brookings Institute study about Maine' economy, and I quote, "The wheel of economic development potential may be turning in Maine's favor as the search for quality places grows in importance.
"Maine possesses a globally known brand built on images of livable communities, stunning scenery, and great

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recreational opportunities.
"Likewise, as innovation drives the northern economy, Maine's reputation for Yankee ingenuity and resourcefulness matters more. On several counts, in short, Maine is surprisingly well positioned for the future, and yet for all that, Maine's future success is by no means assured.
"Workers see quality jobs -- their own and others -being replaced by lower paying ones, yet often lack the skills or opportunity to trade back up. Policymakers found the promise of Maine's traditional and high tech industry clusters, but meanwhile the hope for future of plentiful, good paying new jobs seems to come too slowly, especially in rural areas.
"And all the while unplanned haphazard suburban development rushes along too fast in many places taking away something, a cherished wood lot or open field, a favorite point of water access for fly fishing, the certain -- the way a certain small town felt," and I'll leave my written remarks the attributions of where that came out of the Brookings study.
If you allow noisy 450-foot spinning pinwheels to be put on the tops of our local scenic mountains, you may partially destroy the way of life that makes this place so special for us and is the foundation of our economic prosperity.
You could be making exactly the development mistake the Brookings economic study cautions against, exactly the
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mistake they warn against; but as many people have pointed out and will point out tonight, society needs many more renewable sources of energy, including wind power.

So what is the answer? You have a tough choice to make. There are strong pros and cons to this project. I am here to suggest you postpone a decision, because if you decide now, you do so absent a statewide plan and absent thoughtfully developed criteria.

The governor's created commissions to make recommendations about how wind power should be developed in Maine. I know that as the governor created this Commission, he said this particular project should be exempted from the process.

Respectfully, I observe that that suggestion is illogical and dangerous. You should not decide on a huge action with permanent consequences before the Maine strategic plan is in place. That's like saying, ready, fire, aim.

Wind turbines located on the boundary mountains could produce great social advantages, both economically and environmentally, but they also have the potential to change the character of the land for generations. This project has the potential to impact the character of our culture.

I don't know that much about land and resource management, but $I$ know a considerable amount about how to make good decisions. In this case, a public policy should be
established and thoughtful criteria should be created.
We have the resources right in our community that could help with this process. This decision should be formed by environmental studies and business and science faculty members at the universities and colleges in Maine. Then, and only then, should individual decisions be made on specific projects, including the project now before you.

You know well that the business interests are anxious to get going. There is power and lots of money to be made and big tax credits ready to be earned. Lots of people and organizations are waiting for the promised money to flow to them.

There are a lot of people who don't even see the boundary mountains, in fact, people that don't even know exactly where the boundary mountains are who use a lot of energy living in big houses and commuting long distances in large cars and trucks, and who will briefly feel better about their impact on the environment if this project is approved.

But you have one chance to get this right. I repeat the quote by the Brookings Institute, and yet for all of that, Maine's future success is by no means assured.

All the while, unplanned haphazard suburban development rushes along too fast in many places taking something away, a cherished wood lot, or open field, a favorite point of water access for fly fishing, the way a certain small

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town felt.
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The idea of putting spinning windmills on our unspoiled mountaintops is not the kind of suburban development this report references but absent a statewide plan, strategic plan on wind power, this project is exactly the type of unplanned development that the Brookings Institute advised against: Unplanned development that can take away our cherished way of life.

No amount of money is worth it if we lose what is special in our culture.

I do not speak in opposition to this project. I ask you to await a strategic plan and decision criteria before you act on any wind project. If a statewide plan produces criteria that favors the Kibby wind project, then this project should be approved.

But it is foolish to shoot and then aim. If you do so, you risk damaging the way of life that defines the character of Maine, a way of life that has led people from all over the world to come to know our state as the way life should be.

Thank you for listening to my suggestions.
THE CHAIR: Thank you, Richard. Jean. And after Jean is David Bragdon.

MS. STEWART: I'm a resident of Franklin County, and I work up in this region at times, and I'm concerned about the
project, the scale and the impact --
THE CHAIR: Could you just state your name.
MS. STEWART: Jean Stewart. My name is Jean Stewart and I have spent the afternoon up on Kibby Mountain and feel even though it's a working forest, it has great beauty, great vistas, and it's hard to imagine wanting to come up here with the changes that we're told the plan that might unfold.

I do feel individuals conserving energy are really initially where we need to address our energy needs as a state, and the future of alternative energy should it be included; but this particular project seems not adequately studied, for one thing, as indicated by the previous speaker, possibly, but I think there's more than just -- you can't put an economic value on some things, and that's where I really speak to at this time.

I think we really need to value what is now protected at the higher mountain levels, and I appreciate your hearing us tonight. Thanks.

THE CHAIR: Thank you, Jean. David.
MR. BRAGDON: Good evening. My name is David
Bragdon. I'm the executive director of Energy Matters to Maine, a nonprofit organization focused on lowering electricity costs to Maine consumers and Maine businesses. We believe that a sound energy policy is essential to the State's economic vitality and seeks to provide a voice to
the thousands of Maine businesses and consumers who believe that the State's economic future depends upon far-sighted policies that lower energy prices, reduce price volatility, and improve the diversity of energy supplies.

We're here today to testify in support of the Kibby project, and we will focus our testimony on the demonstration of need criteria, which we believe this project amply fulfills.

Maine's economic development is closely linked to the availability and cost of energy. Energy supply, price, and use powerfully effect the creation of quality jobs and our prospects of long-term economic growth, the vitality of our communities, and our ability to protect the environment.

Maine's comparative energy circumstances is poor. Our average electricity costs are among the highest in the nation, and these historically higher prices have cost Maine jobs.

The Baldacci administration estimates that -- the administration has described the cost of energy as, "the common thread" in recent mill closures and factory closures across the state of Maine. The state has lost 30,000 manufacturing jobs in the last decade in significant part due to energy supply and price disadvantages. Many high quality jobs remain at risk due to energy crisis.

In recent years the State has sought to strengthen economic growth by investing in research and development, but
these targeted $R$ \& D intensive industries, such as biotechnology, information technology, precision manufacturing, these often are significant consumers.

We can and we must diversify the State's economic base, but we cannot escape the conclusion that electricity costs will continue to play a major role in the locational and investment decisions of many business in the new economy, just as they have in many businesses in our traditional natural-resource-based economy.

Your decision on this project occurs at a time when policy decisions occurring outside the state, those made by ISO New England and FERC -- will increase the cost of electricity substantially, 25 percent above current levels over the next three years. This increased cost will harm the ability of Maine companies to compete vis-a-vis firms outside the region.

Your decision on this project can move Maine's energy policy in the right direction. Approval of this wind project will support efforts to lower energy costs, enhance energy security, and ensure diversity of renewable energy resources.

Some opponents of their project have argued that this project is not needed because Maine already generates more electricity than it consumes. The argument is faulty and it neglects the key aspect of Maine's electricity market.

Maine has one price advantage compared to other New England states, and it is due to the bottleneck effect.

That is, if existing limitations in electricity transmission restrict the amount of electricity that Maine can export to more power hungry, southern New England states.

While some consider this bottleneck an obstacle and a reason not to build this wind project, we consider the bottleneck an advantage that provides a modest, but significant, rate advantage for Maine consumers. As long as that bottleneck exists, Maine rate payers will enjoy a comparative price advantage.

Additional generation, particularly wind generation, which diversifies our supply and utilizes an emission-free renewable resource makes good sense permitting this project to go forward in the interest of Maine consumers and the Maine economy. You've heard about some of the additional benefits to the project, some of the economic development benefits both during the construction and operational phase.

There is one additional economic benefit that I haven't heard mentioned tonight, and that is that compared to other forms of electricity generation, wind power has the added benefit of not inferring highly volatile operating costs, and it is not subject to the price volatility of fossil fuels, particularly natural gas, at a time when oil prices have reached record highs in excess of $\$ 80$ per barrel and at a time when natural gas prices have been particularly volatile due to the threat of hurricanes. This benefit for the project is
clearly to be welcomed.
Price volatility imposes a special threat to the State's economic interests because fuel costs are by far the largest single component of the total cost of natural gas electricity generation.

Let me just say, in approving this project, we believe that you will be acting in accordance within existing State policies and State goals concerning both the renewable portfolio standard and the Wind Power Act.

We don't believe that this -- that an action on this project today would in fact be putting the cart before the horse. We have a clear state interest in promoting wind resources and diversifying supply. We believe this project clearly would advance an already stated articulated and legislatively approved State goal.

We also urge you to give timely consideration to this project. This is a well conceived, carefully planned project where the developers worked hard to identify the best available site and where wind project benefits clearly outweigh the adverse impacts.

We want to encourage additional wind power projects in Maine and want developers to approach these projects in the right way. Your timely approval of this project will signify developers that the regulatory process in Maine is not a barrier to well conceived future projects that meet a clearly

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defined public need.
Now, more than ever, the State of Maine needs to support indigenous, cost effective and environmentally sound energy investments. Your vote of approval for this project will promote the State's energy self sufficiency and support long-term economic growth in Maine. Thank you.
THE CHAIR: Thank you, David. I have one more person I think on my list. Cecil, are you here, Cecil White.
MR. WHITE: Yep. First of all I would like to thank the panel very much and the commissioners --
THE CHAIR: Before you start you need to, for the record, just tell us your name.
MR. WHITE: My name is Cecil White, I'm a resident from Kingfield, okay. Actually, I've been listening to this public hearing tonight. I guess it's all about who you are so let's get the record straight.
I am the fifth generation native to the project that you're talking about. It goes back to my great, great ancestors. My great, great grandfather founded the first insurance company and built the first structure in Kingfield and also in the town of Eustis. So if it's who you are, I'm it, okay.
Now, let's get real. All of this stuff I've heard tonight, they were all blessed to come to Maine and build their camps and have all their good stuff, great. It's helped the
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state -- take it from an educated young man like me that has worked many shutdowns, my dad built the Flagstaff Dam, my family built these roads so these people can go through, and I am the one that has been around the world working at different energy facilities, and I'm here to tell you that if someone shows me something better right now than the wind power today, it does about 2 percent of the energy in the United States, okay, great, well, it's going to get better.

I've worked in hydros, I helped build the Stratton system. Nobody wanted it. They all thought it was going to be terrible. Well that town's doing just fine, and it's one of the best systems going on the east coast just in case anybody wants to know.

This project is only the beginning of the energy problems in the United States. Now, as a native boy from here, I'm here to tell you, you know, we've got to start to be responsible and look at this energy.

TransCanada, Maine Power, always struck me that they're putting their best foot forward to come up with a solution. Pros and cons, pros and cons. We're always going to have somebody who will lobby it and say no.

Well, I'm the one that's got to sit down and tell all the ancestors of the area that built all this stuff for you folks that it's going to be okay, things are going to get better. I'm the one that's watched all the businesses close in

Maine. I'm watching all the kids have to leave Maine to be successful, and I'm a workplace supervisor and have been for the last 20 years. If anybody cares about these kids, I care.

I approve this energy plant, my ancestors would sit at the table like they did when they were talking about flooding the town that my family moved out of.

My mother was born in Dead River. My father was born in Stratton. It goes back to my great, great, great grandparents, okay.

You think I like the looks of -- I've actually installed these things. I've been out west. I've got to tell you right now, they're not pretty but they're effective. The wind rime system that we are blessed with up here, the geese and stuff are not flying -- I'm hear to tell you, take it from a boy that hunts it every day.

I walk, I live, my whole life is here, and I'll tell you that those birds have a better flight plan. They're very intelligent. They're not going to go in the 40 -mile plus wind, it's going to be okay.

So I strongly am for it, for any clean energy, because right now this is the real scenario. Twelve more years natural gas is going to kill everybody. You think gas is the problem now, give it six more years, mark my words on the book today, that the little resident boy told you what's going to take place.

Coal, these people are looking, in the United States, to bring back coal. Do we want to be breathing that stuff again? You know, we've worked so hard and lobbied ourselves to get to where we are to stay clean, clean, clean, better, better, it's okay, I need that check, you know what I mean? Somebody's got to come up, that's great.

Well, take it from a resident that cares about the world today, and we need to start saying -- sometime we are going to put our foot down, and someone's going to say, listen, this is what's going to happen, and I'm a local boy that's going to tell you that if we keep knocking these projects down, you're going to regret it ten years from now.

I want to thank the team for coming up here for the public hearing because I've heard an awful lot tonight. All this stuff has been done right, the commissioners and stuff have worked very hard in this state. All these towns have had all these residents -- have been allowed to go to these meeting and it's true. A lot of them sit on the couch and mull about it.

I'm here to tell you that we're going to do this eventually, you can count on it, and I thank you very much for your time.

THE CHAIR: Thank you, Cecil.
PARTICIPANT: Sidney Shane has left. He'd like to speak tomorrow.

THE CHAIR: That's fine.
MR. CAMPBELL: My name is Cap Campbell, I'm the president of the Arnold Trail Snowmobile Club, I'm a resident of Jim Pond Township, I live on Greenbush Pond, and I'm there for a good 75 percent of the time. I've been there for years. I'm also a doctor in environmental science at Unity College, past chairman of the board.

I'm all for renewable energy. We've heard all those arguments tonight. I don't think there's any question that we do need that kind of thing, so I'm not going to go into that.

But as a resident and looking at the boundary mountains every day out my bedroom window, I do not object in any way, shape, or form to this project. It's something that we have to do.

I live right there and I'm going to live with it. I went to Mars Hill twice, stood in the middle of town and listened for noise, couldn't hear any. Talked to people on the street and satisfied myself that I'm not going to be having a problem.

Also, just to add to that, we have no objections in the snowmobile club. We don't necessarily support the project or not support the project, but it does not interfere with anything that we do in the area. Thank you.

THE CHAIR: Thank you very much. I don't think anybody else wants to speak, and if they do they can come back

post hearing. I don't know if you want to do that now or at lunchtime.

THE CHAIR: We'll take care of it now, I guess.
There was a question of the filing of the -- for the record that closing that I guess you and Amy and Pam had discussed the idea of one filing as we did in the Black Nubble case. I don't have any problem with that. If you people are all in agreement of making one filing, I guess that makes all of our lives a little simpler.

MS. BROWNE: That seemed to make sense on our end as well.

THE CHAIR: I don't remember the exact date, but I'll read that into the record when we finish today.

Are there any other intervenors who are going to have a problem with that? You understand what we just said? I think it's the same process we followed at Black Nubble. We're going to have one filing at the end and that will be it.

MS. BROWNE: Just to be clear, that's for the parties, the public comment period?

THE CHAIR: Right, the public comment, obviously, has the double dates on it, and we'll read that into the record at the end.

My understanding is everybody's comfortable with the 30 days after the close of the record for the findings of fact that all of parties can provide if they wish.

MS. BROWNE: We would certainly prefer sooner, but I understand the time constraints, so 30 days is fine.

THE CHAIR: I think 30 days is appropriate. It's what we'll deal with. You're free to submit.

MS. BROWNE: The other thing that we talked about was that we were assuming that the Commission would deliberate between the proposed findings of fact without a staff recommendation, so we just thought we should probably talk about that.

We had both assumed that to be the case. It seems to make sense just given that the Commission is going to have the benefit of the proposed findings of fact.

THE CHAIR: We didn't talk about that yesterday, but I don't -- I don't particularly have a problem with that. If you're all comfortable with it, I am.

So in that case, we will -- we will review your findings of fact, obviously, and we will deliberate on them.

MS. PRODAN: That's fine with us, too.
THE CHAIR: Any of the other intervenors want to comment on that?

Okay.
MS. PRODAN: Friends of the Boundary Mountains also would like to reserve rebuttal time. We don't anticipate needing it.

THE CHAIR: I assumed that that was the case. Any
other questions?
MS. BROWNE: Probably at the end of this morning, we have just additional exhibits to make sure we get into the record, but I don't think we need to do that right now.

THE CHAIR: Okay. Amy, have I covered your checklist? Thank you.

In that case, I think if I've got my schedule correctly it's Friends of the Boundary Mountains' opportunity for their direct, and if you folks want to come right down front and we'll begin.

I'm just going to reintroduce the Commission so that will be in the record.

Commission members present today are Gwen Hilton, Ed Laverty, Bart Harvey, Steve Wight, Rebecca Kurtz. Sorry, Steve, I didn't see you beyond Ed there. I was going to ask where did Steve go, so my apologies.

Staff present today are Catherine Carroll, the director; Diane McKenzie; and Melissa Macaluso, and I believe that's it. Okay.

So I think we're ready to go whenever.
MR. KIMBER: Chairman Harvey, members of the Commission, thank you for this opportunity to make an opening statement on behalf of Friends of the Boundary Mountains.

We urge the Commission to deny rezoning application ZP 709.

THE CHAIR: Excuse me, is it Mr. Kimber?
MR. KIMBER: I'm sorry, yes.
THE CHAIR: You need to tell us your name just for the record.

MR. KIMBER: Robert Kimber, and I'm from Temple, Maine.

We urge the Commission to deny rezoning application ZP 709 because we believe development of the project -- if this rezoning were allowed, is not in the best interest of LURC's jurisdiction or the people of Maine. I'd like to make three points in support of this position.

First, the historical context in which this proposal comes before the Commission is crucial. As a comprehensive land use plan writing notes, "fragmentation of ownership and associated changes in use and management threaten to underline the integrity of the forest resources in a way that compromises the values of the jurisdiction."

Those associated changes in use and management translated into one word add up to development, and it is current development pressure -- both residential and industrial -- that threaten to alter the remote and relatively underdeveloped nature of the jurisdiction.

A couple of maps we have here, LURC approved new dwellings in 1971 to 2005, and after that development permitted dated March 7th, 2007 illustrates how liberally peppered with
dwellings and development the entire jurisdiction already is. Though interestingly enough, Kibby and Skinner Townships, where the Kibby wind power project is proposed, and the adjoining townships to the east show next to no development activity making them excellent candidates for remaining remote and undeveloped.

If the jurisdiction is to remain intact then, and if its primary values of recreational opportunities, high value natural resources, and features and remoteness are not to be incrementally nibbled away, we here in Maine need to guard our semi wildlands with special diligence.

Second, the CLUP stresses remoteness and undeveloped qualities not only for the present value but also with an eye toward the future. It's a quote again from the CLUP, "As other recreational lands are increasingly developed, opportunities for back country experience will become scarcer and the remote values of the jurisdiction will become even more highly prized."

This prediction would appear to have special
applicability to mountains. The CLUP subsection on mountain resources, that's Pages 58 through 60, counts among Maine's "recreational resources that are unparalleled in the eastern United States in terms of abundance, diversity, and uniqueness. Approximately 100 mountain peaks over 3000 feet high, including the Bigelow Range and Saddleback Mountain."

One hundred might seem to be a lot, but the first sentence of this section says just the opposite, "Mountains and the scenic natural recreational, economic, and other values they posses are a limited resource in Maine. Consequently, proposed uses of mountain areas must be carefully evaluated to ensure that important values associated with these areas will be preserved for this and future generations."

These pages in the CLUP are particularly relevant to the present rezoning application because the petitioner has made a point of separating the 4000 -foot mountains along the Appalachian Trail from those of the boundary mountains region and assigning a considerably lower value to the latter. Because they are slightly lower than the 4000 -footers, because they lack an established trail network, and because right now they receive less recreational use.

The authors of the CLUP did not make that distinction, but instead, considered all of Maine's mountains above 3000 feet among the state's unparalleled recreational resources. I agree. And in my prefiled testimony I argue that it is precisely the concentration of these mountains in the northern tiers of Somerset, Franklin, and Oxford Counties that makes this region a resource of statewide significance right now and it will make it increasingly valuable in years to come.

Among the points the CLUP notes as problematic about wind power development in mountain areas are "Visual impacts.

Turbines and power lines sited on mountaintops and ridgelines have the potential to be visible from long distances away."

This is why protection for mountains cannot be piecemeal. A mountain or two here, a mountain or two there, but should be on the landscape scale. The setting is as important as the prominent peaks in it.

I've already touched on my third and last point in the proceeding through power graphs, and that point is what I see as the petitioner's consistent undervaluing of the boundary mountains and the Kibby Mountain and of the Kibby Range in particular.

If the argument goes, the project area is not remote and has either no or very limited scenic or recreational value, then it does not qualify for the protection the law affords these values. I've addressed this argument in considerable detail in my prefiled testimony and rebuttal testimony. I will not revisit those discussion here but will just mention a couple of salient points.

On remoteness. By any definition of remote in the CLUP and in the Commission's rules and regulations, the site of the proposed project qualifies as remote. The concept of remoteness is flexible to allow the Commission to protect remote values which can, and often are, located even in fringe townships.

Scenic values. The view from Kibby Mountain rivals
those from any of the region's highest peaks. The Appalachian Mountain Club's Maine Mountain Guide describes it in glowing terms.
"This remote mountain is in the heart of the wilderness area, north of Flagstaff Lake, east of Chain of Ponds, and south of the Canadian Atlantic Railroad running through Lac Megantic and Jackman. There is an old Maine Forest Service fire tower stand with outstanding, extensive views of the surrounding wilderness."

The view onto Kibby Mountain and Kibby Range from important outlooks in the region is presently one of an undeveloped mountain and forest landscape. The proposed project would change that dramatically.

Recreational and natural character values. The Northern Forest Alliance has identified the western mountains' wild land as one of the five wild land areas in Maine deserving special conservation consideration and has singled out Kibby Mountain and the Kibby Range as special features of the area.

An inventory and ranking of the key resources of the northern forest lands of Vermont, New Hampshire, and Maine published in September 1993 and written by staff members of the Audubon Society of New Hampshire, the Appalachian Mountain Club, and the Maine Audubon Society rated an area designated P-1-B, which includes the boundary mountains, very high for its physical resources, that is, lakes, mountains, and rivers.

And the quote there, "70 percent of the townships in the area received points for mountains, though none of the mountains are over 4000 feet."

In short, the conservation values of the boundary mountains, and Kibby Mountain, and the Kibby Range have been apparent to a number of people for a long time and not just to members of the Friends of the Boundary Mountains.

These three points summarize the arguments my prefiled testimony covers. In closing I would cite the CLUP once more and add a couple of personal comments.

Despite -- this is from the CLUP -- despite the signs of human activity evident in settlements, logging roads, harvested areas, and skid trails, the natural world remains the dominant presence here. This is in the jurisdiction." That's the end of the quote.

There is no other 10.4-million-acre block of land east of the Mississippi River of which that can be said. That vast undeveloped breach of land is truly a unique resort. And while the CLUP makes allowance for many kinds of human interventions in the jurisdiction and aims for the balance between utilization of resources and conflicting public values, there is one major theme woven into that text and that theme is to protect the integrity of those 10.4 million acres to see that the natural world remains the dominant presence throughout Maine's wild land.

This proposed project is totally at odds with that principle. If you introduce into what is now a region with virtually no permanent structures, machines that would tower above the treetops and extend from the northern to the southern boundary of Kibby Township, not to mention the 27-mile transmission line from the project site to Stratton, that would be development and land conversion on an unprecedented scale.

In terms of costs and the benefits in the public interest, the project simply cannot pass muster. Maine is being asked to make a major sacrifice of its mountains and forest landscape for which neither Maine nor the region nor the nation nor the global community will receive benefits in renewable energy or pollution avoidance in any way proportional to that sacrifice.

That is the crux of the matter before the Commission. Both the laws of Maine and the extraordinary development pressures that threaten the integrity of the jurisdiction speak for the protection of Kibby Mountain and the Kibby Range, and I respectfully urge the Commission to deny rezoning application ZP 709.

Thank you for your attention and your consideration, your patience. You make Jobe look like a piper.

MR. WILSON: Good morning, Chairman Harvey, LURC commissioners. My name is Herb Wilson and I am speaking to you today on the part of the Friends of the Boundary Mountains as
well. I am a professor of biology at Colby College, and my particular specialty is ornithology. So I'm going to be speaking to you today about our avian fauna, in particular. We enjoy the sounds of birds as they sing, but they can't represent themselves at these sorts of hearings, so I consider that my job today.

What I want to do today is to give some of the highlights of my prefiled testimony. I won't go through all of it. Some of it is rather detailed, but I want to go through essentially two different aspects of that testimony: One is questions about the adequacy of the avian data, and secondly about the interpretations of the data and the fact that the data perhaps haven't been considered enough to develop some sort of protocol to assess what the likely avian mortality is going to be as a function of these turbines.

We'll start with discussion of the adequacy of the avian abundance. I'm going to talk about just two particular aspects that are in my prefiled testimony.

One is in the spring of 2006 a foraging study was done in late May, and one of the birds that we have in Maine, they're very widely distributed, the Red-eyed Vireo is here, in fact it's one of the most widely distributed songbirds in North America. Some argue that it may be the most woodland songbird in North America. You can see that it extends all throughout Maine up into New Brunswick and the Maritimes, and so forth.

Oddly enough, in the data that were presented in the 2006 foraging report, Red-eyed Vireo was not listed, but this bird was, the golden-winged warbler, which is extraordinarily rare in Maine. If you take a look at its breeding distribution, you see that it's mostly a Midwestern bird -Ohio Valley and so forth -- barely extending up into southern New England, and yet one of these was reported on that particular study.

Secondly, the Connecticut warbler, one was reported here as well. If you take a look at the Connecticut warbler's breeding distribution, it's essentially throughout -- from Minnesota, it's probably the hottest spot for them, but they extend throughout the middle of northern North America.

During their spring migration, what these birds do is they come up through the Gulf of Mexico, come up through the Mississippi Valley flyway, and then disburse east and west.

In the fall we occasionally see them because they do -- some of them do adopt a coastal route to head back down to South America where they winter. But there are only three known records of Connecticut warbler in the spring in Maine, and yet here we have the Connecticut warbler found, a golden-winged warbler found. But Red-eyed Vireo was not found. So one can't help but have questions about the quality of the data when one of the most common birds is missing and two extraordinarily rare birds have been sighted.

The second bit of avian data I want to talk about are the hawk -- the daytime hawk censuses that were done, and the way the data were taken is that people went out in three-day blocks and they looked at when the weather systems were going to be favorable for hawk migration, and in particular in the fall we know that northwest winds tend to push birds south, and that's a great a time to look for migration. In fact, that's when you would expect to see most migrants.

But in fact, there was a fair amount of September when there were no censuses done at all. Also we know that migration extends well into October, and there were no October censuses done either.

Just as an example, let's take a look at some data from another hawk watch. This is in Duluth, Minnesota for September. What you can see is that in every day of the month there were at least a few hawks found, some very low -- like this was only four. There are a few days, like this one here, 21,000 hawks found, another 6100 hawks found here, all the different species are listed there. You'll notice that the winds can be from any direction and you can still get some hawk migration.

My point here is that the number of hawks that are passing over the proposed turbine area are certainly underestimated. We don't know by how much but certainly the values that are given are not a true representation of all the
hawks that migrate over Kibby and Kibby Ridge.
Then I want to talk about some unconsidered issues, ways where some data were taken and where $I$ think the data simply weren't taken far enough.

I'd like to reference a comment from Ms. Gresock yesterday who was asked in response, I think, to one of the LURC commissioners about the difference between the Kenetech data and the TransCanada data, and Lynn made the point that for the more recent data, that altitude data could be given and that's absolutely true and that's a real significant change over the two.

But one of the problems that we have with migration in particular are these towers. The birds get confused by lighted towers. This confusion tends to take place much more so when the weather is inclement, when we have lots of clouds, when the moon is not out, the birds get confused by lights that would appear, as an example, on the lighted turbines.

It doesn't matter really how high the birds are at that point. What they're going to do is to hone in on the light, confusing it perhaps with the moon or perhaps with some star, and what they end up doing is either flying into the tower or they end up circling the tower in confusion until they simply die from exhaustion or fall from exhaustion.

So these are problems that really weren't considered at all in any of the TransCanada material that $I$ could find.

The point here is that we're not looking at a slow chronic mortality of birds here, that these are episodic events. It means a particular situation has to arise, but when those situations do arise, they indeed are horrible nights for birds.

Just as an example, here are three tower kills that took place during inclement weather, one in central Florida, one in Tallahassee, and one in western Kansas, and look at the amount of mortality there, 10,00 birds, mostly Lapland Longspurs killed in western Kansas, 4000 birds of a number of species killed during October migration in Tallahassee.

So this is a concern for avian mortality that these extraordinarily, extraordinary perhaps, but yet terrible events can happen and the question is what does TransCanada propose to do about that. How do they propose to ameliorate these sorts of effects.

Secondly, we know that there's going to be a large power corridor built throughout 26.5 miles or so, built through the area, and this in fact represents a significant fragmentation of habitat.

We know that these represent serious impediments for lots of birds. Birds will not cross over. Even a road 22 feet long can often be a barrier to bird movement. But this also represents a significant barrier to small mammals, to many amphibians, and perhaps to reptiles as well. So the effects of
fragmenting the habitat by this corridor were not considered and I think should have been.

Finally, what I want to talk about is the actual avian mortality from colliding with turbines. What we know is that not all birds are going to -- are going to -- that come down below the level of the turbine are going to encounter the turbines, but still, the fact of the matter is that 14 to 18 percent of all of the nocturnal radar images that were found well below level of the target, of the turbine.

TransCanada tends to say that the majority of birds are above, but 14 to 18 percent is a significant number of birds that are at risk to the rotating turbines it seems to me. Virtually one in six birds has the chance, at least, of coming within a rotor area and being killed by the collision of birds.

So this is a concern for me. I think there is significant risk here.

But the problem that I have really with the TransCanada analysis is that $I$ think that there were three steps that should have been taken to really convince us that they're serious about trying to minimize avian mortality.

The first is, you have to identify the abundance of the birds, and they've done a good job with the radar data. We know roughly what the number of birds that come through during migration are, we know that about a fifth or sixth of them are in fact below the level of the turbines.

Then, it seems to me that the next step is to assess what is the likely mortality of birds going to be given those sorts of rates of movement.

And Ms. Gresock referred yesterday to a recent paper that was published by the National Academy of Sciences by their arm of the National Research Council where they compiled data of avian mortality at a number of different turbine sites, and the average seems to be around 4, 4.25 birds per turbine per year.

But we know there are instances where mortality is much greater. As an example, I'll give you from last year 40 -turbine area in New York resulting in the mortality of 2000 birds. That's 50 birds per turbine per year rather than the four that is typical. So we don't know for sure but at least we have a ballpark to gauge what is the likelihood of bird mortality from each turbine.

Then the next step is to actually monitor what happens, because as in the case of that New York site, the mortality is far greater than might have been predicted.

So it seems to me that an environmentally responsible way to deal with the avian mortality would be not to go headlong into building 44 turbines at once but rather to build one or a few and see actually what happens to the bird mortality there. And then if it's the low and acceptable method, whatever that happens to be, then continue on with the
project from the point of view of the birds, but if not, then the project needs to be discontinued in my view.

TransCanada's idea is to establish a post construction monitoring program, and they indicate that they will work in concert with the IF \& W and perhaps Maine Audubon and other conservation organizations, but it seems to me that in sense what we have here is the fox in charge of the hen house.

I don't see any evidence that TransCanada is willing to shut down the project. Interestingly, two comments were made yesterday, one was Cinnamon responded to -- someone asked about avian mortality and her comment was in the case of an avian mortality event, that it would be an educational experience, not we should shut the turbines down, but it would be an educational experience.

And Ms. Gresock was responding to questions about avian mortality used the words "monitor" and "assess," but it seems to me that what we need is some sort of actual value, some sort of level of acceptable avian mortality that needs to be specified, and if that avian mortality is exceeded, then something needs to be done. One of the things that could be done is shut down the turbine or not build the particular turbines in particular areas if they prove to be too detrimental to avian life.

I'm going to back up here before $I$ show that last
slide.
I did want to comment on one other aspect.
Ms. Gresock yesterday cited me saying that bat mortality was more of a concern than bird mortality, and in fact that is true in part. I don't tend to worry so much about bat mortality here because it's pretty evident that the number of bats that are passing across Kibby are in fact quite limited.

But we do know from work that's being done by Rhonda Milliken, who is a physicist in Canada who has started a business to assess the impact of turbines and to advise on the proper placement of turbines, what she has shown is that a bat is about five times as likely to collide with a turbine blade as a bird, that bats get very much confused because of their echolocation mechanism of navigating. They get confused by the spinning blades and they tend to go right into the blades and get killed.

Birds, on the other hand, are able to avoid spinning turbine blades some of the time, but what Milliken was able to show is in fact that there were three types of habitats where the birds were less capable of changing their trajectory to turbine blades. These were along riparian valleys, along steep gullies where the birds were constrained by steep sides, and thirdly, along ridge tops.

So it's along ridge tops that even though the birds have been known to be able to avoid turbines that it's along
ridge tops where they're more reluctant to change their
trajectory.

So in conclusion for what I have to say, I had some concerns about the adequacy of the data, and I have real concerns about the ability of TransCanada to truly monitor what their mortality events are going to be in advance of the construction of the entire project.

So in my view, TransCanada has failed to meet the burden of proof showing that wind turbines will not cause significant bat, and particularly bird, mortality. Thank you.

THE CHAIR: Thank you. I guess that takes us to cross-examination by -- I'm sorry, questions.

MS. BROWNE: Do you want to do the Commission questions first?

THE CHAIR: We had been waiting for the cross-examination. If you'd like to wait we can do that, and listen to cross by TransCanada.
(There was a pause in the hearing.)
THE CHAIR: You have about a half an hour.
MS. BROWNE: 40 minutes. Good morning. Mr. Wilson, I think I'll start with you just because your testimony is fresh here.

EXAMINATION OF HERB WILSON
BY MS. BROWNE:
Q. I want to turn to your concerns about the, I think as you
testified, that Red-eyed Vireos are common species and you would have expected to have seen those, that in fact I believe it's your testimony that they were not identified; is that correct?
A. They were identified in some of the studies but in the 2006 foraging study, the only Vireo reported was blue-headed.
Q. Well, I think in your prefiled testimony you stated that they weren't identified at all, correct? I'll direct you to Page 2 --
A. Okay.
Q. -- of your prefiled testimony and you said, the species regarding by some ornithologists is the most abundant song bird in North America was found in the Kenetech 1992 study.
A. Yes.
Q. I have found Red-eyed Vireos up to heights of 3000 feet in Maine. I expect that the TRC biologists were not able to distinguish the songs of Red-eyed Vireos and blue-eyed Vireos.

That was your testimony; correct?
A. That is correct, I've -- I failed to indicate that I was referring simply to that 2006 daytime foraging study.
Q. But in fact, just so that the record is clear here, in fact the TRC did identify Red-eyed Vireos during their --
A. But not during the particular survey when the Connecticut warbler and golden-winged warbler were found.
Q. Let's talk about the golden-winged warbler and the Connecticut warbler.

Again, $I$ think that you testified that the Connecticut warbler you thought was a mistaken sighting by the field personnel; correct?
A. I think it requires a very high level of -- yes, I think it requires a very high level of detail to confirm that. I would not be convinced of that without a photograph or a recording.
Q. Were you aware that in fact that sighting was by -- that after that sighting TRC followed up about IF \& W -- Fish and Wildlife -- and other known Maine birding experts to confirm the validity of that sighting?
A. I understand that they corresponded with them; my understanding is that no one was able to confirm it.
Q. Are you aware that the person that saw that bird was somebody from Biodiversity Research Institute?
A. I was not aware; it was not obvious from the report who the actual biologists were.
Q. You understand now --
A. I do.
Q. -- it was somebody from Biodiversity --
A. I do.
Q. -- Research Institute?

You understand now that that was somebody with substantial experience who's done a significant amount of work with that particular species; correct?
A. I'm not aware of that.
Q. Is Biodiversity Research Institute an organization that you're familiar with?
A. I don't know much about them. I know that they maintain an eagle camera, that's how $I$ know them mostly. I don't know much about their work.
Q. Then the golden-winged warbler --
A. Yes, indeed.
Q. -- I think that you also, in your prefiled testimony, stated that that was another example of an error in the fieldwork that was undertaken; correct?
A. I was skeptical of it, yes.
Q. I think in fact your prefiled testimony said that one of the reasons you were skeptical of it was because they are rare?
A. Yes.
Q. And that the "alpine habitat sampled was not typical for that species"; correct?
A. Yes.
Q. Are you aware in fact that there's no alpine habitat --
A. Yes. That was a mistake on my part. It should have said
no mountainous terrain, yes.
Q. Are you also aware that that specific sighting was in the valley in a deciduous shrub area?
A. I was not.
Q. So you would agree that would make it a potentially more appropriate sighting?
A. That's more appropriate habitat, still pretty far north for where we would expect that species to occur.
Q. But that's not what you said in your prefiled testimony; correct?
A. I'll have to look at my prefiled testimony.
Q. That's okay. I appreciate that -- I assume you're participating as a volunteer with Friends of the Boundary Mountains?
A. Yes, this is entirely done without any pay.
Q. I completely appreciate that, and I also appreciate that there's a lot of information here. This notebook here is just the avian studies.

So one of the concerns I have, quite frankly, is that you may not have had an opportunity to fully digest everything that was in this notebook when you prepared your prefiled testimony and your testimony here today?
A. I think I read through all of the avian material. There's an awful lot of redundancy, so there may be points that I missed.

I did my best to read through not only all of the avian reports but also the mammal reports as well.
Q. You can appreciate that TRC and people like Dana Valleau have spent hundreds and hundreds of hours in the field analyzing and collecting this data; correct?
A. I certainly appreciate that, yes.
Q. Significantly more -- and this is not a criticism -- but significantly more time than you've been able to spend parsing through this data?
A. Certainly.
Q. And I think one of the other items you pointed out in your prefiled testimony was that the -- and this was another criticism and one of the reasons, I think, that led you to conclude that you had concerns about the accuracy and sufficiency of the data -- was that the length of the transect in the fall and spring time foraging report was not provided; correct?
A. I said that. This boils down -- I appreciate the rebuttal testimony. This boiled down to the fact that the protocol for how this was done came in a separate document than the actual data in which the data were presented, so I wasn't able to find it where the data were presented, so that was the cause for my confusion there. So it was voluminous material that got me there.
Q. Again, I appreciate it but $I$ think it's important for the

Commission to appreciate that many of the items that you've identified in your prefiled testimony resulted from your inability to find the information that was there; correct?
A. That's why I stressed in my discussion most of the things I felt more strongly about.
Q. Thank you, I appreciate that.

I want to talk for a minute about the hawk surveys, which you also criticized the sufficiency of what was done by TransCanada with respect to those surveys; correct?
A. Yes, indeed.
Q. And I think you criticized the number of days of surveys that were conducted; correct?
A. Right.
Q. Bear with me, I am not a bird expert. But as I understand it, you would agree that if you want to -- you want to try to identify the days when you're likely to have the greatest number of raptors migrating, that would be the most conservative approach to doing a bird survey; correct?
A. Yes, I think that's what I tried to indicate in my comments just a moment ago that you want to try -- most of the birds in the short order of time, you pick the best weather days, but that doesn't mean you're going to get all the hawks that way.

The point is not that the majority of birds were not sampled, it's that all of the birds were not sampled.
Q. But there was no suggestion in these reports for any of the surveys that you have identified all birds that are passing through the project area.

The purpose is to try to identify passage rate and get a sense of the relative number of birds that are passing through; correct?
A. I'm not sure that's -- I'm not sure that's what the goal was, frankly.
Q. Well, you would agree that the days that we sampled for surveys were the days when you're most likely to have the highest number of hawks?
A. Absolutely.
Q. Thank you. You also put up a slide on tower kills -- I won't put it back up again, it's a little bit small but bear with me here -- as an indication to the risk of birds presented by turbines, and these tower kills, I think the mortality event for one was 1592 birds?
A. Yes, that would have been a single night; right.
Q. A single night. The second was 4000 birds; correct?
A. Right.
Q. The third was 10,000 birds; correct?
A. Right.
Q. None of those were from wind turbines; correct?
A. They were lighted towers.
Q. None were wind turbines; correct?
A. That is correct; but my understanding that all the turbines, because they're over 400 feet high, must be lighted.
Q. Well, in fact, actually, are you aware of what the lighting plan is for these turbines?
A. I'm not aware, no.
Q. Just for your benefit not all of the turbines will be lit, and under current FAA guides, they're not all required to be lit.

So your chart of tower kills doesn't purport to suggest that those mortality events resulted from wind turbines?
A. They purport -- I purport that they result from a lighted tower regardless of what that tower is going to be.

MS. PRODAN: Could I ask that the questions be phrased as questions and not statements? Thank you.

MS. BROWNE: Thanks.
BY MS. BROWNE:
Q. You also in your testimony said that the -I think what I heard you say was -- the average mortality for wind turbines is 4 to 4.25 per turbine per year?
A. That's what the National Research Council report gave, yes.
Q. Could you give some reference for that, because it's significantly higher than any of the numbers I'm familiar with.
A. I have a .pdf I can give you after this is over if you'd like.
Q. What did you say the source of it was?
A. The National Academy of Science has a research arm called the National Research Council that independently collect data on all sorts of things, and they published their report. I think it was May of '07. It was published this year.
Q. Thank you. And trying to put the risks that you see here to birds and bats, or I guess your testimony, the principal concern was birds at this site; right?
A. Yeah, we know that bats have a higher risk at a turbine but the number of bats using the area clearly is very small.
Q. Are you aware of the National Academy of Sciences publication on the environmental impacts of wind energy projects?
A. I don't know that I've seen that particular document.
Q. Are you aware of the Erickson data that gives information on mortality events associated with bird mortality associated with other structures?
A. No, I'm not.
Q. Are you aware that collisions with buildings kill, as the National Academy of Sciences reports, collisions with buildings kill 97- to 976 million birds annually?
A. I'm not surprised at that number. I know it's huge.
Q. And that collisions with communication towers, which I think are probably the towers that you were referring to in your testimony, kill between 4 and 5 million based on conservative estimates but could be as high as 50 million?
A. Yes.
Q. Cars kill 80 million birds a year?
A. Okay.
Q. When you talk about the risks, your concern about avian risks, and you talk about the need to -- I think what you suggested was putting up a few turbines, seeing what the impacts are, and then putting up the rest of the project.

Are you aware of any other wind power project that has had to proceed in that type of fashion?
A. No, but that seems to be irrelevant to me. It seems to me that wind powers need to be sited in proper places, and if the stipulations had been more lenient in the past, it doesn't mean that we should continue to do so.

It's obvious that there are instances where significant avian mortality can occur at a wind farm, and it seems to me that we need to be stringent about siting wind farms to minimize that avian mortality.
Q. I wouldn't disagree with you except for your first statement that there have been significant mortality events.

Is there anything particular about the Kibby site as opposed to other ridgeline sites in the state of Maine, New England, or the northeast that you saw that presents unique risks to birds?
A. I guess I have two comments. One is if you look -- and I don't recall which radar study it was -- but a range was given for the number of targets that passed over Kibby and that range was between 6 and 1506 birds per kilometer per hour.

If the 1506 was more typical, then that makes the Kibby area two or three times the volume of birds passing over other areas that are found in New York and New England, other comparable sites.

But again, this is a New York site that I cited, it's very hard to know exactly -- it's very hard to predict exactly whether or not a particular site is going to induce lots of avian mortality, and certainly the radar data is a good start but that, as I argued, is just the first of three steps that needed to be done.
Q. I appreciate that and I guess since I have limited time, I can't follow up on some of the specifics of that.

Let me just circle back to one last point, which is,
are you aware of any other project, wind power project, that has conducted more preconstruction avian and bat surveys than this project here?
A. I guess -- I have not -- I have not been involved with, other than the Kenetech project, with other wind farm applications, so I can't really answer that.
Q. So to your knowledge, no?
A. To my knowledge, no.

MS. BROWNE: Thank you. I'm going to switch over here, if you could just bear with me, to Mr. Kimber.

EXAMINATION OF ROBERT KIMBER
BY MS. BROWNE:
Q. Good morning, Mr. Kimber?
A. Good morning.
Q. I'm Juliet Browne. Just a housekeeping matter, as I understand it, you're actually on the board of directors for Friends of the Boundary Mountains; is that correct?
A. That's correct.
Q. You spent a substantial amount of your prefiled testimony and your testimony here today talking about the CLUP; correct?
A. Correct.
Q. And you cited a number of passages from the CLUP in your prefiled testimony, and I was pleased to hear you -- at least acknowledge today -- that there is a balancing that
the CLUP contemplates between development on the one hand and promoting or protecting the remote values that you've discussed; correct?
A. There is. I think I also expressed it was rather clear to me in the CLUP that there is a primary commitment there to the protection of the jurisdiction, its overall integrity.
Q. I'd like to take you -- because I think the CLUP is the starting point for the discussion here -- I want to take a minute and look at the CLUP because I think it's important to put these concepts into appropriate context.

Could you just read that section which is from Page 1 of the CLUP, this is how we start off with the CLUP?
A. Hm-hmm. It's purpose in these areas is to extend the principles of planning and zoning, to preserve public health, safety, and welfare, to encourage the well planned multiple use of natural resources, to promote orderly development, and to protect natural and ecological values.
Q. So in those categories, the natural and ecological values come last?
A. Natural and ecological values come last? Is that what you're saying?
Q. Yes.
A. Yes, that stresses their importance.
Q. Then continuing with the CLUP, could you read, this is a section of the CLUP on development?
A. The Commission has a dual mandate with respect to conservation and development in the jurisdiction. It must reconcile the need to protect the natural environment and other important values from uses that cause degradation with the need for traditional resource-based uses and reasonable economic growth and development.
Q. That's not a provision -- neither of these provisions are provisions of the CLUP that you referenced in your prefiled testimony, are there?
A. No, they are not.
Q. And you would agree that that reflects the dual mission, dual mandate of the Commission here?
A. Yeah -- you know --
Q. That's okay.
A. We could talk about this.
Q. I hear you. I also just want to be clear, it's not your testimony that the CLUP precludes rezoning of a P-MA area to a development subdistrict to allow wind power, is it?
A. No, it does not preclude it. It certainly puts, it seems to me, very significant hurdles in the path of that kind of rezoning.
Q. And you would agree that the Commission must undertake a balancing when it's presented with a specific application and a specific area above 2700 feet?
A. Yes, it must undertake a balancing, but $I$ can also cite
passages here that stress how that, you know, some, as I say, some of the hurdles that must be considered in that.
Q. I mean, that's a good example if you go to the next line.
A. Okay.
Q. This is the energy resources section, which, specifically, I don't know if you were here for my opening comments, but specifically acknowledges the wind resource in the state of Maine and that much of it occurs among mountain areas or areas above 2700 feet.

Next slide.
A. Okay, I would like to respond to that.
Q. Let me just give you the next one and I think it will be more complete context.

In fact, the CLUP specifically identifies four areas of particular concern with a rezoning of a $P$-MA area to allow wind power development, and those are visual impacts, soil impacts, wildlife impacts, and technical feasibility; correct?
A. That's right, yes.
Q. The other thing that you talked about in your testimony was the fact that you felt the applicant here was making an artificial distinction between peaks over 4000 feet and peaks over 3000 feet, as I understand your testimony; correct?
A. Yes, I think that's fair to say. That the -- somehow --
to me it seemed an artificially high value placed on peaks that may have a 300-foot difference than a peak somewhat lower.
Q. If I understand your testimony correctly, you believe that the entirety of the boundary mountains, not just the portions over 2700 feet, are off limits to wind power development; correct?
A. The boundary mountains, yeah -- yeah, I do believe that -yeah, I mean that is clear. I do believe that that region is an unusual region in the state deserving of protection, yes. Yes.
Q. So it's the entirety of the boundary mountains above and below 2700 feet; correct?
A. Above and below 2700 feet -- well, I do speak of the necessity of landscape protection, so that certainly would involve obviously some places that are under 2700 feet, yes.
Q. This is just a map of different mountain areas and $I$ want to make sure I understand, you know, the full context here.

Your testimony is that the boundary mountains -- I think as you said, the -- let's refer to the high western mountain area.

Do you know what I'm referring to when I say that?
A. We're referring essentially, I guess I think I would refer
to it as the AT strip, if you will. The high mountain peaks from --

Yeah, this would be essentially what I sort of called AT corridor, and then here's the boundary line. Yes, it's two separate areas.
Q. And you described the AT corridor as a gold standard?
A. Yes.
Q. The boundary mountains as the silver standard?
A. Yes.
Q. So as I understand your testimony, the AT corridor is off limits to wind power development; correct?
A. The AT corridor, well, yes, it would be -- I mean, if you were going to say, yeah, very close to the AT corridor would be off limits. Yes.
Q. Let's just say that entire high western region, are you suggesting there's portions of it that under your testimony would be appropriate for development?
A. This is the AT corridor again you mean?
Q. The Longfellow Mountains --
A. Boy, it would be -- no, it could be -- it would depend then on distance, location, who knows, you know.
Q. Just so I'm clear, the entirety of the boundary mountains is off limits, but you think there may be portions of the western high mountains that are appropriate for development?
A. Portions of --
Q. Let's take -- what about the Mahoosucs?
A. Oh, do you know what we're getting to here? There is a problem here because the high mountain area is in, interestingly enough, a more settled area than the boundary mountains are.

You know, in other words, the proximity to settlement in what's designated as a Longfellows Mountain area is much closer to settlement but this gives me the hesitation that I just went through there, that probably there may be areas that would be in terms of previous settlement that might be more appropriate.
Q. Can you think of any?
A. Can I think of any? No, I can't think of any, no. But --
Q. Well, let's talk a little bit about the types of values that you've articulated as present in the boundary mountains.

I think you identified the absence of formal trails as one of the important considerations for why that area is special?
A. Hm -hmm (indicates yes).
Q. In fact, there's actually a trail, I think as people have talked about, up to the top of Kibby Mountain; right?
A. Yes.
Q. To the extent that bushwhacking opportunities are the
metric that you use, it's true, isn't it, that there are substantially more opportunities for bushwhacking in the North Maine Woods, for example?
A. There are more opportunities?
Q. Well, the North Maine Woods is an area of, what, 3.5 million acres?
A. Yeah, you know, there's probably no place in the state of Maine if you plunked down that you could walk 1 mile without running into some kind of road.

Whether it's in northern Maine or in the boundary mountains or the Longfellows Mountains. Bushwhacking -bushwhacking is obviously something that takes its origin from some place that you can get to if you don't bushwhack to.
Q. I wasn't suggesting that you couldn't get there but as I understood your testimony on Page 10, you identified the presence of opportunities for bushwhacking in the boundary mountains as an indication of their special uniqueness?
A. Yeah, it is. For mountain terrain -- for mountain terrain, yes. If you're up in the North Woods, it's a fine place to bushwhack, it's a different type of terrain, it's a good place to bushwhack as well.

My point was that this is a remarkable mountain area that is at this point undeveloped and has great potential and is currently used by some people quite extensively --
not by many perhaps -- but it's used by a great number of people at this point and has considerable potential as recreational area in the future.
Q. Let me just return to that, follow up on that for a minute.

As I understand it, the area is not used by many people, the boundary mountains; isn't that the case?
A. I have never done a count up there. I know fair numbers of people who do go up there, in other words, people I know, the bushwhacking crew, right.
Q. You don't have any -- you haven't done any kind of survey --
A. I have not.
Q. -- formal about the level of use that occurs; correct?
A. I have not.
Q. In fact, I believe you wrote in a May 11, 2007 editorial or op-ed piece that relatively few people in Maine and even in Franklin County seem to know about the boundary mountain region?
A. Yes, I agree.
Q. So this is not a heavily used area by recreational, bushwhackers, or others; correct?
A. No, it is not to my amazement frankly.
Q. I think in the Friends of the Boundary Mountains literature they all say the boundary mountains are known
to just a few fortunate people; correct?
A. I consider myself among them.
Q. I appreciate that. And you also say that in your prefiled testimony the importance of allowing for continued back country opportunities, and I think what you say on Page 11 is that those back country opportunities are important as the demand for them continues to grow; is that correct?
A. That's correct.
Q. Page 11?
A. Yes.
Q. You rely on the May SCORP in your testimony. Are you familiar with that document?
A. I am.
Q. Could you just describe for people who may not be what it is?
A. Essentially an analysis of recreational needs and demands in the state and how they might conceivably be met.

Is that a fair summary?
Q. I think you're probably more familiar with it than $I$ am and I'll take that. I want to show you some pages from the SCORP that you rely on.

If you look at Page 17 there, if you look at that first paragraph Public Use Trends, if you could read the last sentence of that first paragraph.
A. What is particularly interesting in the following figures
is static or a decline in public use of more remote recreation areas -- Baxter, Allagash, and North Maine Woods -- and growth and attendance have developed parks closer to population areas.
Q. Then if could turn to Page 20 of that same document.
A. Hm-hmm (indicates yes).
Q. If you look at the last paragraph there, if you could just read the last sentence of that paragraph.
A. Camping, is that the one you mean? Camping days double?
Q. The overall trend. Page 20.
A. Oh, okay, I'm sorry. The overall trend in North Maine Woods camping is declining.
Q. So at least you would agree that based on the SCORP that you rely on, that makes clear that bushwhacking, remote camping, camping, those trends are declining?
A. Well --
Q. At least based on the SCORP?
A. Let me find my -- let me find my reference to the SCORP.
Q. Page 7 is where you talk about.
A. Yeah, Page 7 is where $I$ talk about it.

Yes, of course, there $I$ am referencing the visual, the sightseeing, what people want to do when they come to Maine, their interests in visiting wilderness, 38 percent; lakes and rivers, 37 percent; natural environment, 36 percent; the interest in visiting naturally attractive
areas.
Yeah, okay, so those in a way, you know, the Allagash -- what were the references there again -references were to declining visitors to Acadia, overnight -- what was the other? Declining public use of more remote recreation areas -- Baxter, Allagash, and North Maine Woods -- and growth and attendance at developed parks closer to population areas.

Yes, this is, of course, in direct contrast to what the CLUP says which says back country interest in back country recreation is increasing. So somebody must be wrong.
Q. So although you rely on the SCORP for some assertions, you don't believe ultimately it's a reliable or relevant source?
A. I believe -- yeah, it certainly is reliable in its indication that people come to Maine to visit and be in and see natural areas that are attractive.

I may also point out there that the top category, which I cited there, 66 percent of people who come for overnight visits want to visit small towns and villages.

Clearly it's another attractive area for people, but that does not preclude their interests in the more remote areas.
Q. Let's just look at those statistics in the SCORP. In
fact, if you look at Page 8 of the SCORP, doesn't that indicate that by far when people come to Maine, the sad fact is, most people come to Maine to go to Kittery, Freeport -- not to denigrate those areas -- Ogunquit, Kennebunkport, Bar Harbor, and Acadia, at least there's some natural viewing in there.

But the realty is that the document that you rely on establishes that's what the lion's share of what people come to Maine for, not for the type of the values that you articulated and I may share those values, but that's not who's coming to Maine unfortunately.
A. Yeah, the people who come to shop obviously are not going into the Maine LURC jurisdiction to do that.

It seems to me that at issue in this hearing is the protection of the LURC and of the LURC jurisdiction and not of Freeport.
Q. I would agree with you on that. My concern was your taking the reference from the SCORP to suggest that most people are coming for an outdoor experience and in fact they're coming to shop?
A. Absolutely they are, but the people who are coming to Maine for outdoor experiences, plenty of them still are coming to experience the natural world and not the developed world.

MS. PRODAN: I just think Mr. Kimber is entitled to
get a question and not have to anticipate what it is that is trying to be asked. Thank you.

MS. BROWNE: If you're confused, please let me know. BY MS. BROWNE:
Q. I want to shift for a minute on this concept of remoteness.

You talked about going to Seboomic Lake?
A. Yes.
Q. And the feeling of remoteness there and that not being -the presence of Golden Road didn't interfere with the sense of remoteness; is that a fair characterization?
A. In the context of Maine, yes, it did not.
Q. I just want to be clear, you talked about the fact that you could get on a road from Millinocket and go to Quebec City and that didn't interfere with your sense of remoteness.

You weren't suggesting that Seboomic Lake was close to Millinocket, were you?
A. Close to Millinocket? It isn't all that far. An hour's drive.
Q. $\quad 57$ miles; right?
A. 57 miles, yeah, wood's road, over an hour's drive.
Q. And Quebec is even further; correct?
A. Quite a bit.
Q. And Seboomic Lake is part of Seboomic Unit Management
Plan; correct?
A. Yes.
Q. So this is public preserve land that you were in; correct?
A. No, it's not; $I$ was off the public preserve land.
Q. But part of the -- well, you're surrounded by public preserve land in that area; correct?
A. The map does not extend -- the public preserve land does not extend north of the lake, does it?
Q. Well, let me show you the Seboomic Unit Management Plan --
A. Yes, I've seen some of that.
Q. Great. And rather than spend time about are you within or without, you would agree that that's the general area of the Seboomic Unit Management Plan is where you were; correct?
A. Yeah, we were near -- put it this way, actually there's a mistake, whether you're left-handed or right-handed, we were actually hiking northwest, not northeast, of Seboomic. My own correction there.
Q. If you could look at Page 10 of the Seboomic Unit Management Plan --
A. Which I don't have -- oh, sorry --
Q. -- the top of that is titled Remote but Accessible Location?
A. Hm-hmm, yeah.
Q. And you'll see in that paragraph that the State, would you
agree, characterizes this area as "semi remote"?
A. Where does this term semi remote come from?
Q. Just so because the court reporter can't hear you mumbling, could you just read that paragraph, please.
A. The Seboomic Unit far enough from concentrated areas, interstate highways, and utilities to be considered remote, yet it is accessible by car. In this sense, the term semi remote is appropriate for this unit.

It is located more than 75 miles from the interstate and 20 miles from a State road, yet it can easily be visited on a day-use basis by residents and visitors staying in nearby gateway communities with Greenville, population 1419, and Jackman, population 1057, which lie within 35 miles of the unit. Okay.
Q. So you weren't suggesting that being in the boundary mountains of the area of the Kibby project was remote in the same sense that being in the Seboomic Unit Management Area was remote, were you?
A. What I'm suggesting -- did suggest in my prefiled testimony is that remoteness in Maine has a definition that is like wilderness character in Maine.

It has to be defined in the context of an already heavily roaded area, and therefore to say that Seboomic is more or less remote in a sense for this discussion is not relevant, that in, you know, in the content of this
discussion, the Kibby Mountain area, Kibby Range area is also remote and that is the point that I try to make.
Q. Since I'm running out of time here, just a few last questions --
A. Sure.
Q. You'd agree remoteness is a relative concept; correct?
A. Remote -- well, it's relative.
Q. There are degrees of remoteness?
A. I'm sorry?
Q. There are degrees of remoteness?
A. Degrees of remoteness -- no, I'm not so certain that $I$ could say that in the context of this discussion because there is -- in other words, to say that a town that is two townships away from development areas is less remote than one that is ten townships away is, in the context of the term remote as it is used in the jurisdiction, is not correct.

To say that this place -- this place here is less remote than that one, it may be farther but it is not in the terms that the Commission has to deal in, it is not less remote. No.
Q. So what is the definition of remote?
A. The definition of remote $I$ could cover in considerable detail in my testimony and also my rebuttal testimony that remote is a concept used in the Commission's deliberations
that is applied to lands in the jurisdiction, that are not in the fringe of the jurisdiction and that -- well, again I have to back up because remote is sometimes used in applications of sites that are in the fringe.
Q. I don't mean to interrupt you, but I appreciate that's probably a too complicated question for me to ask given the time constraints.
A. It is a complicated question, it is indeed.
Q. But there's nothing in the CLUP -- there's no prohibition on allowing development in an area that someone determines is remote; correct?
A. There is no prohibition, as I understand it, in the development anywhere in the area; however, there are these hurdles, and remoteness is one of the characteristics of the jurisdiction that the law protects.

MS. BROWNE: And just one last series of questions, Chairman Harvey.

THE CHAIR: You're out of time.
BY MS. BROWNE:
Q. You rely on David Field as somebody who articulates the values that you think are important in the western mountains and the boundary mountains; correct?
A. I do. That doesn't always mean I agree with David.
Q. On Page 7 you state, quoting him, "Beauty is why many people born in western Maine still live here, why many of
us from away have come to live, why vacationers come back to Maine and its western mountains year after year.

That's your testimony; correct?
A. That's correct.
Q. Are you aware that David Field has stated under oath that he does not object to the Kibby project?
A. No, I'm not aware of that. That's why I said I did not anticipate that $I$ would agree with David, much as I respect him.

MS. BROWNE: No further questions. Thank you. Do the other intervenors have any questions?

MS. BURNS: We don't have any questions.
THE CHAIR: Okay. Thank you very much. NRCM. Okay.
Very good. That leaves it to us.
Rebecca? Ed? I'll let Ed start.
MR. LAVERTY: Thank you, Mr. Chairman. Thank you for

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your testimony.
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EXAMINATION OF ROBERT KIMBER
BY MR. LAVERTY:
Q. Mr. Kimber, I wanted to revisit this notion of balancing in one of the earlier statements in the CLUP that you read at Ms. Browne's behest.

It does -- and I think our view are different interpretations -- it does set up a balance between preservation of resource values with well planned
development. Just as an aside, I might say, your response to her question reminded me of a quote from the attitudes, they who are first are last and they who are last shall be first.

Nonetheless, what we're trying -- I think in a nutshell, what we're trying to do is we're trying to preserve the values of the jurisdiction and at the same time allow development. One of the ways we've done that is we've used the concept of adjacency by limited development to areas along the fringe of the jurisdiction.

As you note, a draft CLUP has been apprised of rather uncontrolled development, which is single-family dwellings that fall below subdivision review and not reviewed by LURC at this time, and I think there are some concerns about uncontrolled development, squat development throughout jurisdiction.

One of the ways we are getting at this uncontrolled development is to try to limit development to areas not only where there is similar development but where there is also infrastructure available.

And one of the things that has been presented to us -- it seems a little counterintuitive -- but has been presented to us is that in this area of the state, interestingly enough, the infrastructure to support wind power exists where it doesn't in most other areas
throughout our jurisdiction in that transmission capacity is available -- might need to be modified but it's available -- substation capacity here is available, and that if you look at where the resource and the infrastructure overlap, this is one of those areas that are prime for development.

So I guess in trying to make the balance, I'd ask you to sort of address that, I realize that to say that a 27-mile transmission line may in some people's mind stretch the idea of available infrastructure, but as compared to Seboomic, where we might be putting hundreds of miles of transmission line and therefore opening our vast areas of jurisdiction to the development, it seems that the argument here that infrastructure exists, needs to be taken into account in making that balancing determination.

I'd ask if you comment on that.
A. Yeah. Boy, I mean, I hear what you're saying, I appreciate what you're saying, but I return again, I guess -- this may be, who knows, those judgment calls in our lives, but $I$ look at this mountain area here, this western mountain area, the boundary mountains areas, which is quite extensive, I balance that -- I balance that against the availability of that particular infrastructure.

Also, I do have to say the 27 miles of transmission line you mentioned is a stretch, it seems to me, that there are certainly areas in the jurisdiction and there are areas outside of the jurisdiction. This is another whole discussion we haven't gotten into.

As to the siting, the appropriate siting of installations of this kind, that given the scarcity of remote undeveloped lands in the state, the question in my mind always is why, why the rush, in other words, to the jurisdiction. Why the rush to our back country lands rather than to our developed landscapes.

Again, of course, impacts on communities, but in any case for this Commission, its concern is the jurisdiction, and it seems to me that this is an extremely valuable area of the jurisdiction that has to be balanced against the perhaps the availability of infrastructure that you see there.

It also would seem to me, if you would compare this to, say, Stetson Mountain, there's quite a difference there. You know, this particular site is, in terms of its natural values, much more interesting it seems to me. Probably folks over there might dispute that, but the proximity there to roadways and also simply the height of that area, it's lower, so --.

I guess -- in other words, you asked me for my read
on that balance, that's what it would be. I would look at that landscape and say that it still outbalances whatever virtues there may be in that access to Kibby construction.
Q. I appreciate your response, and I think that's the dilemma. But I think that we do have to acknowledge that the infrastructure does exist here. I think that's an important thing that we need to acknowledge.
A. Well, the infrastructure is the road basically at this point.
Q. It's the transmission facilities and the substation facilities.
A. Yeah, but I mean, you're not saying, though, that 27 miles is a short distance then for?
Q. As opposed to 200 miles or so?
A. 200 miles, yeah.
Q. I acknowledge that. It's in the eye -- to what extent does that meet the immediately available infrastructure. Nonetheless, I think we need to acknowledge that, the substation here, and the existing transmission capacity of Flagstaff here creates an infrastructure that doesn't exist in many other areas within the jurisdiction. I think that's part of my dilemma.

Let me move on to something else, if I might. Just quickly, going back to the notion that a number of surveys have indicated that the use of more remote recreational
opportunities in the state of Maine are diminishing. My understanding -- and I wanted to check this with you -- is that is to a great extent a result of demographics and the fact that the baby boomers are getting older and we now would like to go to have a nice warm meal and a warm bed at the end of the day and do our excursions in maybe a less intrusive way, and so that a lot of diminishment of the utilization of remote areas has to do with demographics?
A. Where are the 20 year olds then?
Q. Kittery.
A. That's an interesting sociological question, issue that you raised there. My gosh, it's just our gray beards out there in the bush, something's going wrong.

You know. It also seems to me that -- wow, the thought saddens me that you're saying, in other words, you're saying that the evidence seems to suggest that anybody under 72 is not out there is a sad commentary, No. 1; and No. 2, that there is no necessity then to protect the natural values of the jurisdiction, we might as well write it off because nobody is going it use it.
Q. That was another question -- this is getting to the point of testimony.

Even though people may come to Kittery, they may come to Freeport, it's interesting the type of consumption that
they engage in from a mail order firm whose cache is the natural resource values of the state and Maine. And even though people may come to Acadia and other places -- I'm asking this as a question $I$ guess.

Isn't a lot of the reason they come because Maine's cache -- even though people may not experience it directly -- has to do with its natural sort of reasonably unspoiled values?
A. Yeah, I think that the chart from the SCORP that I did quote, people are coming to charming small towns and visiting areas and visiting natural areas certainly has to do with that. Well, the weekend trip, if you will, right? But again, $I$ have difficulty reconciling all of this, too, with the CLUP's very clear articulation that we need to be saving back country, preserving back country lands for the future.

That's in there and clearly the authors of the CLUP and their document, as I understand it, received a stamp of approval from the Commission, would indicate that those landscapes are an important element of the state and are landscapes that need preservation --
Q. Thank you.
A. Protection.
Q. Thank you.
A. Again, may I stress that Friends of the Boundary Mountains
has not said put this into a park, it has said simply, keep this area for traditional uses of forestry and outdoor recreation, back country recreation.

You look at all this stuff clearly, there's endless balancing back and forth and back and forth in all these documents, and you, good people, have the problem of striking the judgment case in each instance of what is there.

As I said, I found the CLUP a very fascinating document.
Q. I think we're get a little afar.
A. We are indeed.

MR. LAVERTY: Thank you. Dr. Wilson, I have a few. EXAMINATION OF HERB WILSON

BY MR. LAVERTY:
Q. What I'm about to ask may sound facetious, and I don't mean it to be, a knee jerk, but I've wanted to ask this question and you're here and I have the opportunity.

About a year or so ago, we, in anticipation of wind power in general, conducted a number of forums where we invited people to come and talk generally about wind power, and in one of those fora, an ornithologist from the State Department of Inland Fisheries \& Wildlife attempted to sort of contextualize bird mortality and bat mortality for us and indicated that the bird mortality associated
with collisions with high-rise buildings in the United States far outweighs bird mortality associated with wind farm mortality.

And also beyond that, he went so far as to say, if we wanted to use an environmentally responsible approach to bird mortality in the United States, he said that the maximally efficient way to do that would to have the ownership of domestic cats made illegal, that they far exceed the mortality associated with collision in high-rise buildings.

Now, again, I'm not -- I know this sort of sets up a red herring. I'm not trying to minimalize the impact of bird mortality associated with wind generation; but help us put it in that context, please. What are we talking about here?
A. In actual numbers $I$ don't have the data, but it seems to me that those sorts of comparisons are strained. Even if the mortality associated with wind turbines is 1 percent of those that hit buildings, that's still 1 percent of birds that mortality could be eliminated, and certainly collisions with moving cars are significant sources, free running cats, absolutely, collisions with buildings, absolutely.

But it seems to me that because this sort of source of mortality is huge compared to this source of mortality,
it still doesn't mean you should do nothing about a smaller source of mortality.

Plus, the birds that are often most often -- well, they are often killed at wind towers or larger live birds like the raptors and so forth.

People like to try -- like the Altima wind turbines in California, which were poorly designed, and the huge number of golden eagles have been killed there. Things have gotten better, absolutely, but still it represents a significant source of mortality paling in comparison perhaps to the mortality associated with birds colliding with windows, but still it's a mortality that we don't have to exact on birds by not -- by siting our wind turbines appropriately.

MR. LAVERTY: Thank you. Thank you Mr. Kimber. MR. WIGHT: A couple questions for Bob. EXAMINATION OF ROBERT KIMBER

BY MR. WIGHT:
Q. Juliet managed to get you to say that the boundary mountains and the Longfellow Mountains may not be appropriate for wind. Yesterday we saw a map that showed the boundary mountains and the Longfellow Mountains as being the best wind resource in the state.

We deal with a resource-rich area, so a question to you, did you ever oppose timber cutting practices in
western Maine?
A. Did I oppose timber cutting practices?
Q. Were you involved in the Mt. Blue efforts?
A. No, I was not. I mean, I certainly have -- I certainly, you know, I've looked at various cutting practices sometimes and said no, I think it's not so great, and there could be improvements in cutting practices in the state of Maine.

I have never advocated in shutting down the cutting of wood in Maine. In fact -- I won't bother but I've written about this and my vision of Maine -- if you'll excuse this brief digression -- is thriving timberlands with carefully selected preserved large areas for back country and traditional recreational uses.

So I've never advocated that we're just simply going to get rid of timber.
Q. Thank you. So we all pretty much accept the fact that this is an industrial forest. This is what's been happening here for the last hundred years.
A. Absolutely.
Q. And I think we're projecting that what should continue to happen here into the future?
A. Hm -hmm (indicates yes).
Q. We've gone through Poland Springs requests to withdraw water from the areas of the jurisdiction, and we've said
that's a resource-based industry and we've made accommodations for that.

So the question is wind being a resource, can you see any chance in your back country bushwhacker's mind that we can accommodate wind resources in the same way that we've accommodated these other resource-based industries?
A. We probably can, yes. I have -- you know, as I began to mention earlier, it seems to me that LURC jurisdiction is not the only place to do this.

We know at this point in history that wind resources do not have to be Class 7 and 8 to be exploited for wind power installations, and certainly the history of technology in wind power is far from over.

Who knows what the next five or ten years will bring in terms of machinery that is capable of utilizing different wind power classes in areas.

So, no, I would -- what I would be doing, if you give me my druthers, is looking at areas outside the jurisdiction that have development already where there are not really, really severe conflicting interests with the communities that surround them.

In other words, put them in developed areas. The primary wind resource in Maine is again on the coast. You look at inland Maine, those wind power maps, there would be tiny little streaks of high-valued areas, they're all
in the western mountains, they're all in our area, and so I would -- if you say where the premier wind resource is, it's on the coast. It isn't necessarily inland. There's vastly more wind opportunity on the coast.

We somehow have to figure out how to locate these things if we're going to have any, that they have the minimal impact on what makes Maine a special place.
Q. What we've learned from the only wind farm that we have in the state so far is Mars Hill is that if you have a wind tower within a certain distance of residences, you run into difficulty, so I don't know if it's remoteness but it's certainly separation from population is another concern.
A. Yes.
Q. But anyway, one other thing is land ownership.

We're very good about talking about the vast unspoiled areas, the opportunities we have for the bushwhacking crowd to go to these places and they should always be maintained for us to do that, or maybe they could cut the wood if they cut it the right way.

These people own this land and expect a return on the land. Do you think there's any way that we can get the bushwhackers to pay their return or how are they going to use their land if the wood products industry doesn't give them the return they want?
A. Doesn't give them the return they want, well, that -yeah, then how -- well -- again, we start getting into rather large philosophical questions. The return they want, no one is suggesting, I think, that they do not deserve a return of some kind, right.

And I fully appreciate what you said about, you know, all of us being guests on that land.
Q. Right, we have a gift that we somehow think has become a right.
A. I have never taken that for granted, not at all. On the contrary $I$ think it is a real privilege that those landowners have extended to us.
Q. So if a landowner said to you, I really don't mind you -I think it's great that you're interested in going out and using my land, but please understand that I need to put some wind towers up on the top, is that going to destroy your experience on this land?
A. Well, yeah, it is. I think it really does -- I think I made it quite clear that that kind of development in this territory is destructive of back country experience.
Q. Current back country experience. Back country experience is what we've known right from the time of European settlement until --
A. Again, the changes that have taken place in back country experience even if my lifetime are quite dramatic.
Q. You no longer take the steam train to get to your trail?
A. Exactly. When you can get in your car at practically any place in the state and drive to the most, if I may use the words, remote corners of the jurisdiction, things have changed dramatically.

What is back country in Maine, this is a whole set of definitions that really have shifted in the course of our lifetimes.

But, yeah, I've been off on this tact and I've lost the point of your question.
Q. We have a holistic problem. We have a historical use and now we have a major historical global problem that we need to deal with.

So we need to step back -- I guess I'm testifying -but I do think that there's a real question that comes up, and you have the opportunity to be part of the solution as the proponent of back country use.
A. Yeah. I mean, I do go back always in these discussions to the goals and policies that are articulated in the CLUP.

Among the three, toward the end on Page 134, if I may read those, support and promote the management of all resources based on the principles of sound planning and multiple use to enhance the living and working conditions of the people of Maine to ensure the separation of incompatible uses and to ensure the continued availability
of outstanding quality water, air, forest, wildlife, and other natural resource values in the jurisdiction, that's No. 1.

No. 2, conserve, protect, and enhance the natural resources of the jurisdiction primarily -- primarily -for fiber and food production, non intensive outdoor recreation and fisheries and wildlife habitat.

No. 3, maintain the natural character of certain areas within the jurisdiction having significant natural values in primitive recreation opportunities.

Flipping back again to the energy section, LURC regulatory approach, number of protection zones that are applied to resources that can be used for energy production, such as high mountain area protection zones, shoreland protection zones, and wetland protection zones. In all of these cases, the focus of these zones is the resource, not the energy which can be produced from it.
Q. Thank you.
A. There are themes.

MR. WIGHT: Thanks.
MS. KURTZ: Hopefully I can keep this brief.
EXAMINATION HERB WILSON
BY MS. KURTZ:
Q. I struggle with -- and I'm sure -- I can't speak for the commissioners -- but sort of the conflicting testimony
that we get, just kind of go back and forth, and I guess these are questions for Dr. Wilson.

In the statute to change a zone, the applicant -- or the applicant has to prove that there's no undue adverse impact on a resource.

I guess one of the concerns that $I$ have, sort of a red flag from me, there was testimony about the Red-eyed Vireo being one of the most common birds in North America and the two warblers, which are rarely seen in Maine and I -- and whether or not that testimony really demonstrates the data may not be adequate.

I guess I have two questions: One, what would the possible explanations be for why they didn't see the Vireos and why they saw the warblers, and what that would mean.

Put that in context, how can -- how can any -- how can the applicant prove no undue adverse impact if it doesn't know what's there?
A. Yes, Ms. Browne was absolutely correct. The amount of material that was provided on avian abundance and to a lesser degree on bat abundance is huge. There's a tremendous amount of work there.

We also know that the various studies were farmed out to different firms. We don't know -- at least based on my reading -- the particular firm was noted but not the
particular person.
One might expect that there would be different abilities among different people. It could be different biologists that are doing surveys at different times. When I'm looking at these sorts of things, I'm always looking for general patterns, and when I see that Red-eyed Vireo is found in some foraging studies and some breeding surveys but yet is missing from a foraging survey, then I'm thinking, well, there's a discrepancy here in the abilities of the people to identify the birds that were there.

My suggestion for the reason for Red-eyed Vireos being absent is that their song is somewhat similar to the song of the blue-headed Vireo, which was reported on that particular May 2006 daytime foraging study.

So that may be an explanation there. Most bird identification, frankly, in the spring and summer is done by ear. It takes training to do that, and that may have been what was going on there. I don't know for sure.

But anyway, that sent up a red flag and the red flag was hoisted even higher when I see the presence of two birds that extraordinary, absolutely extraordinary, to be found in Maine.

Again, $I$ didn't know the prominence of the sightings, the person that had done the sightings. That came back in
rebuttal testimony to my original prefiled testimony, but certainly morning warbler is a very similar warbler to the Connecticut warbler, which is found in the mountains of Maine, and so that was a possible misidentification there. Golden-winged warbler is not seen well and could be confused for perhaps a chestnut warbler, yellow nut warbler.

So anyway, the point there was to say that I'm not sure that we have a totally firm handle on the birds that are there. Those were the red flags that jumped up at me from my examination of the abundance state of the foraging data.
Q. I guess a follow-up question to that, then, is the firm that was employed to do this, if you were alarmed by these anomalies, wouldn't they also -- shouldn't they also do a follow-up study?

I guess it just -- it really -- I'm familiar with Biodiversity Research Institute and it makes me question the validity of the data and this is not to -- well, if those anomalies were there, it would seem that there might have been a suggestion that a follow-up study would be done, and I guess I'm a little concerned that a follow-up study was not done, that we still really don't know what's there and what's not there.

It seems like a significant anomaly.
A. Yeah, if I had been writing that report, I would certainly have not simply reported the Connecticut warbler and golden-winged warbler without providing a footnote about identification because, again, they are extraordinary findings. I think I would have also been suspicious that my data didn't include Red-eyed Vireo.

I don't know how far that goes, but just this jumped out at me and I thought, well, this gives me a little bit -- I'm a little skeptical now.
Q. Thank you. The other question is about the collisions, some of those horrendous figures that you quoted, 10,000 birds in one night. Juliet communicated that it was actually communication towers as opposed to wind towers.

Is it the long, tall structure that causes the problem or the lighting that causes the problem?
A. It's the light itself, which is why -- whether it's a lighted turbine, it's not spinning or even spinning or a tower is irrelevant.

It's the light that's the confusing aspect. Again, these confusions occur on overcast nights oftentimes inclement weather where birds are trying to get down, and they're unable to use either celestial navigation or lunar navigation and figure out exactly whether they are. They confuse a light as some celestial object and end up flying around and around with devastating consequences.
Q. Is it -- do you -- knowing what you know about bird behavior, the addition of spinning or rotating blades, a communication tower does not have those rotating blades --
A. Right.
Q. -- but now you have something that is lit and has blades. Would that, in your mind based on bird behavior, would that be an added risk so that it's not just a communication, that when you compare the two, it's perhaps not fair to say that, well, they're communication towers, so that data doesn't correspond.

Can they be compared and an added risk?
A. I think there would be added risk. I think the spinning turbines would exacerbate the risk, so in fact it would be an added sort of thing.

MS. KURTZ: I think that's it. Thank you.
MR. SCHAEFER: First of all, I've got to congratulate
you guys for fighting a good fight and doing it on your own time and own nickel. I'm proud of you in that respect.

Back to the Friends of the Boundary Mountains, you've been involved in this project since Kenetech -- or before Kenetech --

MR. KIMBER: Yeah, the Friends of the Boundary Mountains formed around the Kenetech project. Yes, so I have been involved since then. Yes.

BY MR. SCHAEFER:
Q. I guess my question is, have you made any effort to obtain ownership by fund raising or by conservation easement of any of these lands that you're interested in?
A. We did make -- yes, as you saw in my rebuttal testimony, I attached to the rebuttal testimony a conservation plan that the Friends of the Boundary Mountains did submit to the Department of Conservation back in 1999.
Q. But as far as raising funds or trying to buy any of those rights --
A. Well, yeah -- well, in the sense that we went to the State to say, you know, can we find some funding to do this, we did make that effort to, yes, conserve these lands.

We did not -- we didn't start writing letters to our friends at that point and say, you know, we need $\$ 12$ million to buy this.

No, so we did not launch that kind of campaign but we did make that overture to the Department of Conservation, yes.

## EXAMINATION OF HERB WILSON

BY MR. SCHAEFER:
Q. A question about towers. The wind towers are a solid cylinder and some of the communication towers are erector set-type deals.

Is there a difference in bird mortality between the two types of construction or attractiveness to birds?
A. I don't know. I don't know.

MR. SCHAEFER: All right. Thank you.
MS. HILTON: Follow up on that question.
EXAMINATION OF HERB WILSON
BY MS. HILTON:
Q. I'm frustrated because we don't have more information. It appears that the information about bird mortality is just not out there and that we haven't had the kind of experience, wind towers, that would be nice to have. I'm just wondering, I think what $I$ heard you say is that the lighting of the towers is based on what we've seen with lighting on communication towers is potentially a big issue?
A. I think it's a big issue, yes.
Q. Do you think there is enough -- or that there has been enough research done on that issue to actually -- for TransCanada or for another developer -- to actually study that issue without having to do the primary research that we don't have that was specific to wind towers?
A. Could you say that once again?
Q. I'm just wondering, say you had done the work for a proposal like the one that we're considering here, and what would you have done with respect to this issue?
A. I guess -- I guess the thing that -- the way you're only
going to know for sure is monitoring what has been done and monitoring mortalities at other wind turbines that are already in existence as a way to at least get a handle on that.

There may be data out there, $I$ don't know about that, but that's why $I$ was suggesting that an environmentally responsible way to try to do this project would be to erect one or a few turbines, maybe even just towers without the turbines spinning and see what the mortality was.

At this point $I$ don't think we know, but we know that there's a potential for the occasional huge mortality event, that a single -- that mortality in a single night could in fact swamp the cumulative mortality over a year from collisions with the spinning turbine blades.
Q. So -- so I guess, for example, lighting Met towers is going to give us the information that we're looking for. I don't think there is -- I think I know the answer.
A. I think that's right.

MS. HILTON: My other quick question is for Bob. EXAMINATION OF ROBERT KIMBER

BY MS. HILTON:
Q. At LURC we had long discussions, particularly about the recreational use and the friends and back country use. What do you -- with respect to planning for the future, I
mean, what is our window? Are we just looking at the current generations and those trends, but when you think about the long term, I mean, what do you consider these recreational uses and man's use of an area like this?
A. I mean, of course, both from my own preferences and also from what is suggested and indicated as important in the Comprehensive Land Use Plan, I think that the important thing is maintaining opportunities for what are called the primitive recreational opportunities, non motorized, which is not to say I'm about excluding the motorized ones at all.

Some important planning has to happen in the LURC jurisdiction to accommodate those different types of resources and -- activities rather -- and that the long-range -- that long-range work has not been done yet.

In the interim what seems to be absolutely important is to maintain the regions that make those kinds of things even possible, you know, to say, if you're going to have -- in the future you're going to have the option of back country recreation in Maine, the landscapes that make that possible have to be protected, and they are -- those uses are compatible with forestry, we know that, we can set up plans for the jurisdiction that would make that possible.

But I guess what I'm driving at is that we simply
cannot foreclose that option at this point, and it is a difficult decision, how do you go about this.

In northern Maine, clearly you're talking about the major river corridors, you're talking about the St. John, the Allagash, other important waterways are the major resources in those areas. In western Maine, the CLUP defines our region as the western mountains. They are our keynoted natural resource.
Q. Do you think that, say a turbine farm that is 10 turbines would have a different impact or be more acceptable in this area than say a wind farm with 44 that we're talking about now?
A. Yeah, I mean, scale clearly is a factor. Again -- and I don't mean to throw red herrings into the discussion -but this is why I have always -- and any kinds of discussions I've had about planning wind power in Maine -have always argued for widely distributed small plants in relatively developed areas rather than in our back country, because you can -- and the argument I guess is that economies of scale and they're not commercially viable, et cetera, et cetera.

But what would make sense to me would be small-scale wind power development scattered throughout the developed parts of the state where it does not impinge on communities and is not huge in the back country.

I think it's very hard. Even -- simply the intrusion of structure is what really makes a difference in the back country. As soon as you have intrusive structure there, then back country simply disappears. It's not there anymore.

So I would say 10 is too many, yes; 10 is not as bad as 44, but nonetheless, if you have that kind of large intrusive structure in back country, it is no longer back country.

This is kind of like the emperor and no clothes. You look at that, and all the talk about the small footprint and you have something that is 10 times higher than the trees, that is not back country anymore. It is truly a dramatic change.

Does that speak to your question?
MS. HILTON: Yes, thank you.
EXAMINATION OF HERB WILSON
BY MR. HARVEY:
Q. Dr. Wilson, how -- can you tell me why the species identification in this case -- which was a problem, problematic by your testimony -- is more important or as important as the total number of birds that we're seeing identified in the passage rates? Why is one -- is one more important than the other, or are they both equally important? Which of those issues is really the key
problem here or the key issue?
A. If I had to choose one of two kinds of data to take, I would take the total number of birds passing over, no question about it.

But it also becomes important to know what the birds are that are there. The foraging studies sort of identify on the ground the birds that likely are flying over that previous night is secondarily important because some birds are frankly more common than others, some are more restricted in habitat than others. It's nice to know what you've got.
Q. So I guess -- but the passage rate is a really important issue for what we're dealing with here?
A. Absolutely.
Q. I think you expressed concern -- and I guess the commissioners have as well -- about what kinds of mortality we might expect from wind farms. We don't seem to have a lot of data.

I don't know if you were here yesterday --
A. I was.
Q. -- but the applicant testified about the fact that it was involved in some huge wind farm projects in Quebec, and those have been in existence at least for several years.

Are you aware of any information emanating from those projects regarding mortality?
A. I'm not aware of any information.
Q. Could we take those as models of what could happen here? I don't know if the movements are the same on the Gaspê peninsula?
A. Yeah, I don't know the exact siting. I don't know the types of habitat. There are certainly comparable sites in other parts of the northeast that would be reasonable. In fact, these were the ones that were compared by the National Research Council article that I referred to. We have some data on actual annual mortality per turbine.

THE CHAIR: Just to Mr. Kimber's point about -- I'm probably close to testifying here.

EXAMINATION OF ROBERT KIMBER
BY MR. HARVEY:
Q. Your comment about dispersal element of these wind farms, you're aware of what's going on, for example, in the town of Freedom?
A. Yes.
Q. Where a small wind power --
A. Yes.
Q. Do you believe that there is any place that we could have a meeting about wind farms and not have some friends?
A. It's a tough go. I hear that -- I hear that loud and clear.

No, it is not -- it's not easy to -- I do not think it's easy to site wind power in Maine, I do not. Whether in the organized territories or the unorganized territories, the landscape is Maine's great treasure and it's going to be really hard.

There are regions of the country where it is not that difficult to site wind power. The Midwest is certainly the glowing capital. It has a terrific wind resource, farmers and ranchers often welcome the wind power plant, they like the lease income.

We don't have that landscape, we just don't have it. Both in terms of our economy and of our heritage and our interests and our activities, frankly, I don't think wind power is a very good fit for Maine. I think it is a possible fit in some places and they will be hard to find. That's true.

THE CHAIR: Thank you. I think that -- Catherine. MS. McKENZIE: I have a technical question about the towers and the lighting.

EXAMINATION OF HERB WILSON
BY MS. McKENZIE:
Q. I remember reading through some material -- I can't remember exactly where $I$ saw it -- but it seems like there was a difference between the type of lighting, and I was wondering if you could tell me in the examples you were
giving for bird mortality for the towers, the difference between was it white lighting versus red lighting, constant lighting or strobe lighting, and what effect would that have?

I know for the proposal they're saying the lighting would be red and it would be strobing at a slow rate.

Can you kind of tell me that the difference is or similarity between the towers that you were citing and the wind power that is proposed?
A. I'm not certain that $I$ can be absolutely certain, but my memory is that all the towers that I cited were in fact red strobing lights, and I don't know how many were on them.

I think that information is provided in the original papers but I don't recall.

MS. McKENZIE: Thank you.
THE CHAIR: I think at this point we'll take about 10
minutes and give our court reporters a little break. We'll
come back with Maine Audubon, Appalachian Mountain Club, et cetera, that group testifying. You have a question, Ms. Browne?

MS. BROWNE: I'd like an opportunity to do some recross based on the additional testimony that's come out. THE CHAIR: How much time do you need? MS. BROWNE: 10 minutes.

THE CHAIR: We're going to do a break first. After the break.

Are you going to have questions as well, Pam, of your panel? You can think about it anyway and tell me afterwards.

Thank you very much. Appreciate your testimony and discussion. Don't go away.
(There was a break in the hearing at 10:54 a.m. and the hearing resumed at 11:13 a.m.)

MS. BROWNE: It will be limited to 10 minutes.
THE CHAIR: All right. We'll take you for your word. Who do you want here? Mr. Wilson and Mr. Kimber, okay.

MS. BROWNE: Thank you, Mr. Harvey, Dr. Wilson, and Mr. Kimber.

EXAMINATION OF HERB WILSON
BY MS. BROWNE:
Q. Dr. Wilson, I just want to return. There was some colloquy back and forth on the sighting of the Connecticut warbler and the golden-winged warbler. I just want to make sure that the record is clear and people understand exactly what happened.

The Connecticut warbler, it's true that TRC specifically acknowledged in its prefiled testimony that that was an unusual sighting; correct?
A. I don't recall that, frankly, sorry.
Q. It's your understanding, again, that TRC immediately communicated the sighting to US Fish \& Wildlife and IF \& W and birding experts?
A. That's what you indicated earlier, yes.
Q. And that those experts -- and that the person that actually saw the bird saw the bird at close range; correct?
A. Yes.
Q. And that the person from Biodiversity Research Institute is somebody that specifically had experience handling Connecticut warblers at a banding station in coastal, manager, and spring migration; correct?
A. I was not aware of that until that information was provided in the rebuttal testimony to my original prefiled testimony.
Q. And I appreciate that; but in light of the rebuttal testimony, do you have greater comfort now that the sighting was valid?
A. I still have skepticism, it is less.
Q. If you had made a similar sighting, wouldn't you have done the same thing, talked to IF \& W, Fish \& Wildlife, other expert birders, and discussed it?
A. I would have tried to get a photograph or a recording immediately. That's what $I$ would have done.
Q. And the golden-winged warbler, TRC also acknowledged that
that was somewhat unexpected; correct?
A. I don't recall that; perhaps so.
Q. And I believe you actually -- during my prior cross -acknowledged that you had made a mistake and that in fact you had thought that the siting was in subalpine habitat and in fact the sighting was in the valley and a deciduous area that's more appropriate for that bird; correct?
A. Yeah, misused the word alpine in my testimony. I meant to say mountainous.

It was not clear to me from my original readings where exactly that golden-winged warbler was found and subsequently you indicated that it was found in a second growth or earlier successional forest, which is more typical.

Typically they actually are found in areas that are perhaps four or five years beyond a clearcut. I don't know what the particular habitat was where it was sighted.
Q. Again, you understand from the rebuttal testimony that the bird was observed by a biologist from BRI, again; correct?
A. I was not aware of who observed the bird.
Q. But now you understand that's the case; correct?
A. I do.
Q. And that it was observed at close range for one and a half minutes from various and angles; correct?
A. I did not know that until today.
Q. It's in the prefiled rebuttal testimony. Did you have an opportunity to read that?
A. I did. I don't recall that, I guess.
Q. And then also with respect to that same species, are you aware that DEP and other birders in Maine have believed that there are quite a few northern records of these sightings in Maine, that they occur every year in Maine?
A. I'm not aware of that, and I follow the bird sighting literature very carefully. I regularly read North American Birds. I subscribe to North New England Birding Journal, and anytime a golden-winged warbler is sighted, it's a cause for rejoicing, and if those are reported, they're not reported to a place where I see them.
Q. So you're not away of any of those reportings; correct?
A. That would be correct.
Q. There was also some discussion on those towers that you put up in your slide, I think they were communication towers, with high mortality events?
A. Yes.
Q. And I just wanted to be clear, those towers are all guy towers; correct?
A. At least two of them were, yes.
Q. And a guy tower -- guy towers -- create significantly greater risks to birds than do towers that are not guyed?
A. The data I see indicates that the guy wires account for probably two-thirds of the mortality. So there's still significant mortality from the tower proper.
Q. And you understand that the turbines here are not going to be guy; correct?
A. I understand that, yes.
Q. On the lighting, I think there -- I just want to make sure there's no confusion on this -- you understand that the proposed lighting here is not for a strobe or a solid light but for the pulse, a slow pulse on and off; correct?
A. That's correct, yes.
Q. And you understand that the FAA lighting recommendations have specifically been modified to address the types of concerns about these mortality events when the birds get confused on a foggy night and you may have single incidents of high mortality; correct?
A. The FAA has tried to alter the lighting to ameliorate the problem, but the problem still exists. It's not clear to me by what percentage that mortality has been ameliorated by the change and the frequency by which the pulse goes on and off.
Q. That's not an area of your expertise; correct?
A. It would not be.
Q. And although I'm not going to go into it now because it is complicated and would take sufficient amount of time, I
just want to be clear because there were questions about lack of mortality data for wind turbines.

In fact, there is data in the $U S$ on mortality associated with wind turbines; correct?
A. I cite it twice in a report by the National Research Council that provides such data.
Q. And there's other data, too; correct? There is data on operating wind farms and associated mortality?
A. That's what this report does. It collects all such data into one single document.

MS. BROWNE: We'll try to provide some concise information on that as part of the post hearing submittals because I appreciate the question that has come up on that. Thank you, Dr. Wilson.

EXAMINATION OF ROBERT KIMBER
BY MS. BROWNE:
Q. Mr. Kimber, I think I heard you say during some of the questioning that you're not proposing that this area be included in a park; correct?
A. That's right.
Q. Though you have presented -- you have sought to have the State take some steps to conserve the area, provide some sort of development restrictions; correct?
A. That's right.
Q. And those efforts have been ongoing since 1995; correct?
A. 1995 -- no, I mean.
Q. Well, for some time.
A. Our efforts to -- yeah, to raise some kind of interest and attention for this area have been ongoing since 1995, we published a little brochure about the area that's been distributed.

As I mentioned earlier, yeah, in 1999, then we did submit a conservation proposal to the State.
Q. And to date the State has not taken any action on that; correct?
A. The State did in fact take action on it. The State negotiated with the landowner. As always, I mean, I don't know -- I don't know the content of those negotiations, so I can't give you any details about that.

The State did contact -- as I understand it -- did contact the landowner and --
Q. Let me rephrase the question. Since these are discussions that nobody knows about, I don't think it's appropriate to refer to them here.

The State hasn't taken any action to protect that land, put conservation restrictions on it, or otherwise prohibit development; correct?
A. Of course, one of the issues there is that the land is encumbered.
Q. Just -- I don't mean to be unpleasant here, but just in
the interest of time if you could just give me a yes or no answer.

As I understand it, there have been no -- the State hasn't put any conservation restrictions on the State -sorry, the boundary mountain area, any type of limitations on development; correct?
A. That is true, the State made an effort to negotiate some kind of conservation arrangement about this land, and one of the barriers to that, obviously, is the encumbrance that was on the land, which is the wind rights. I think that is germane.
Q. I move to strike because you said you have no information about the discussions. In the interest of time --
A. -- information about the discussions, but it was very clear after --

MS. BROWNE: Mr. Chairman, I just ask that -THE CHAIR: Let's move on. THE WITNESS: Okay.

BY MS. BROWNE:
Q. I think you also said you don't oppose timber harvesting; correct?
A. That's right.
Q. Now, it's true, isn't it, that you're on the board for Americans for Maine Woods National Park; correct?
A. There is no such organization that I'm aware of.
Q. You're not on the National Advisory Committee for Americans for Maine Woods National Park?
A. I am on the national -- I mean, I'm on the list of people who have said that a National Park is a very viable and useful idea, yes.
Q. That would include an area that encompasses much of what's known as the North Maine Woods; correct?
A. It would include portions of the North Maine Woods, yes.
Q. It would not include this project area; correct?
A. I can't say what it would include.

MS. PRODAN: Mr. Chairman, I'm going to object to this line of questioning because it doesn't have anything to do with the project area.

MS. BROWNE: Well, with all due respect, we've had a lot of discussion about other areas in the state, and I think it is germane, and he testified he is not proposing to put this area into a park; he is involved in an organization that is seeking to put other areas of the state into a park, and I think that is directly relevant, and I have one more question on it.

BY MS. BROWNE:
Q. The Americans for Maine Woods National Park, that would not allow timber harvesting within that National Park, would it?
A. Well, you know, National Park -- this is -- I have written
about this rather extensively, I have the article with me here, and I will be happy to put it into the record that gives my views on land conservation in the State of Maine and is -- there are a wide range of options, as you know, for federal protection of land that ranges from national parks to preserves to designated wilderness areas, and those are all options that in any consideration $I$ have written about open to discussion.
Q. With all due respect, if you could just answer the question.

The Americas for Maine Woods National Park on which you serve on the advisory committee, that's a proposal for a national park that would not allow timber harvesting; correct?
A. National Park as far as -- I don't really know that.
Q. You don't know whether the --
A. The National Park allows any timber harvesting.
Q. If you don't know, that's fine.
A. I'm not positive about that. I cannot say. I would be happy to check it out.

MS. BROWNE: No need. Thank you, Mr. Chairman.
MS. PRODAN: Mr. Chairman, could I ask Mr. Kimber a couple of follow-up questions based on questions that the commissioners asked?

THE CHAIR: Yes, go ahead.

MS. PRODAN: Thank you.
EXAMINATION OF ROBERT KIMBER
BY MS. PRODAN:
Q. You were asked by Commissioner Schaefer whether Friends of the Boundary Mountains were planning to purchase the land in the project area.

Can you explain why Friends of the Boundary Mountains did not make a fund raising effort at that time?
A. Yeah, because there was no -- there was no willing seller of land that we were aware of, and as I mentioned before, earlier, the land was still encumbered and we had no -- in other words, we had no prospects that a private fund raising effort would serve the purpose of securing this land.
Q. Could you clarify what you were saying concerning future recreation possibilities?
A. Yes -- yeah, I mean, that came up in the discussion about declining interest in back country recreation at this point.

What I meant -- what I wanted to leave with the Commission is whether at this particular moment the Allagash or Acadia or any other National Park Service declining use is not a prediction of what the future is going to be, but if there is loss of land in which back country recreation is taking place, we have simply
foreclosed that possibly.
The other thing I think is so important about this is that Maine needs to have places where people can do these things.

It should not be -- no Maine citizen should have to go to Alaska to find land for some kind of wild country experience. Kids who grow up in Maine want to be able to go a few miles and find country that they can have that kind of experience and that kind of training in. That's my point on that.

THE CHAIR: Thank you, both. I think you're off the hook at this point. Thank you, again, for your testimony and answering your questions.

Moving on to the intervenor group consisting of a whole bunch of organizations, Maine Audubon, Appalachian Mountain Club, and the NRCM. Are you all going to be speaking or is it one person?

MS. JONES: Three of us.
THE CHAIR: And you know you have 30 minutes; is that going to work?

MS. JONES: Yes.
DR. PUBLICOVER: Chairman Harvey, members of the Commission, good afternoon or good morning, I guess it's still morning.

My name is David Publicover and I'm a senior staff
scientist representing the Appalachian Mountain Club, and I'll be followed by Jody Jones from Maine Audubon, then Dylan Voorhees from the Natural Resources Council of Maine.

The AMC supports the development of the Kibby wind power project. We believe that the project will make a substantial contribution to the generation of renewable energy in Maine, is well sited in a location that avoids the core areas of high resource value in the northern boundary mountains, will not add undue adverse impacts on significant natural resource values that are of concern to AMC, and through the conservation agreement, will provide enhanced protection to other mountain resources at greater value than those proposed for development.

We believe that the benefits of the project outweigh the inevitable and unavoidable impacts that will be created and which are common to most, if not all, wind power projects located in the developed high elevation areas.

The detailed justification for these conclusions is given in our prefiled written testimony and I will not repeat them hear, rather $I$ would like to take this opportunity to give you our perspective on several issues raised by Robert Kimber.

I will say, personally, $I$ find it a little painful to be opposed because I have great respect for Mr. Kimber and the other members of the Friends of the Boundary Mountains, but on this issue we have a different vision of the landscape.

The first issue is remoteness. The AMC clearly believes that remoteness is one of the jurisdiction's most unique characteristics and strongly support LURC goals and policies in preserving it, however; it is but one fact that needs to be considered.

Remoteness is a relative concept. It's difficult to draw a hard and fast line and say that one side of the line is remote and the other is not. In one sense it reflects distance from the fringe of the jurisdiction and from existing developing, essentially how long does it take you to drive from a particular area.

However, in another sense it reflects the character of the local landscape and the difficulty in accessing any particular point in that landscape. In important ways I would say that the high ridges of the Mahoosuc Range, which are relatively close to development, are more remote than the edge of the Golden Road in the heart of the jurisdiction.

I would ask you to turn your attention to the screen. Some work done by the Wildlife Conservation Society I think helps illustrate this. They have undertaken a global project to map what they call a human footprint, which is a relative measure of the impact of human uses on the landscape based on information such as population density, the presence of roads and other infracture, land cover changes, nighttime light pollution, and this shows the eastern United States.

The scale of human influence runs from relatively wild down at the green and yellow into the scale to very heavily developed at the darker red end of the scale.

What's clear is that the undeveloped lands of northern and eastern Maine stand out as by far the largest contiguous area of relatively low development in the eastern United States.

This is the jurisdiction. This is what you are charged with administering, and it illustrates why preservation of the natural character of the landscape and remoteness are such an important consideration. This is a unique and highly valuable landscape, not only for the state, but in the context of the entire country.

This is a somewhat more refined version of the analysis that was done by WCS Canada, and the pattern of existing development, if you know the Maine landscape, is fairly clear with sort of more heavy settled areas in the southern part of the state and the agricultural lands of Aroostook County, and some of the major route corridors, including Route 11, Route 201, Route 27.

And the shades of green and yellow represent undeveloped land where the primary impact is from timber management and logging roads. Essentially this starts to define the remote parts of the jurisdiction, tempered somewhat distance from roads and settlement.

I'd like to point out that certain areas, especially down in here along the Longfellows Mountains or the Appalachian Trail Chain, from the Mahoosucs, the west high mountains, the Moxie and from Bald Mountain, Bald Pond areas are relatively close to development; but, again, you can circumvent these areas on highways. But they are among the wildest and most natural parts of the jurisdiction. I would consider these areas what $I$ might call locally remote or mostly wild.

So this kind of illustrates why I think, especially with regard to wind power, adjacency may be problematic.

When we overlay the Class 4 wind resource from the true wind data on this map, it's clear that much of the strongest wind resource in the state -- especially in the jurisdiction -- is located in areas that would be considered remote, and we have again the areas stretching from the Mahoosucs to Bigelow, the northern boundary mountains that were discussed, this is the Coburn Mountain area, the high peaks of the 100-mile wilderness, Baxter State Park.

Now, there are some areas that at this scale don't show too well, but there are some Class 4 wind areas in more heavily settled areas primarily in the organized towns of southern Oxford and Franklin County near the Androscoggin River Valley.

So the boundary mountains regions, we certainly believe that the entire boundary mountains regions qualify as
remote and it's really only the presence of Route 27 that provides some local attenuation of that remoteness.

However, to hold that this entire area should be off limits to development, to wind power development, based on the remoteness criterion would create a stand that would effectively put much of the jurisdiction off limits to wind power development. Given the need for renewable energy development, we are not prepared to do this.

When we look at the boundary mountains region closer, it's apparent to us that the Kibby Range, which would be the site of most of the turbines in the project, are among the least remote parts of this northern boundary mountains due to their proximity to Route 27, and I've had the opportunity to hike up to the summit of the Kibby Range, and I actually found it to be one of the most easily accessed mountains that I've ever climbed.

The Kibby Mountain turbines up in this area are certainly somewhat more remote and would definitely qualify as remote by any definition. However, we do not believe that this should override all other factors involved in considering the project.

Within this region these area really lie outside what we would consider the core larger high elevation areas that are more wild and less fragmented.

Secondly, Mr. Kimber quotes from AMC Maine Mountain

Guide as to the scenic value of the view from the summit of Kibby Mountain. There's no question that the project will have an impact on this view. However, in evaluating the project we consider not only the impact itself but the relative value of the resource that is affected. We give greater weight to impacts on major trail systems and high recreational use areas than we do to more locally significant resources.

We do not mean to degrade the value of the Kibby Mountain Trail, as we consider these local trails to be an important component of the recreational landscape, however, we are not prepared to draw a scenic exclusion zone around every secondary trail in this state.

Third, Mr. Kimber cites the Northern Forest Alliance of Wild Lands Report as to the value of the area proposed for development. These areas were delineated by the Alliance about a decade ago to bring attention to large areas that we believe should be a focus for conservation attention and over time they have served this purpose well.

However, delineating these areas and the NFA's vision for them, the potential for wind power development received little consideration. Neither the NFA as a whole or the Maine caucus of the NFA has ever established a position regarding wind power development in these areas, and that is intentional. There's simply no consensus among the Alliance on this issue. They were never intended to be, and are not suitable
for use, as de facto wind power zoned areas. They are far from course for this purpose. There are areas outside of the wild lands that I would consider unsuitable for development and areas that $I$ would consider suitable.

The same can be said for the information from the Northern Forest Inventory document developed by AMC and Maine and New Hampshire Audubon. The report was issued in 1993 and represents our earliest attempt to understand resource distribution across this landscape. However, even more than the wild lands report, this analysis is far too coarse to serve as a useful guide for detailed land use planning or the evaluation of individual properties.

The area Mr. Kimber cited -- P-D-1 -- extends from Moosehead Lake to the Canadian border, and from boundary Bald Mountain down to The Forks. Within this area there is great variation as to resource value, level of development, includes organized towns and settlements.

The decision to support this project was not easy for
AMC. We recognize that it will have impacts but believe that the benefits of the project outweigh these impacts. We also recognize that reasonable people in possession of the same information will reach different conclusions as to where wind power is acceptable.

Based on our evaluation and our organizational values, this project falls on the acceptable side of the line.

And we thank you for the opportunity to testify.
Now I'll give it over to Jody.
MS. JONES: My name is Jody Jones. I'm a wildlife ecologist with Maine Audubon, and I appreciate the opportunity to come before you today to talk about the TransCanada project.

I would just like to add, I, too, find it difficult to be on the opposite side of all the folks sitting at the Friends of the Boundary Mountains' table, whom I've worked with at different times.

In looking at the wildlife impact, there are two basic areas of concern that we looked at in determining where to draw the line, which is what $I$ think what we're all struggling to do. The potential for collision mortality and the habitat loss due to degradation and loss from footprint.

In looking at the habitat loss and degradation, what I looked for in the Kibby project was have they avoided the highest valued habitat species and the fact that they put together a mitigation package was beneficial, as well, and that mitigation package included Peak C and D and funding for a high mountain area resource value.

In terms of the Bicknell's thrush, which we've talked a lot about in the last month or so, minimizing the risks to this special bird, again, I was looking for the applicant to avoid the higher elevation areas, which are known to have the characteristics for the birds and also the place that $I$ feel is
really important, that there should be no turbines within current breeding territories.

The TransCanada project put 12 of their 46 turbines below 2007 hundred feet; 36 of the 46 turbines are below 3000 feet; and one turbine was above 3200 feet.

They also removed the turbines that were proposed initially at Kibby Mountain from the plan, and no breeding birds were found either on Kibby on the remaining portion of the A Series and the B Series, and even though they have done five surveys to try to locate the birds, they had found some early on previously, but those were likely to be either birds that were investigating the area and didn't find the appropriate habitat or migration.

In the additional protection in the $C$ and $D$ weighed heavily where Bicknell's thrush were identified as part of the avoidance.

I don't think I have to talk too much about northern bog lemming except that in trying to minimize any of the impacts, looking for the high elevation sphagnum matts to be completed avoided and to place any turbine streams outside areas that would have hydrological impact, and to protect upland foraging areas.

This is the graphic that's in the application. It's difficult to see, but the northern bog lemming habitat in the sphagnum wetlands are all -- the project area is all downslope
from the area which would reduce and minimize any impacts from the project on the hydrology of the northern bog lemming habitat and upland area, and it was outside the entire sub watershed also contributing to protection and minimizing impact of the northern bog lemming, and also within that area have kept out of the area which is the foraging habitat for that species.

Minimizing migratory impacts to migratory birds and bats, there are issues associated with this, which made it difficult to assess, and I think you've heard a lot about that already.

We have limited data, the National Academy of Sciences' report on impacts to wildlife from wind power projects indicated, there are only 14 studies currently available at wind power sites that look at mortality, so we don't have a lot of information available to go on.

Forested ridges have been identified as higher risk sites in that same report, which indicates to me that every project here in Maine needs to do before- and after-impact studies and use standard methodologies. And then, once those studies have been done, we should try to avoid the highest use areas for a variety of species.

Okay, in assessing the risks $I$ wanted to make sure TransCanada used standardized methodologies and to avoid the highest use sites for raptors, neotropical migrants, bats, and
rare species.
In terms of the migratory birds and bats, they did avoid -- none were identified in that particular habitat. The raptor passage rate was low abundance compared to other projects; bats were low abundance; but what about neotropical migrants?

In assessment of the risks, I wanted to make sure that the methodology that they used, again, were standard, that the level of effort that they used was appropriate. We determined that it was. That the timing, that they captured the relevant time periods, and results were, from our perspective, that this site has what $I$ would characterize as a moderate passage rate, 300 targets per kilometer per hour, and the percent was below the rotor swept area, which we measured was about 14 percent.

It was also important to Maine Audubon that because we do not know very much about the impacts of migratory species, what we do know about the lighted communication towers, which are -- some of them, I'm not sure about the ones that Dr. Wilson indicated -- but some of them are 1500 to 2000 feet tall, reach higher up into the area, and are different -they're just different but they do indicate that there may be a problem.

So what's really important to us was that they had post construction studies, that those studies used standard
methodologies that $I F$ \& $W$ agreed with, and also that they put together a decommissioning plan that called for removal of above-ground structures, a guarantee of funding by the applicant, and the cost determined by an independent third party.

So in closing, Bicknell's thrush breeding locations were avoided, the northern bog lemming, it wasn't its core habitat and forging area. They did the appropriate studies and found relatively low use for some the species that are of concern, and a migrant level for the northeast, and they put together a mitigation package, post contraction for the decommission.

Thank you for your time.
MR. VOORHEES: Good morning. My name is Dylan Voorhees. I'm the clean energy director for the Natural Resources Council of Maine.

I want to start by thanking the commissioners for their continuing and remarkable commitment to hearing about these issues. These are not easy or simple decisions, and we really do believe that.

A brief overview of this project. We believe it strikes an even better balance of benefits over impacts than the previous Kenetech wind farm. We believe the project has no undue adverse impacts on existing uses and resource values. We believe it meets a clear demonstrated need, both
environmentally and economically, provides a very substantial clean energy benefit, and includes significant land mitigation.

While Kibby, we believe, is definitely its own project, the comparison to Kenetech is a natural one. NRCM looked very closely at the balance of impacts and benefits of the Kenetech project in the early '90s, and we have looked very closely at the Kibby project. We believe the balance has significantly improved since then, which is why we are strongly supporting this project.

The environmental footprint of this project is dramatically smaller than the Kenetech project permitted in 1995. We believe it's especially better in terms of the P-MA zone, for example, requiring 14 miles of new roads instead of 40. LURC review criteria, we believe, has not changed significantly since that project was permitted.

The most dramatic change from Kenetech to Kibby is the scope of impact across the region's landscape. This map shows in red those areas that were previously proposed for turbines and in squares where the Kibby project would be located.

The Kenetech project would have climbed all the way up and over the peak of Kibby Mountain and covered peaks like Tumbledown it and Three-Slide Mountain. These areas are closer, as Mr. Publicover testified, to a core of a remote roadless area with rare identified natural communities.

I'm not going to go through this chart in detail but it provides further illustration of this comparison between the two projects.

Now, some things have changed since Kenetech prompting NRCM and obviously the Commission to take a fresh look. Some of these things include today a greater understanding of the negative environmental impacts of fossil fuels and the need for clean energy. In some cases we have more detailed or updated wildlife and natural community information, for example, better mapped natural communities, a greater knowledge about the ecology of some threatened species, and thought it's limited, more knowledge about the impacts of wind power.

In addition, the Kibby project uses different larger turbines. These modern turbines in fact are what enable the project to have far smaller impacts while delivering a significant quantity of clean energy. They are much taller, there can be no doubt about that.

Because the blades are set high above the trees, the project actually doesn't require the clear cutting of the top of the ridgelines to harness wind power, which would have been required for the smaller turbines at Kenetech.

As I said, obviously it's important to take a fresh new look at this project, and one of the most important tasks, we believe, is to evaluate impacts on existing uses, including
recreation.

First, we believe that most existing uses will experience little to no impacts, such as forestry, motorized recreation; and second -- and we've been over this so I won't go into it in detail -- the impact on primitive recreation we believe will be relatively small mostly because this is not an area that attracts significant numbers of hikers, campers, hunters seeking a wilderness experience.

It is used by a small number of users, as we've discussed. This small level of off-trail use does not rely on any special resource activity, and we do not believe it precluded wind development.

The third, it is undeniable that the project will have an impact on scenic views from Kibby Mountain. Similarly, visibility from a beautiful but secondary trail should not preclude wind power. If it did, it would probably preclude wind power in most of the jurisdiction and perhaps even development in general.

Remoteness as we know is difficult to define, and there's no question that the western mountains are an important and special region. The Commission is not being asked to rezone the western mountains or the boundary mountains. If the definitions and applications of remoteness and resource protection proposed by some are applied across western Maine, we believe it would prevent Maine from obtaining its renewable
power goals, certainly doing so at any reasonable cost, and we believe this is contrary to the Comprehensive Land Use Plan, which calls for balance and appropriate energy resource utilization.

I think the bottom line is we do not believe that this wind power project is incompatible with preserving a sense of remoteness in the region or with maintaining significant opportunities for back country recreation.

I think there probably is relatively little debate about the demonstrated need for wind power in Maine. The finding of the 1995 Commission, some of which are quoted in my testimony here, I think are clear.

Again, this project, while deserving a fresh look, we believe that the need has actually increased. As you know, scientists from the United Nations down to the University of Maine are telling us that the threat of climate change is real and is real for LURC jurisdiction. As a result, Maine's legislature has passed as recently as this year numerous bills which call for an increase in renewable power and wind development in particular.

I'd like to point out that the renewable portfolio standard in Maine is not dissimilar from the policy in Quebec called an RFP that called for a significant amount of wind power to be developed. It's slightly different approaches of how that happens but a similarly set, a very specific goal for
the State, in terms of the development of clean renewable energy.

We hope that the Commission appreciates that what matters to Maine is not simply a number of wind power projects but the actual amount of clean energy. This project has a very large clean energy benefit when compared to other wind projects or the biggest hydropower dams in the State. These hydropower dams are shown here, and the Kibby project in yellow, and this is, again, actual generation, not capacity.

This project would produce two to three times more energy than Mars Hill or Stetson or Black Nubble. It's similar in actual energy output to the second largest dam in the state, Wyman Hydro.

So we believe Kibby will play a significant role in helping Maine meet its need for new clean energy.

So the environmental benefits of wind power are real and meaningful, we think that is clear. There is no silver bullet. Many approaches are needed and a broad energy strategy is needed.

We believe this project plays a role in an existing broad energy strategy in Maine, a strategy that includes carbon regulations and RPS law, a comprehensive plan for climate action. We have an energy strategy. We believe that clean energy should become a critical strategy for the long-term protection of the LURC jurisdiction and its values as well.

So briefly, in summary, the project, we believe, has no undue adverse impacts, it provides a significant amount of clean generation, clean power, which will help us reduce our dependence on fossil fuels, and in short, we believe it is in the best interest of the people of Maine.

Thank you very much.
THE CHAIR: Thank you. Is that -- everybody has spoken?

MS. BURNS GRAY: Mr. Chairman, we would like to offer Mr. Publicover's slides as an exhibit.

THE CHAIR: Okay, you may do that. Since it's close to 12 o'clock, I guess we'll take our lunch break now and try to come back around 12:30, and we'll do cross-examination by whomever -- TransCanada, obviously, has the first crack at you. We'll go from there. Let's get back around 12:30, please.
(There was a luncheon break in the hearing at 11:57 a.m. and the hearing resumed at 12:39 p.m.)

MS. BROWNE: Thank you, Mr. Chairman. There were five PowerPoint presentations during TransCanada's presentation that we provided copies to everybody of. I won't try to number them because $I$ know you have your own numbering system.

There was also an October 1st letter to the Commission and the parties that we referred to as supplemental application material, which was circulated yesterday.

We have also -- would like to move in the four

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PowerPoint presentations that were provided to the Commission
on August 1st. That included the PUC material, the DEP's
material, Office of Energy Independence and Security, and the
ISO material. That's been provided to the parties now, as
well, and we have also done 11-by-17 versions of the poster
boards just so that they're in the record as well.
    The two exhibits that I used in the cross of Bob
Kimber, we would also like to move into the record. I don't
have of copies of those but I will provide copies as well.
    I think that's it.
    THE CHAIR: Thank you.
    MS. PRODAN: For Friends of the Boundary Mountains,
the only exhibits that we have to move in at this time are the
PowerPoint presentation and the written statement by
Mr. Kimber. We've already provided those copies.
    THE CHAIR: Is that statement different than his
direct testimony, then, of the rebuttal?
    MS. PRODAN: It contains the same information but he
wrote it so that he could read it.
    THE CHAIR: What he said here today is what you're
referring to?
    MS. PRODAN: Yes.
    THE CHAIR: That's fine. So that's all in the
record.
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    All right, any other intervenors that have exhibits
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that need to go into the record, it's time to do it now.
    We're going to begin the cross-examination of this
group of witnesses by the applicant. Unless you're waiving a
set time.
    MS. BROWNE: I am.
    THE CHAIR: So I guess we move to the Friends of the
Boundary Mountains. I notice, Pam, we've given you 70 minutes.
I assume you plan to use all of that?
    MS. PRODAN: Yes, Mr. Chairman, I do plan to use 70
minutes.
    THE CHAIR: All right. Please proceed.
        EXAMINATION OF JODY JONES
BY MS. PRODAN:
Q. Good afternoon, Ms. Jones.
A. Good afternoon.
Q. If you could define Maine Audubon's area of interest in
    these wind power proceedings in one or two words, would it
    be wildlife? In one or two words.
A. I think Maine Audubon brings a special expertise in the
    wildlife and wildlife habitat area if that answers your
    question.
Q. Thank you. Maine Audubon is not particularly interested
    in protecting a remote or undeveloped area, just for the
    sake of that, is it?
A. Well, I would say that we participate in the Northern
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Forest Alliance and that, you know, we're part of those discussions as well.
Q. But these are not values -- remote and undeveloped is what I'm talking about -- that Maine Audubon has in its mission or its purpose; is that correct?
A. I don't believe it is in our purpose or mission.
Q. Was it a condition of your support for this project that TransCanada agree to conditions on the development in the project area?
A. Can you elaborate on that?
Q. Yes. Maybe I should just rephrase that slightly. Was it a condition of your support for the Kibby project that TransCanada agree to conditions on the wind power development?
A. Well, we worked with TransCanada over several months, and during that time they addressed a number of our site-specific concerns.
Q. Would Maine Audubon have given its support to this project if TransCanada had not agreed to address your concerns?
A. Would we -- okay, there's a negative in there. Basically if TransCanada had not met our concerns, we would not be supporting the project today. Does that answer your question?
Q. Yes. That's your statement then?
A. Yes.
Q. Did you say on Page 5 of your prefiled direct testimony that it was important to Maine Audubon to have a strong decommissioning plan because you don't want ghost turbines to continue to pose a hazard to migratory wildlife?
A. Yes.
Q. What do you mean by continue to pose a hazard?
A. Well, this is an important piece for Maine Audubon because although we don't have information on specific, how these particular turbines -- let me just start over.

Out in California at Altima Pass, there are turbines that are continuing to cause problems for birds out there. And so we recognize that this technology, as it moves forward in the east, if -- that it's important that if for some reason birds are being killed by these turbines that they -- we recognize that there are certain risks of any -- any structure up in that area, and we want to reduce those risks to the maximum extent possible, so decommissioning plans are part of that, yeah.
Q. So you're acknowledging that there is going to be a risk from the structures while they're operating also; is that correct?
A. That's right.
Q. When you -- excuse me. When Maine Audubon evaluates a wind power project, does Maine Audubon actually calculate the risk to birds based on what the projected bird kills
could be?
A. No, I'm not aware of anybody who has the type of data necessary to do that level of risk assessment.

What we do is try to assure that the applicant has provided the necessary preconstruction assessments and follows standard methodologies because without those, we cannot determine the correlation between the mortality and the avian use, so that's of prime importance to us.

Once those assessments are conducted, we look at that relative to what we do know in terms of other project areas and determine whether or not the passage rate and the use of the area is -- how it relates to the other projects.

I will grant you that the data in that area is limited. The National Academy of Sciences has 14 studies indicating the mortality at wind power facilities but we're starting to get more information annually on behalf of passage rate and how that might relate to mortality but we don't have it yet.
Q. Has Maine Audubon ever determined a level at which bird mortality would be unacceptable?
A. A level of mortality, no, from wind power projects?
Q. Yes.
A. No.
Q. In terms of the standard of no undue adverse impact that
has to be met for approval, what would you consider to be an undue level of avian mortality?
A. Well, I think -- I don't believe -- I think the way to answer that best is that once we know what species are being impacted and at what levels, we need to determine whether or not that's going to effect the regional population first.
Q. Do you know if TransCanada has done avian or bat studies in Quebec at their wind project?
A. I'm aware that they've done some in the Gaspê.
Q. Have she offered to share any data with you on that?
A. They have, and I did receive it but it's in French. That was a problem for me.
Q. Do you think that might be because mortality might be high?
A. No, I don't think so, but that's just my personal opinion. I don't think -- I don't know how to answer that one.
Q. Were the numbers in French?
A. Well, I couldn't --.
Q. Would you agree that Bicknell's thrush is what is called a disturbance specialist?
A. Yes.
Q. Regarding the presence or absence of Bicknell's thrush, there could be ice storms or other events to create the scrub needed in the Kibby project area, couldn't there?
A. I looked at that in terms of the elevation of the project. Those types of activities are much more prevalent at higher elevations, so my answer to that is that my belief was that there was less likelihood of creation of that kind of habitat at the elevations where the proposed project occurs. That, in addition to the protection of the $C$ and D areas, which were at higher elevations with documented Bicknell's thrush occurrence led me to the conclusion of no undue adverse impact.
Q. In fact, Bicknell's thrush were documented on the Kibby Range and in a regenerating clearcut, wasn't it?
A. Yes, it was, outside of the project area.
Q. Are you aware of the Vermont Institute of Natural Science computer model for determining suitable Bicknell's thrush habitat?
A. I am.
Q. And does not the elevation at which Bicknell's thrush is predicted to be found decrease with an increase in latitude?
A. That's correct. That's a landscape level model, and what I typically look for in these projects is site-specific information to determine where we would draw the line. Q. Wouldn't you say that it's likely during the next 25 years Bicknell's thrush habitat will be created in the areas proposed for development?
A. Could you say that again, Pam.
Q. Wouldn't you say that it's likely, based on what you know, that during the next 25 years Bicknell's thrush habitat will be created in the areas proposed for development?
A. From cutting or from windthrow?
Q. I'm talking about the wind power development areas.
A. Oh, from the actual project area itself? I'm confused, I'm sorry.
Q. I can rephrase that so maybe it's more clear.

Wouldn't you say that it's likely that during the next 25 years Bicknell's thrush habitat will be created by whatever causes in the areas proposed for the Kibby development?
A. Well, you know, as I stated before, I think the lower elevations make it less likely that natural disturbance will be causing those types of disturbances to create Bicknell's thrush habitat.
Q. Where the Bicknell's thrush was documented on Kibby Range, was that on top of the ridge or at lower elevation on the ridge?
A. I'd have to look that up. I could point to it on a map. It was in a small isolated patch that was observed I think a couple of times in the spring and not again.
Q. So you weren't paying attention to where on the mountain those occurrences were when you saw the testimony --
A. Like I said, if I had the map in front of me I could point to it. So I did pay attention.
Q. You didn't notice whether it was on the top of the range or on --
A. It was on the shoulder.
Q. Isn't it true that the Bicknell's thrush population are known to fluctuate because of the red squirrel population fluctuations?
A. Yeah, red squirrels are a pretty heavy predator of Bicknell's thrush nests.
Q. So in some years there might be very few Bicknell's thrush observed; is that correct?
A. Well, they would be attempting to nest, so you would actually observe them, but the productivity would be down.
Q. Isn't it agreed by ornithologists that any documented gray-cheeked thrush prior to 1995 occurring in Maine was a Bicknell's thrush?
A. Any documented gray-cheeked thrush prior to 1995 was a Bicknell's thrush?
Q. Yes.
A. Occurring in Maine?
Q. Yes.
A. I think that's probably likely. I mean, that's when the species was separated from the gray-cheeked thrush.
Q. Thank you. Do you know everything now that you need to
know to be able to properly conserve Bicknell's thrush habitat, or will you learn more?
A. I'm sure I'll learn more. I'm sure everybody will. I think there's a lot to learn about this particular species.
Q. Based on what you said in your PowerPoint concerning minimizing risks, has anybody done a credible analysis as to whether the benefits of wind power development outweigh the costs of high mountain development? And this is the benefits for Bicknell's thrush versus the cost for Bicknell's thrush.
A. No.
Q. So it's your opinion that that study just hasn't been done yet; is that correct?
A. I'm -- I'm not sure what you mean. I'm sorry.
Q. Okay. Has anybody done a credible analysis as to whether the benefits of wind power development outweigh the costs of high mountain development on Bicknell's thrush?
A. I think what you're talking about is the benefits that are accrued from decreased emissions and mercury that's going to help Bicknell's thrush versus building within their habitat, is that what you're trying to say?
Q. Yes. I'm sorry I didn't make that clear.
A. I understand now.
Q. Do you think that study has been done?
A. No.
Q. Thank you.
A. You're welcome.
Q. Regarding off-site mitigation in the Mahoosucs that is proposed under the agreement with TransCanada, can you explain how this will help the organisms, such as birds, that encounter the development in the Kibby project?
A. No, I don't think that -- I would probably point to the C and D area as more relevant than the Mahoosuc area.
Q. I'll ask about that.

How does maintaining the status quo basically on Kibby Ridge C and D mitigate when there's no improvement over what's there now?
A. Well, the certainty that there will never be wind power generated on those ridges is the benefit in our estimation.
Q. Does the agreement with TransCanada include a -- strike that.

Does the agreement with TransCanada preclude
TransCanada from building a transmission line in Kibby Township or Skinner Township?
A. I don't think it does.

MS. PRODAN: Thank you. Good afternoon, Dave. DR. PUBLICOVER: Good afternoon.

EXAMINATION OF DAVID PUBLICOVER

BY MS. PRODAN:
Q. Isn't it true that roadless areas are shrinking in Maine generally speaking?
A. That's true.
Q. And they're smaller now than they were 10 years ago; isn't that correct?
A. That's probably correct, yes.
Q. Is there any reason why they won't continue to shrink?
A. I think in some places they will continue to shrink.
Q. You said in your testimony -- or in your presentation this morning on balance you feel the benefits of this project outweigh the harm; is that correct?
A. I believe I said that, yes.
Q. On Page 3 of your prefiled testimony you say, "As a condition of this support, we have entered into a conservation agreement with the applicant that will provide additional off-site protection to high value mountain resources, both within the vicinity of the project and elsewhere; correct?
A. Yes.
Q. So if the agreement weren't in place, you wouldn't be giving your support to the project, would you?
A. If the agreement wasn't in place, I can't say what our position would be. We certainly would not oppose it because the mitigation presumes that we've already
determined that it's an appropriate site.
Whether our position would be one of qualified support, neutrality, would require some fairly hard thinking on our part and we never had to get to the point of doing that. But it would not have led us to oppose the project.
Q. The intervenor's agreement doesn't preclude TransCanada from building a transmission line under its easement running with the land to tie in other mountain ranges outside of the ridges in the Kibby $D$ and $C$ project area, does it?
A. I'm not sure it prohibits building other transmission lines. I'd have to look at the agreement, but I believe we have a provision that says that the existing transmission line that they're proposing on this will not be used to transmit power from additional sites in the Kibby and Tumbledown Mountain area.
Q. Did you summit that with your testimony?
A. It was submitted as part of TransCanada's testimony.
Q. Okay. Is there any protection in the agreement you signed with TransCanada against further roads?
A. In the $C$ and $D$ areas?
Q. Anywhere.
A. No, the agreement -- Kibby only has the right in those other -- the remainder of the $A, C$ and $D$ areas. They only
have the right to construct wind power.
If Plum Creek wants to build roads in those areas, they have the right to do so. That was one reason why we extended the mitigation to an off-site area because TransCanada did not provide complete and full protection of those $A, C$, and $D$ areas.
Q. Does the intervenor's agreement with TransCanada prohibit subdivision in the Kibby project area?
A. No, it does not.
Q. Then does it prohibit development other than wind?
A. No, it does not.
Q. Then this is not a conservation easement, is it?
A. It's not a conservation easement, no.
Q. But that's how you referred to it in your testimony, is it not?
A. I think I called it a conservation agreement.
Q. On Page 3 of your testimony, could you look at the top line? Do you not state that --
A. Are you talking about -- okay, my prefiled testimony, Page 3 --
Q. Yes.
A. -- entered into a conservation agreement with the applicant, yes.
Q. It's a conservation agreement but not a conservation easement; is that right?
A. There's two parts. There's TransCanada's agreement to permanently forego development of the $A, C$, and $D$ areas and it's a contribution towards the funding of a conservation easement on the Stow Mountain parcel.
Q. But in the boundary mountains --
A. In the boundary mountains --
Q. -- there is no conservation --
A. It is not an easement.
Q. -- correct? In fact, would you agree that it would not be possible for anyone to purchase a conservation easement or the underlying lands in Kibby and Skinner Townships without extinguishing the wind rights and the transmission rights that haven't been extinguished to date; correct?
A. Say that again.
Q. You agree that it would not be feasible for anyone to purchase the underlying lands or a conservation easement in Skinner and Kibby Townships without extinguishing the wind rights and the transmission rights that are there?
A. No, I don't agree with that. You can have a conservation easement that would recognize existing outstanding rights that would not be extinguished by the easement for the purpose.
Q. In other words, it's your position that an area could be developed for, let's say, a transmission line for wind power and still qualify as a conservation easement area?
A. Conservation easements can cover any range of things. You can have easements that prohibit one specific use, you can have easements that prohibit most uses.

Conservation easement is a highly variable instrument that can be tailored to cover whatever rights the parties are interested in conserving.

You could have a conservation easement that allowed the construction of a transmission line, yes.
Q. So you think that there could be a conservation easement in Skinner and Kibby Townships even after wind power would be developed there by TransCanada; is that your position?
A. Well, I suspect the easement would not cover the areas that had been developed.
Q. But it's your position that the area surrounding the development could be protected by a conservation easement even if there were wind turbines developed as is proposed?
A. You could have an easement that covered the undeveloped lands around the wind power proposal, yes.
Q. Is it your position that conservation values are not impacted by the development --
A. That's not my position.
Q. -- such as what's proposed?
A. That's not my position at all.
Q. In order to have a conservation easement, there would have to be some conservation value to the easement, would there
not?
A. There would be.
Q. Do you think that the construction of the Kibby project -and the transmission line for it -- will increase or decrease the likelihood that other mountains in that area would be proposed to be developed for wind power?
A. I couldn't say.
Q. Would you see that as a positive development if other areas were proposed to be developed for wind power in that region?
A. It depends on what other areas. I think in general I would not like to see a significant expansion of wind power development in this region because I think there may be some additional kind of fringe areas within that region; but certainly expansion into the core higher elevation areas I would consider that to be a negative development.
Q. So is that how you're defining significant just staying out of the core area?
A. I think significant is a relative concept. I think there are some parts of the boundary mountains that are more valuable than others.
Q. Are you arguing in this proceeding for a lowering of the protection afforded by the P-MA subdistrict designation?
A. No, I don't believe I am.
Q. I thought you just implied that there's some areas that are more valuable than others in the boundary mountains?
A. There are.
Q. Do you not think that all of those elevations over 2700 feet are afforded some protection under the P-MA designation?
A. I think they are afforded some projection, yes; but I don't think that protection extends to a complete prohibition on wind power development.
Q. But you're in favor of ranking mountains in the $P-M A$ subdistrict, in other words; isn't that right?
A. Yes, that's some of the analytical work we've done has been aimed at sort of understanding the relative value of different mountain ridgelines. Yes.
Q. Isn't it true that you would like to see some areas in the P-MA subdistrict with higher -- what you consider to be higher resource values continue to be protected while others could be developed with wind power?
A. Our position is that we think that it has been that LURC should adopt a more refined definition of allowable uses in $P-M A$ zones such that some would be designated as off limits to wind power and others would be available for consideration.

I don't think that's different from the type of approach that LURC has taken with their management
classification of lakes. Some lakes have been designated as a higher value and there are greater restrictions on development on those lakes.
Q. At this time is there any mention of mitigation or compensation in LURC's regulations with regard to the development proposed in D-PD zones?
A. No, there is not.
Q. But you're advocating that that be considered as a mountain concept type of proposal?
A. Yeah, we actually think what we've proposed is in some way fairly similar to a lake concept plan.

It is our position that any rezoning of a P-MA zone for wind power or other development would require compensatory mitigation in order, by our interpretation, in order for the substantially equivalent protection clause to be met.
Q. And you feel that this type of mitigation could take place off site, do you?
A. I think in some cases it has to.
Q. In one situation here with the agreement with TransCanada, you actually are supporting some compensation or mitigation that is close to the project; is that correct?
A. Yes.
Q. Let me ask you --
A. Let me just say that our original proposal for

TransCanada -- our original goal was to focus the mitigation entirely within the northern boundary mountains region but that proved to be not practical.
Q. Let me ask you, how does maintaining the status quo on Kibby Ridge mitigate when there's no actual improvement over what's there now?
A. I would echo what Jody said that prohibition of future wind power development, I believe, is a benefit and enhanced protection over what would be allowed now.
Q. So you do believe that this project will be permitted, do you not?
A. Excuse me?
Q. You do believe that this project will be permitted; correct?
A. I have no idea. I can't read the minds of the Commission.
Q. So this is just a back-up plan in case they do approve it?
A. If they don't approve it, there is no mitigation because there's no impact.
Q. But if they do approve it, then your plan is that at least some areas would not be rezoned for wind power; is that right?
A. Yes.

MS. PRODAN: Mr. Voorhees, good afternoon. MR. VOORHEES: Good afternoon.

BY MS. PRODAN:
Q. You attached to your testimony some testimony of Dr. Jeffrey Wells from the Black Nubble proceeding; is that correct?
A. That is correct.
Q. And you also quoted from Dr. Wells in your testimony; is that correct?
A. Yes.

MS. PRODAN: I'm going to ask the presiding officer if we could strike -- not really strike -- but we object to the use of the testimony of Dr. Wells being submitted in this proceeding without having Dr. Wells available, and we also object to the extracted findings from Dr. Wells that Mr. Voorhees has included in his testimony.

We just object to it for taking it for the truth of the matter discussed by Mr. Voorhees staying in there as long as it's understood that this is simply in the record for -- to show why Mr. Voorhees and NRCM have taken the position that they've taken.

MR. VOORHEES: Can I comment on that?
MS. PRODAN: I'm not quite finished.
It's our position that $N R C M$ should have made
Dr. Wells available in this proceeding as well if they wanted to use his testimony. He should have been available for cross-examination.

THE CHAIR: So you're asking me to exclude all of his testimony or all references to Dr. Wells' testimony?

MS. PRODAN: I think there is some value in that it certainly does explain that $N R C M$ has relied on someone, but we really do object to any use of the findings or any use of the testimony of Dr. Wells because Dr. Wells is not here for us to cross-examine. We did not have that opportunity at Black Nubble because we were not a party.

THE CHAIR: So your remedy is that we should not consider anything Dr. Wells had to say; is that what you mean?

MS. PRODAN: Not in this proceeding.
THE CHAIR: Is somebody going to say something?
MS. BURNS GRAY: Yes, Jennifer Burns Gray for the intervenors.

I would just like to point out that Ms. Prodan did not request that Mr. Wells be available for cross-examination in her list of requested.

MS. PRODAN: Mr. Wells did not submit prefiled testimony.

MR. VOORHEES: Can I also point out that many intervenors, probably most of them, have referred to other studies that are done and attached them and also quote from them in their testimony.

THE CHAIR: I think what we're going to do is we'll allow -- I think that Ms. Burns has pointed out that there's a

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lot of testimony submitted from studies from all over the place
and that we will allow your testimony to be included with
objections noted by Ms. Prodan and that we will give it the
weight which it is due.
    MS. PRODAN: Thank you.
BY MS. PRODAN:
Q. Mr. Voorhees, NRCM has intervened in the Plum Creek
    proceeding, hasn't it?
A. Yes.
Q. NRCM is concerned about the impacts of the Plum Creek
    project, isn't it?
A. I think that is easy enough for me to answer, but I would
    point out that I am not aware of the details of our
    involvement in the Plum Creek.
    THE CHAIR: What was the question, Ed?
    MR. LAVERTY: Repeat your question.
    MS. PRODAN: I accept that he's not aware of the
details.
    MR. VOORHEES: We are opposed to the Plum Creek
development.
    THE CHAIR: I don't think we want to get into
Plum Creek testimony.
    MS. PRODAN: I don't either, actually.
    THE CHAIR: Let's stay with the subject and keep us
all out of trouble.
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BY MS. PRODAN:
Q. Plum Creek is the underlying owner of the Kibby and Skinner Townships, isn't it?
A. I believe so.
Q. If this project is approved, what kind of a message does NRCM think it sends to Plum Creek and other landowners in western Maine from NRCM?
A. I guess that we're not trying to send any messages as part of our position here. We believe that the project is in an appropriate place for wind power, and if it sends that message, we will be comfortable with it.
Q. When was the current land use plan adopted by LURC?
A. 1997, I believe.
Q. Would you agree that there are currently CLUP policies in place that were not in place for the Kenetech decision?
A. Yes.
Q. However, in your testimony you indicated that it was your belief that it was -- that the criteria is the same?
A. I don't believe that we testified that it is identical. We believe that it is substantively the same.
Q. On Page 3, you refer to the middle paragraph there and read the first sentence.

MS. BROWNE: Page 3 of the CLUP?
MS. PRODAN: No, Page 3 of Mr. Voorhees' direct
testimony.

THE WITNESS: Tell me where on Page 3.
MS. PRODAN: The middle paragraph, starting, "It." MR. VOORHEES: It is important to note that the valuation criteria utilized by the Commission in reaching its decision to endorse the Kenetech project have remained essentially unchanged since 1995.

I think essentially unchanged is quite similar to my statement just now, substantively the same. BY MS. PRODAN:
Q. Have you checked to see whether there are any new policies in the CLUP concerning energy that are different from what was in the old CLUP?
A. As I said, I think there are changes in the two CLUP documents. I can't specifically articulate the exact wording that changed from this CLUP to the previous one.
Q. I'd like you to compare right now, actually, the old CLUP to the current CLUP concerning energy policies.

First, the old CLUP on -- Page 71 of the old CLUP -this is the document with the green cover that is the prior CLUP, and this goes to the question of --

THE CHAIR: Could you just tell us the date, Pam, so we know.

MS. PRODAN: Originally adopted in 1976, revised in 1983.

THE CHAIR: So you're talking about the 1983 CLUP.

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Was that the one -- I assume you're getting to the question of
which one Kenetech was --
    MS. PRODAN: I'm --
    THE CHAIR: -- approved on.
    MS. PRODAN: I'm questioning Mr. Voorhees' testimony
that the policies were the same at the time of the Kenetech
proceeding as they are now.
    THE CHAIR: Okay, the CLUP you're referring to is the
one in which Kenetech was reviewed under; right?
    MS. PRODAN: Yes.
    THE CHAIR: That's the 1983 CLUP?
    MS. PRODAN: Yes, it is.
    MR. HARVEY: And then the next CLUP wasn't until
1997; right?
    MS. PRODAN: Right.
    THE CHAIR: Ed, does that satisfy your question?
    MR. LAVERTY: Yes, I just wanted to know the
document.
    MS. BROWNE: We don't have copies.
    MS. PRODAN: No, it's sort of a historic document.
BY MS. PRODAN:
Q. On Page 70 you will note that it discusses energy
    resources and there are six goals; is that correct? This
    is the --
A. Yes, that's correct.
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Q. -- earlier CLUP. Could you repeat that?
A. Yes, that is correct.
Q. In the discussion on energy resources in the new CLUP on Page 136, how many goals are there?
A. Eight -- actually there's one goal, there's eight policies.
Q. I see. They're now called policies.
A. There's one goal, it appears to be the same, and there are now eight policy statements instead of six.
Q. Could you please read Policies 7 and 8 in the current CLUP?
A. Allow new or emerging energy technologies which do not have an undue adverse impact on existing uses and natural resources. Limit the scale of new or emerging energy technologies where feasible to allow time for the Commission to evaluate the technology and impacts in large-scale applications.
Q. Thank you. Would you agree that this is the largest wind power proposal LURC is considering now?
A. Considering now?
Q. Yes.
A. Yes.
Q. This a.m., this morning, you testified that you believe that the Commission applied the criteria protective of remote areas, it will place most areas of the jurisdiction
off limits to wind power and Maine will not be able to meet its goals to add clean generation to the mix; is that correct?
A. Let me look at what I said. Can you just repeat that?
Q. Well, I would except that I had to takes notes because that was not in your prefiled testimony. So I would like you to read it actually.
A. What I said is if the definitions and applications of remoteness in resource protection proposed by the Friends of the Boundary Mountains are applied across western Maine, then it would effectively prevent Maine from obtaining its renewable power standards, power goals, certainly at a reasonable cost.

I believe that's what I said.
Q. So the application of -- could you read that first part again.
A. The definitions and applications of remoteness and resource protection -- what I mean by that is that the sense of testimony that we've heard suggests to me that any wind power development is inconsistent with a sense of remoteness across this region.
Q. Are you asking LURC not to apply certain criteria to this project?
A. No.
Q. And you didn't mean to imply that in your testimony, in
your presentation this morning, did you?
A. Absolutely not.
Q. I want to refer to one of your exhibits, Exhibit C. This is the forestry operations permit exhibit that you submitted with your testimony?
A. Yes.
Q. Who compiled this data in Exhibit C?
A. A number of people. It's taken obviously from data gathered from LURC files. We've had interns work on it and I've worked on it, as well as other staff at NRCM.
Q. Did you go back and check over the work that was done by the interns?
A. I did not.
Q. So it's likely that there could be some errors in here?
A. I don't know whether $I$ would describe it as likely. I certainly wouldn't be surprised if there were.
Q. Who is it you have for interns at NRCM? What type of people, are they students?
A. I think the person who did most of this work was a student, yes.
Q. Some of the dates in the left-hand column are wrong, aren't they?
A. I don't know for sure. If you point to one specifically and suggest it's wrong, you may be correct.
Q. But you submitted this expecting the Commission to rely on
this data; correct?
A. I submitted this exhibit to demonstrate a larger point that I don't think relies on exact dates being a hundred percent accurate.
Q. Could you flip to the third page and look at the first entry under Redington Township?
A. Yes.
Q. Do you believe the date's correct on that?
A. I can't say.
Q. Could you read that line?
A. What are you referring to, October 25th, 2006?
Q. Yes. Read the whole line, please.
A. Redington Township 1000 -- I'm not sure what all the -021 Hudson Pulp and Paper Company, P-MA.
Q. Does Hudson Pulp and Paper still own or manage land in Redington Township?
A. I can't say for sure.
Q. How many lines are there in this exhibit for Redington Township?
A. I Count 11.
Q. So that indicates to you that there were 11 permits?
A. Not all of these are individual permits. As it says in the introduction, there were also amendments included.
Q. $\quad 11$ events then? Permits or amendments to permits?
A. I believe that's correct.
Q. Which would allow harvesting of a P-MA zone?
A. That's correct.
Q. So anyway, from this list of forestry operation permits, for the Town of Redington what does it look like in terms of number of acres in Redington that were applied to be cut in the $P$-MA zone? You get to do math in your head.
A. Well, it looks like approximately 4000.
Q. Could you tell from this data whether there's been any harvesting applied to be done in the $P-M A$ zone in Kibby Township?
A. I don't believe that's listed in this document.
Q. So from this document you would have to conclude that Kibby Township has never been logged during the time permits have been required by LURC in the $P$-MA zone; is that correct?
A. I can't testify that that's the case, but it's clearly absent from this list.
Q. Why can't you testify to that?
A. As I said, I'm not suggesting that this document is comprehensive of every single permit that was granted, nor have I suggested that every single number in this document is 100 percent correct.
Q. Now, this exhibit for forestry operation permits doesn't say anything about structures in a P-MA zone, does it?
A. No.
Q. Or roads, does it?
A. Not -- well, the permits may refer to road construction. I'm not sure about that detail, but this document isn't referring to allowable road construction.
Q. It does not refer to road construction associated with the development, does it?
A. That's correct.
Q. Are you aware that TransCanada plans to construct 34 -foot wide roads along the top of Kibby Range to move its equipment around?
A. That's correct.
Q. That's at elevations predominantly in the P-MA zone?
A. I don't know if I'm comfortable with the predominantly, but I know some of that road construction is in the $P-M A$ zone, yes.
Q. On Page 9 of your direct testimony, is it correct that you stated in the section entitled Impacts on $P$-MA Districts that you think that clearing would be the major impact caused by wind power development on the resources in the P-MA subdistrict?
A. I don't believe I testified to that. We did describe the extent of the clearing, and I do believe that the clearing would be one of the more important impacts from the project.
Q. Did you not imply that the impacts in the $P-M A$ zone would
be clearing for timber rather than development?
A. Can you repeat that question.
Q. I will -- could I rephrase it?
A. Yes.
Q. If you look at Page 9 of your direct testimony, the paragraph that starts second, could you read that sentence for me?
A. Second, to the extent of clearing needed for this project would be small compared with the benefits of the project and also small when compared with clearing for timber allowed by the Commission in nearby $P$-MA zones.
Q. So would you agree that this implies that you're weighing the effects of clearing for timber in a $P-M A$ zone versus the benefits of development in a $P$-MA zone?
A. I don't think that's the only balancing that we are describing here; but, yes, I think we are describing the balance between the impact of clearing and the benefits of the project.
Q. Let me ask you, what do you think -- what do you think would be the major impact caused by wind power development on the resources in the $P-M A$ subdistrict?
A. As I said, I think that permanent clearing of land is one of the impacts. I think that impacts on wildlife, as Ms. Jones testified about, is also one of the impacts on the P-MA zone.

I think the construction of roads -- in some cases, steep slopes -- is another impact on the values of the P-MA zone.
Q. When NRCM considers the benefits versus the tradeoffs of wind power in $P-M A$ subdistricts in other areas of the jurisdiction, does it consider the values of remoteness in undeveloped land?
A. Absolutely.
Q. Where did you refer to that in your testimony?
A. On Page 5 I talked about the fact that we do not believe the project area is a remote wilderness area.

As I described to you today, although there is remoteness values in this area, I do not believe that the project is consistent with preserving that sense of remoteness in the region.
Q. Are there any remote wilderness areas in Maine?
A. I think there are.
Q. Do you know where they are?
A. I can't give a list of them. I think that there are many places in the boundary mountains themselves that are remote wilderness areas.
Q. Okay. Turn to Exhibit A, please. Actually, you have two Exhibit As; is that correct?
A. They're meant to be both part of the same. We have an Attachment A and an Exhibit A.
Q. Mine both say Exhibit A. Did you mean to staple them together?
A. Yes.
Q. So they are both Exhibit A?
A. The map and the chart, yes.
Q. The chart on the following page is part of the same exhibit; is that correct?
A. Yes.
Q. On Page 2 of your testimony you say TransCanada project does not include Tumbledown, boundary, Three-Slide, and other mountains proposed in the Kenetech project; is that right?
A. I believe that is correct.
Q. On your Exhibit A map called Turbine Locations, Kenetech versus Kibby, are you aware that the turbines depicted in the township to the east of Kibby and Skinner Townships were not included in Kenetech's petition for rezoning?
A. Those are probably referring to Phase II. I believe the Kenetech project had two phases of construction, and I'm not exactly sure which were part of Phase I, which was permitted, and which are part of Phase II.
Q. Do you have any evidence that Kenetech actually acquired any wind development rights in that township?
A. I'm not sure I can answer that question. MS. BROWNE: Which township?

MS. PRODAN: This is the township that is to the east of Kibby and Skinner Townships. It's depicted on his map, Exhibit A.

BY MS. PRODAN:
Q. So you don't have any evidence that Kenetech even had any right to develop those mountains in the township referred to, do you, but you put it on the map?
A. I believe these are -- this is an accurate depiction of the Kenetech project, and as I said, I don't know that all of the locations here are part of the Phase I that was permitted, and I also do not have information that would allow me to know which of those they had the wind rights to at the time of the application.
Q. You're aware, are you not, that TransCanada in its updated information dated July 23rd, 2007 admitted that its development rights do not extend into Merrill Strip?
A. That's TransCanada's application, they do not have -- I'm sorry.
Q. And you are aware, are you not, that TransCanada in its updated information dated July 23rd, 2007 admitted that its development rights do not extend into Merrill Strip?
A. I believe that's correct.
Q. So you are aware of that?
A. Yes.
Q. Would you agree that while it might appear from your map
that TransCanada is responsible for reducing the Kenetech project to less than half the original size, that would be misleading since TransCanada doesn't even have easements over all those mountains?
A. I'm not suggesting that TransCanada is responsible for the change from Kenetech to the Kibby project, only that the scale and the magnitude and the impacts of their project compared to the Kenetech project do not include those areas that Kenetech proposed to develop.
Q. So you would agree with me, then, that this map might be misleading, would you not?
A. No, I would not agree with that. I'm not -- I did not intend to suggest. I think your question is that TransCanada, the company, was in some way responsible for that change.
Q. On Page 5 of your testimony you admit that the project will be visible from some sensitive sites of State or regional significance; correct?
A. Yes.
Q. You state on Page 5 that those sensitive viewpoints of State or regional significance are greater than 10 miles away.

Is that still your testimony?
A. I'm reading. Can you -- okay, I've seen it. I believe that's generally correct.
Q. Isn't the Scenic Highway along Route 27 of State or regional significance?
A. Yes.
Q. Are you aware that the turbines when viewed from Sarampus Falls or Vine Road on Route 27 would be less than 1.5 miles away?
A. I would certainly agree with that. I don't believe that those are significant to impact the viewpoints.
Q. It goes back to the question of whether you still are saying that sensitive viewpoints of State or regional significance are greater than 10 miles away.

I guess my next question to you is, you don't think that Sarampus Falls or Vine Road on Route 27 are considered viewpoints; is that correct?
A. I think those are important viewpoints; I don't think that the impact of the project from those viewpoints is significant or undue.

They're obviously less than 1 mile away. I think you're correct that my statement isn't technically correct referring to that Scenic Byway.
Q. Would you agree that these -- this location -- these two locations are of State or regional significance?
A. Yes.
Q. Would you agree that Chain of Ponds, which has significant public lands on it, is of State or regional significance?
A. I'm not sure -- I think they are of significance in the region.
Q. Do you realize that the turbines will be viewed from Chain of Ponds for -- according to Ms. Vissering's testimony -for a mile intermittently at a distance of less than 2 miles from the turbines?
A. Again, $I$ can't recall the exact visualizations and her testimony. It was our conclusion that those also were not specific impacts on the views from those locations.
Q. So is your position that this is not a sensitive viewpoint, or is your position that it's a sensitive viewpoint but the impacts are not significant?
A. I think that these are sensitive viewpoints and as I -the first sentence there that $I$ was suggesting is that the project is visible from important resources, scenic resources, of State and regional significance, and my point in saying that is that even though we believe this project is appropriate, we do not deny that it is visible from some locations that are beautiful and scenic.
Q. Well, Mr. Voorhees, wasn't your point actually that the project will be visible from some sensitive view spots of State or regional significance but only at distances greater than 10 miles?
A. I think that those are the viewpoints that we believe were areas of the greatest State or regional significance, such
as the Appalachian Trail and Flagstaff Lake.
Q. So now you're changing your position and acknowledging that the highway, the State Scenic Highway, as well as Chain of Ponds, are indeed sensitive viewpoints; rights?
A. Yeah, a useful clarification of what we were intending to convey.
Q. Are you also aware that in Title 38 fragile mountains themselves, in other words, areas over 2700 feet, are resources of State significance?
A. Well, I think that's an extremely generalized application of a type of land form that's regionally significant. It's not the same as a sensitive view from a particular identified State or regional.
Q. Your testimony does refer to spots of State or regional significance, does it not?
A. Yeah, I think that I would agree that that may be too general a term that I am using.
Q. And you do understand that the legislature delegated to LURC the authority to protect these areas, do you not?
A. Hm-hmm, yep, absolutely.
Q. In your testimony on Page 9 you refer to clearing for timber; correct?
A. Yes.
Q. You also compare clearing for development with clearing for timber; correct?
A. If you're referring to a comparison for clearing for this wind development and clearing for timber, yes, we do make that comparison.
Q. Are you opposed to timber harvesting?
A. No.
Q. What do you mean by clearing for timber?
A. Harvesting trees to use for timber. I'm not sure I understand the question.
Q. You used the term clearing for timber, which is not unfamiliar to me, so I ask you, what do you know by clearing for timber? How do you define that?
A. I mean -- well, clearing for timber can take many different forms from full clear cutting to selective clearing of small areas.

I think that we're making a general comparison between the practice of cutting for timber and the practice for cutting down trees to make room for turbine pads.
Q. Where's your evaluation of the impact of permanent structures that are hundreds of feet tall, associated clearing, substation and transmission lines, concrete plants, blasting and construction of 30 -foot wide permanent roads to put up the wind generators and maintain them?
A. We were unable in our brief testimony to examine every
single impact of this project in detail nor do $I$ think that was the purpose.

We also were consolidated with other intervenors and collectively our testimony, I think, gives a very good look at the impact from these projects, including the turbines themselves.
Q. What permanent development other than haul roads for forest management and operations is there in the Kibby project area now.
A. I wouldn't be surprised if there aren't any.
Q. Wouldn't you think it would be an important aspect to consider the impact of this type of development?
A. We absolutely did the impact of this type of development. We do not believe that the footprint in the mountain of these wind turbines is substantial in comparison to the benefits, nor do we believe that the amount of clearing that is required has any substantial or greater impact than the collective set of forestry operations happening in this area.

They are undeniably structures that will stay on the landscape, if not permanently, for a long time. That's obviously a difference between this project and clearing for timber.
Q. Well, if you did conduct an analysis, why didn't you include it with your testimony?
A. I'm not sure what you're referring to by an analysis.
Q. I asked you the previous question, whether NRCM did an analysis and I thought you answered that we did do an analysis of the impact of the project?
A. Yeah, I guess it's not -- it didn't take the form of a formal study.
Q. So how did you do it?
A. Well, that's a good question and a long one. We started --
Q. That's my last question so you're going to have to cut it off.
A. Our examinations and our conclusions of this project are based on a lot of different factors, some of which go beyond my own involvement in this project and extend back to our involvement in the Kenetech project.

We started with a look at that project and a look at the conclusions that the Commission came to and the conclusions that the NRCM and others came to on that project. That provided a strong basis for how we thought about this project.

We then looked at the differences between these two projects as I've illustrated. We also thought about the demonstrated need for these wind power projects, which as I've testified, I think have changed. We also read through all the application materials by

TransCanada and conferred with other organizations, we visited the site, and we took part in a set of conversations with TransCanada that explored the impacts that we were concerned about and tried to find appropriate solutions where there were opportunities.

So that's not a comprehensive list but that's a beginning of a description of the kind of process that we went through in coming to our conclusions.

THE CHAIR: Are you -- is that -- you're completed
Pam, thank you. Do any other intervenors have any questions?
Commissioners. Who wants to start? Gwen?
MS. HILTON: Yes, I'll start. This question is for
Mr. Publicover.
EXAMINATION OF DAVID PUBLICOVER
BY MS. HILTON:
Q. You made a comment, I believe, that went something like this, that this project, if disapproved, would put too many other places off the list, the list of potential sites, potentially approvable sites for wind power, and I assume that since you made that statement that you considered what kind of bar this established or might establish if this project is approved, and I just wondered one, $I$ guess, did you do that and what in general you think the implications are for future wind projects. One, in this particular region of Maine and more specifically,

I guess, and many other parts of Maine?
A. Well, I think what $I$ was saying refers mostly to the mountains, the western mountains region; and the statement was intended to say that $I$ think if this project were disapproved, the criteria to be applied to that disapproval would be applied to many other sites in the state, and I think in the sense that that might be to broad a brush and that is essentially a decision that would be better made in the context of the CLUP to make a sort of broad statement about remote areas or not appropriate for wind power development.

I think essentially you would be precluding
development in almost -- certainly the entire boundary mountains region extending down to the New Hampshire border that might tend to force wind power into areas that were less remote but more sensitive, such as some of the areas along the Mahoosucs and Bigelow area.

So we aren't prepared to take that broad a brush and say that large areas of the state should be off limits to wind power simply because they're remote.
Q. Do you think that -- I mean, Kenetech obviously was a much larger project and looked at a lot of other ridges or mountaintops in this region.

Would you support wind power in addition to what we have here on any of those others?
A. There may be some other sites in the region we would consider. I think if this project extended over the summit of Kibby Mountain, we would have opposed it, and certainly if the project was as extensive as Kenetech given what we understand now about distribution and value of resources, we would not support that.

I would not say there are no other ridges within this region that could potentially be considered whether for core high elevation areas where we would -- even though we supported them in Kenetech, I don't believe we would support them now because I think we're aware of other opportunities for development in less sensitive places.

MS. HILTON: Could I have an answer, maybe, to the same question from each of the others of you.

MR. VOORHEES: I think it would be important to think about the reason why you might disapprove this project, and I think $I$ would agree with Dave that if it was -- the fact that this is a remote region in general that $I$ think it would be a concern to us.

We also have spent a lot of time talking with wind developers. Wind developers are looking -- they pay a lot of attention to the decisions of the Commission -- that's no surprise -- they need to make very substantial investments even before an application arrives here, and I do think that there is a consequence for wind development in the western mountains
of not permitting sites that appear to be reasonably sited.
I think there is an important precedent that's set. I don't think -- I think what's important is the thinking that goes into it and the reason why the Commission might disapprove a project if it was as broad as what we're hearing the concerns are, that $I$ think is problematic.

We may decide that there are important reasons to not permit this project, but if they are as broad brush stroke as some of them that we've been talking about, I think that would have negative consequences for wind development in Maine.

MS. JONES: I appreciate the question. I think the question that faces you folks is what can we approve over 2700 feet with regard to wind power development and that is a tough question, one that we struggled with at Maine Audubon. I think if you don't struggle with it, you're not doing your homework.

For us what we considered were there multiple values of high resource values at the site and -- or not. Other resources that were there, did they avoid those areas.

I think I agree with Dave that had the project
continued on up on top of Kibby Mountain, it would have been a much more difficult decision for us to support the project.

Similarly, I was one of the people that negotiated the Kenetech project -- negotiated with the folks there and we've learned so much more and we have to make our decisions based on what we know today with the best always data. We're
always in that position. We're in that position today, and the best available data that we have today, we think that this is an appropriately sited wind power project.

MS. HILTON: Okay.
MR. SCHAEFER: Just best available data, is there any return on research from Mars Hill for mortality yet?

MS. JONES: No, I don't have -- I don't think it's available yet. The folks at Mars Hill know that we're very interested in receiving it once it's compiled and interpreted and brought forth.

MR. LAVERTY: Just one question, Ms. Jones. Dr. Wilson -- again, I'm not an ornithologists and I'm not as well versed in birds as I should be, I'm personally embarrassed about that -- but he seemed to imply that the absence of identification of some species that should have been there and then the identification of other species that shouldn't seem to imply, at least from Dr. Wilson's perspective, a weakness in the methodology that was applied to do the ornithology -- the bird assessment, okay.

Would you -- I guess -- and what we're sort of
wrestling with here is -- is this a significant concern that sort of demonstrates either the study design or methodology or maybe the competence of individuals who are assigned to execute these studies? You've reviewed these studies. Would you give us your assessment of the veracity of these studies?

MS. JONES: Yes. The golden-winged warbler and the Connecticut warbler that were identified were immediately reported to the birding community.

Maine Audubon does the Bird Alert. Our organization is part of the birding community and the experts. I noted that the experts did send the reports to -- including a lot of people that are highly valued in terms of their ability to identify the BRI, which some of you are familiar with are highly regarded in terms of their ability to identify birds. When you do the studies, having them in the hand and I think there's just really no substitute for an in-depth understanding.

I have a lot of confidence -- I've also been out in the field with Dana Valleau, found him to be very straightforward, not trying to hide anything like most of the -- similar to most of the folks that I've worked with here in Maine. So I have a lot of confidence in the accuracy of those reports.

The Red-eyed Vireo, I haven't really focused on that. It wasn't found in the 2006 foraging study. Birds are episodic in their movements. I have a lot of confidence in these particular studies. I have read that thick volume over the course of many months and have a lot of confidence in it.

MR. LAVERTY: In your view, the absence of identification of that species, should that have tripped
additional research? Should something have been done as a result of that finding?

MS. JONES: Not from the negative data piece of information, no.

MR. LAVERTY: Thank you.
MR. WIGHT: Jody, we talked a lot about post construction studies and all that.

Can you tell me what the value of a post construction study is to the built infrastructure that you're studying? I guess the question is, is it valuable to that or is it valuable scientifically or the future?

MS. JONES: I would say the latter. What we're trying to find out as you move forward with permitting wind power facilities, we have to have a much better understanding of the interaction between the migratory species, in particular, and these facilities, so that will help us understand how the birds, bats, wind turbines all interact.

MR. WIGHT: Have you ever heard of anybody voicing the opinion that we should build the project, do a post construction study, and if we see high bird mortality we'll tear the project down?

MS. JONES: No, I haven't seen that. The worse mortality incident was with the bat issue down in West Virginia. I feel the difference between that project and this project is that in place is that $I F \& W$ is going to decide
what the mitigation measures are going to be, and I think that that was really important to Maine Audubon that it be a regulatory agency that has the expertise to do that.

MR. WIGHT: Thank you.

MR. VOORHEES: Not to step on Jody's turf as the bird expert, but $I$ think one of the goals of these post construction studies is that mortality events are usually fairly episodic, kind of like erosion. Ninety-five percent of the erosion takes place in one big storm each year.

If we can understand the connection between these higher mortality events and the climatic conditions, it doesn't mean you tear the project down, but it may mean that when a certain type of weather front is coming through, you stop the turbines from rotating, you shut them off. It doesn't entirely reduce the risk but it lowers it because the blades aren't moving.

It may be a matter of three or four days in the fall. Shutting down the turbines can significantly reduce the risk of mortality. I think the goal is to try and predict when those high-risk periods are.

MS. JONES: And they're also associated with specific, you know, low cloud ceiling nights. Those are some of the things that $I F \& W$ would work with.

MR. WIGHT: That's very helpful. Thank you.
MS. KURTZ: I have a question for Mr. Publicover.

EXAMINATION OF DAVID PUBLICOVER
BY MS. KURTZ:
Q. I think -- did you actually do a study on all the appropriate wind sites in Maine, the AMC, are you part of that?
A. Yeah, we are in the process of doing a study where we have identified ridgelines underlain by Class 4, overlaying them with data on a variety of recreational scenic and natural resources in trying to understand which sites have the greatest amount of overlap with those resources and which sites do not.

We hope to have that work done by the end of October.
Q. We have a community of a work in progress, then. We received something like that back in 2006. Was that a completed study?
A. I'm not sure what it was. I know I've sort of talked about this work we've been doing and some sort of preliminary results have come out. I don't recall what.
Q. Was there a written report? In any event, my question is --
A. Oh, I might give you one -- it may have been the one we did for Massachusetts, sort of working on that.
Q. No, it was in Maine, and I think it may have started with, I don't know, a hundred or a couple hundred ridgelines and actually was cut down to somewhere around 22 appropriate
ones.
I just wondered if Kibby was on that -- Kibby Range and the $A$ and $B$ series that we're talking about here, if that was in your original list of appropriate.
A. In the preliminary -- I think probably what I gave you -and I know I did this in my original testimony in Redington was sort of preliminary results -- some of the areas that $I$ thought and some of the mountains that were showing up as having sort of multiple high resource values. Kibby Mountain actually does show up as fairly high on the scale of things.

But the site -- the Kibby Mountain site we evaluate is a fairly long site that runs from the northern part of the A series around over to Spencer Bale Mountain.

The values -- so if the resource values that contribute to the high -- sort of the relatively high value of Kibby Mountain -- are concentrated on that portion of the ridgeline that will not be impacted essentially from the Kibby Mountain north. That's where the rare natural community is, that's where the Bicknell's thrush habitat is, that's part of the large roadless area that comes across Tumbledown Mountain.

The area that will be developed as part of the A Series essentially lies outside and for the most part separate from the values that contribute to the high range
of the Kibby Mountain site.
Q. Was that distinction made? I'm just trying to remember, like I said, there were only like 22.
A. Yeah, that was the preliminary list of really the highest ranking mountain and sort of the preliminary results. Kibby was not on that list at that time, no.
Q. As being appropriate?
A. No, I think that the list of 20 or so was the most inappropriate sites and included Bigelow and Baxter.
Q. So it was the --
A. Kibby was not in that list of top 20. I think it shows up in the top 20 percent of the state, but it's certainly not among the top 20 out of 267 sites.
Q. So maybe I've gotten this backwards. What I'm trying to separate in my find is whether or not that A, B Series that we're talking about, whether they were?
A. They were not on the list. If you've seen the list for 20 mountains, that was part of my Redington testimony.

Kibby is not on that list.
Q. And the 20 mountains are appropriate?
A. Inappropriate. Those are the gem high value ones. Again, Kibby -- preliminary results and analysis, Kibby is a fairly high ranked mountain but the project does not impact that part of the site, and the Kibby Range is actually relatively low scoring in the analysis.

MS. KURTZ: Thank you.
THE CHAIR: I guess this is for Jody.
EXAMINATION OF JODY JONES
BY MR. HARVEY:
Q. We've used the term mitigation -- mortality risks. I think this is fairly obvious to me but you need to confirm it.

The mortality risk is not even throughout the year, is it? I assume it's higher during a migration period as opposed to some other time of the year. Is that true?
A. Yes, that's true. For the neotropical migrants, the birds that nest in the boreal forest in our vicinity and pass through Maine on their way to their wintering grounds -the spring and the fall -- which is why the applicant did the nocturnal migrating birds at that point.

That's a very high risk time on forested ridges in other areas, in mid Atlantic states, and that's why that was done.

And then raptors, there are two types of habitats that are at risk: One, if you're in sort of a core foraging area like Altima Pass was, and then the birds use high elevation areas to gain elevation. Some of those are traditional sites, like Hawk Mountain.

The question that's placed before the applicant is this as well. That's the kind of thing, during the fall
and spring.
Q. How long a period is this normally?
A. Well, it's episodic and it depends on the species. Bats start swarming in July and August and then it's mid August to mid October.
Q. So that's the southbound?
A. That's the southbound. In the spring it's more concentrated. It's not as long because they're in a hurry.
Q. For obvious reasons.
A. For obvious reasons.
Q. So getting back south is not quite the same priority.

Is there a difference in your assessment of mortality to the birds, for example, when the wind farm is running as opposed to when it's not running, obviously the structure is there 100 percent of the time, so it is an obstacle that has to be overcome.

I'm assuming, anyway, when the thing is turning that there's a higher risk to birds passing by.

Is it a huge increase, incremental increase, or is it just so-so?
A. Well, what we know from the communications tower is higher up in the migratory pathway, we're assuming the higher risk because there's a higher percentage of the birds in the rotor swept area.

They're not guides as was pointed out before, and there's the question of avoidance. Now, diurnal, or birds that migrate during the day -- particularly hawks -- if they're not in the mode of foraging, which they tend to lose their perspective when they're trying to get at something, there's the assumption that if they're using these facilities for gaining elevation that they would be highly visible and less likely to collide.

The nocturnal migrating songbirds that we're concerned, because at night visibility is low and a certain portion will be lit, that's the thing that we want studied.

Did I answer your question? So, yes, the turbine spinning is a concern. Bats have been known to be attracted to spinning turbines.
Q. I guess I'm not sure if this is important or not, but it's interesting, I guess, is that I wondered, have you looked at the -- on an overall basis, the wind farm doesn't run, what, 30 percent of the time? I think that's how I understand these capacity factors.

That really means a wind farm only runs 30 percent of the time.
A. On average.
Q. There a lot of time it's not running. It would seem to me that perhaps the risk that we're facing has a lot to do
with when the wind blows?
A. That's right, it has to do with that. What we want to do with post construction studies is understand all those interactions, so that if there a problem, we can address it.
Q. I guess we're left here with that we have to build a few of these things to really know what's going to happen?
A. In different locations, particularly, yes.

But I think -- I just want to point out that the preconstruction studies are really key to get to the before and after impact studies.

THE CHAIR: Did I spur something, Steve?
MR. SCHAEFER: The profile of the actual blades, if the prevailing wind is from the west and the birds are migrating from the north to the south, there would be less resistance in the migratory path, is that part of the equation?

MS. JONES: I think there was some discussion of that in Dana Valleau's rebuttal testimony that I also read. We'll find out, is my answer.

THE CHAIR: I think that's probably enough from me. Thank you very much for your participation and testimony.

We've got -- we finally get to CLF and IEPM. Are they working together on this?

MR. WILBY: Good afternoon, commissioners. My name is Dave Wilby, executive director of the Independent Energy

Producers of Maine, and I want to thank you for all your efforts in public service on this project and all the ones that have come before you recently.

I think that Sean and I both subscribe to Mr. Kimber's philosophy earlier that the most significant comes last in the list as to last intervenors today.

IEPM has provided testimony and summarized it before on the issues that we've addressed in the Kibby proceeding, so I'm not going to go into detail. I'm going to be mindful the chairman's admonition recently to not be unduly repetitious.

But just to recap, my testimony suggested that the Kibby project meets the demonstrated need criterion because the project is consistent with State, regional, and federal energy policies and objectives, and because there is, I think, demonstrable public demand for wind development and wind power itself.

Secondly, the second major point I think I tried to make in my testimony is that the Kibby project is consistent with key portions of the CLUP -- namely, the energy and air resources sections. Those are the sections that I attempted to address.

So that in essence was my testimony, and I think it may be useful just to spend a moment to address a couple issues raised yesterday during the cross of Ed Miller of Maine Lung Association by the Friends of the Boundary Mountains because

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it's related to my testimony and I think it's important to
clarify a couple of issues.
First, I think it was suggested -- or at least implied -- that the development of new electricity generation wasn't necessary. This is not the case, as the comments of the Maine Public Utilities Commission to this Commission have made clear recently, and I have -- I'll just refer to a very few slides here for parties' information with the Commission's information. They are all contained in the exhibit that was recently handed out by the applicant from Ms. Prodan's edification. They're all in Tab 1 of this particular document. I decided not to make copies, just not to waste paper, so these slides are in the record.
Again, I think what this slide shows, quickly, those red and blue lines sloping up are two scenarios of our growing demand for electricity in the very near future. We're not talking about a decade from now, we're talking about a matter of months and a few years. And this illustrates that we need to develop new electricity here in the state and in the region now, even assuming that we put more focus on the conservation and efficiency side.
The PUC's message -- which I think contrasts with what was implied yesterday -- was that more power, particular renewable power of the sort that wind would provide, is needed even as conservation efforts go forward on a parallel tract.
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It's not one or the other, it's frankly both.
    Second, Friends of the Boundary Mountains' cross
yesterday of Mr. Miller, during that process referenced a 2005
study on small wind projects to suggest that if all the
proposed wind projects in -- I'm sorry, in Maine and
New England -- were built at once, the various State's
renewable portfolio standards would be swamped.
    This is simply not true as this slide from ISO
New England by way of Chairman Adams from PUC shows. That pie
chart on the left, that green slice of the pie, shows the
demand for new renewables created by all of New England's State
RPSs combined in 2015. That's 6.5 percent of the total energy
of the region.
As you can see by the numbers on the right, to fulfill this demand, we're going to have to do essentially all of the projects that are currently proposed, although that's probably unlikely for a variety of reasons. We'll have to do all of them, plus likely more, to meet the public policy demands that are already on the books.
In this I think I want to echo and maybe expand just for a moment on Mr . Voorhees' comment of an hour ago or so about the RFP process, and I think this was colloquy with Terry Bennett yesterday and I think with the chairman about that process, and certainly the question, as \(I\) recall it, was whether Maine has a similar sort of RFP, and of course, the
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answer that Mr. Voorhees gave is absolutely correct, they do
not and there is not such a process.
    It is exactly the same sort of response to a public
policy that TransCanada is making here. If the question had
been posed, are you responding as you did in Quebec to a
government policy, policy, to encourage you to develop these
things in this region, I think the answer would have been yes.
    It's a different mechanism, the RFP in the provinces
and an RPS in New England because we have very different
electricity systems. Although the mechanism is different, the
fundamental purpose is, I think, exactly the same.
    So with that I really appreciate the opportunity to
testify.
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MR. MAHONEY: Good afternoon, Mr. Chairman and fellow commissioners.

My name is Sean Mahoney and I'm the vice president and director of the Conservation Law Foundation office in Maine.

CLF supports this project wholeheartedly. CLF recognizes and appreciates the Friends of the Boundary Mountains' position and Mr. Kimber's eloquent testimony on the value of wild and remote places in Maine.

However, we must respectfully disagree with their position that this project is at odds with protecting the integrity of LURC jurisdiction and particularly with

Mr. Kimber's concluding statement that the benefits of wind power with respect to renewable energy or pollution avoidance are in no way proportional to the adverse impacts to Maine's mountain and forest landscapes.

The real and current threat posed to Maine's mountain and forest landscapes are starkly presented in the findings of the Northeast Climate Impact Assessment report, a summary of which is included in my prefiled testimony and was presented to you by Dr. Cameron Wake concerning the Black Nubble project.

The adage to think globally and act locally, which was noted in last night's public hearing, is particularly important in the context of global warming and wind power projects.

The causes of global warming and impacts and solutions are such a magnitude that it can lead to paralysis that stems from a sense of powerlessness, that nothing an individual -- or in this case the State of Maine -- can do will have an impact. It is precisely that attitude, however, that will lead to catastrophic consequences that Dr. Wake outlined in his presentation to you several weeks ago.

It's true that this one project will not solve all the ills of the world and that it will have an impact on an undeniably beautiful part of our state, but this project, while relatively small in relation to the problem of global warming as a whole, is a critical part of the solution as are other

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proposed resources of renewable energy.
    There is a reason this project has wide spread
support in Maine, Franklin County, and the host community of
Eustis.
    The project is consistent with Maine's participation
in the Regional Greenhouse Gas Initiative, and with the recent
legislation that requires a 10-percent increase in new
renewable energy sources by 2010, and it's consistent with the
presentation that was made to you by the commissioner of the
Department of Environmental Protection, the PUC, ISO
New England, and the Office of Energy Independence on
August 1st, as referred to in Mr. Wilby's testimony.
    The short-term and long-term benefits of this
project, including job creation, increased community financial
resources, and land conservation, and particularly restriction
of any further wind power development in the Kibby Ranges C and
D, are also of value.
    As the adverse impacts, they are minimal, essentially
limited to the visual impact of the turbines.
    That factor is, as testimony in this and other
proceeding has made clear, a subjective one. Duluth Wing finds
them unacceptable; David Field, the AMT Conservancy, finds them
acceptable here at Kibby but unacceptable with respect to
Black Nubble. Former Governor King finds wind turbines a
symbol of hope. It's a subjective value.
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This is a project with local, county, and statewide support. It's supported by long-time and recently arrived residents of the area, elected representatives, businesses, and all of the major environmental groups in the state.

It will provide very real benefits to the people of Maine and is a step in the right direction to reducing our collective impact on the places we all treasure.

Thank you.
THE CHAIR: I'm going to let the cross-examination proceed here if there is any wish to do so. If not, the commissioners will ask questions.

MS. BROWNE: No, no questions on our part.
THE CHAIR: Pam has questions. She has 20 minutes.
(There was a break in the hearing at 2:21 p.m. and the hearing resumed at 2:33 p.m.)

MS. PRODAN: Good afternoon, Mr. Mahoney. I don't actually have any questions for Mr. Wilby.

EXAMINATION OF SEAN MAHONEY
BY MS. PRODAN:
Q. Is it your position that the addition of wind power will drive down electric prices in Maine?
A. I think that that's a position that the Commissioner of the PUC, Mr. Adams, has taken.
Q. So you do agree with the first statement that more generation will tend to lead to lower prices and that
includes wind power?
A. I would agree with that as a general statement.
Q. If electric prices go down, do consumers have more or less incentive to conserve electricity?
A. Are you asking me to speculate as to what people are going to do?
Q. Go right ahead, speculate.
A. I would give you my hope that people will, regardless of the price of their electricity, will begin to conserve and use it more efficiently because of other issues beyond the cost.
Q. Do you think it's human nature that if electricity continues to be expensive, consumers will not be as likely to conserve as electricity becomes more expensive?
A. I think, just to clarify, I think that renewable sources will keep energy prices down. It's not necessarily going to reduce prices from what they are today.

The way the pricing system works, renewable projects will be the first to be taken on-line, but the price of that energy will be the last bit of energy in, so it would be the price probably of carbon-based oil or coal or natural gas.
Q. On the second page of your testimony you say about the Kibby project that the project's strong wind resources and sufficient proximity to major electrical grids and

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transmission facilities makes this project viable.
    Is that still your testimony today?
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A. Yes.
Q. Were you aware when you made that statement that the transmission line is 27.7 miles long?
A. I was. I think I take the same position that Commissioner Laverty was expressing in his colloquy earlier today with another one of the witnesses. I can't remember who it was.
Q. Were you aware that over 23 miles of that 115 kV transmission line require a totally new right-of-way?
A. I'm aware that it requires easements and right-of-way. I'm not aware of the specifics. It's not part of this proceeding.
Q. But basically you consider their new transmission line over 27 miles long, much of it in new territory, not along roads or other power lines but cut through the woods would be in sufficient proximity; correct?
A. Again, I think it's relative to where other sources of new renewable power could be placed.
Q. But you did say in your testimony the project's strong wind resource in sufficient proximity to major grid facilities makes this project viable; isn't that right?
A. Yes, and I stand by that.
Q. Is 30 miles in sufficient proximity, or is it your
position that 30 miles also would be in sufficient proximity?
A. I imagine it would depend on the resource and the other available infrastructure that's existing or would need to be built.
Q. So you don't really have a definition of in sufficient proximity?
A. No; that's my opinion.
Q. How much of LURC jurisdiction is within sufficient proximity?
A. I can't answer that. I don't know what you're looking for for an answer.

LURC jurisdiction is a very big jurisdiction, lots of it is not in proximity to anything.
Q. It sounds like from your testimony that proximity to the grid was one of the factors that you considered in your opinion as to whether this was a viable project; is that right?
A. That's correct.
Q. Would you assume that all the areas of the jurisdiction would be suitable for wind power unless there were some concern you had about proximity to the grid?
A. I'm not sure I understand the question.
Q. How do you decide what's proximate to the grid?
A. I think, again, it's a relative approach to how far away
is the resource, what existing infrastructure is there.
Q. Do you have a formula?
A. No, I have no formula.
Q. Did you do an analysis that's written down anywhere?
A. No.
Q. It's just a judgment call?
A. Absolutely it's a judgment call.
Q. Were you aware of any plans by any landowner in proximity to the Kibby project or the transmission line who are looking into wind power as a possible use of their land?
A. I think my answer to that would be no, if $I$ understand your question. Are there other landowners within a certain distance from the Kibby project that are thinking of using their land for wind power?
Q. So you're not aware of any landowners? They haven't approached you to discuss whether CLF would support their wind power project?
A. Well, if you want to include the Black Nubble project as within a certain radius, we did support that project as well.
Q. But they were there first; right?
A. I have no answer to that one.
Q. Is there any reason why another developer in an area -using your phrase -- in sufficient proximity to the Kibby project would not be able to develop wind power? This
meaning another developer besides TransCanada.
A. If somebody else was developing the Kibby project other than TransCanada, would they be considered in sufficient proximity, is that your question?
Q. No, the question is whether there was any reason why another developer in an area in sufficient proximity but not the Kibby project itself, is there any reason why another developer wouldn't be able to develop wind power?
A. No, not that I can --
Q. Can't think of any. In fact, wouldn't you see that as a positive development if there were other proposals for wind power in the Kibby project area?
A. I think that from a very general perspective if there were more renewable energy projects, that's a good thing from the perspective of the Conservation Law Foundation.
Q. Have you reviewed the original grant from S. D Warren of wind and transmission rates?
A. No, I haven't looked at any of that, Pam.
Q. But you are an attorney, aren't you?
A. I am.
Q. Would you agree that the original grant from S. D Warren to US Wind Power includes two sections under the paragraph called Grants?
A. I'll say -- my testimony has nothing to do with this. I'm happy to read this if you would like me to, but as an
attorney, you know that $I$ will read and reread before giving you an opinion, and then I'll send you a large bill that doesn't make any sense at all.

THE CHAIR: If you want him to respond, a deed is a pretty complex document to read in seconds.

MS. PRODAN: The heading, the single word.
THE CHAIR: Can you just tell us what you're after here and maybe he can respond to it.

MS. PRODAN: He referred to proximity to transmission, and I'm getting at the whole issue of transmission rights and the transmission easements in the area because he feels that the project is in sufficient proximity to transmission, so I wanted to just ask two questions on that.

MR. MAHONEY: By transmission what $I$ mean is that it's in sufficient proximity to existing substations that would allow the power to, once generated, be transported to the grid.

Now, if you're talking about the transmission lines from the turbines to the existing substations, that's the distance we're talking about as to the impacts of that transmission line.

I didn't express any opinion on that in my testimony nor do $I$ believe it's before the Commission at this time.

MS. BROWNE: I would just offer to make a point. I'm having a difficult time following the spread, and it seems to go beyond the scope of any of his direct testimony; and if they
are going to review a document, I would just like an opportunity to see the same document.

MS. PRODAN: Well, it was actually submitted by TransCanada.

MS. BROWNE: Is it the original 1992 easement agreement?

MS. PRODAN: Yes, it is; and you provided a clear copy of it this summer.

BY MS. PRODAN:
Q. The question goes to whether if a new substation is built for the Kibby project, would you use the same analysis for future wind projects that you would consider whether to support using the same distances that you used for the Kibby project?
A. It might be a factor to consider.
Q. You indicated in the prefiled presentation you felt that there was a strong statement by Commissioner Littell that wind power was an important part of the solution to global warming; is that correct?
A. Yes.
Q. Do you recall in Commissioner Littell's presentation when he explained carbon offsets, he explained that these are offsets that are allowed when reductions cannot be achieved within the sector; is that right?
A. No, I don't think that's right.
Q. So you don't agree with the premise that carbon offsets are allowed when reductions cannot be allowed or cannot be achieved within the electric sector?
A. I don't necessarily agree with the characterization.

Carbon offsets are a tool by which entities who are exceeding allowable levels of emissions are able to continue operation, continue to purchase -- that Cap and Trade system.

I do recall that there was some confusion initially with Commissioner Littell's testimony with respect to the difference between carbon offsets and displacements, and that that, $I$ believe, was clarified based on some of the questions by the commissioners that the concept carbon offsets are very different from the concept of displacement.

Renewable energy as Commissioner Littell and Commissioner Adams both testified, will displace other more expensive sources of energy which typically tend to be, at this point in time, oil and coal.
Q. Do you recall that Commissioner Littell said that the six categories for carbon offsets are approved to get additional carbon reductions; do you recall that?
A. In some states that is moving forward as a RGGI rules, which the State is in the process of doing -- at least the State of Maine is currently in the process of doing.
Q. Do you recall that he said that -- in his presentation which has been submitted as a document in his proceeding -- that he said, I did this primarily -- in other words, including the six categories -- so that you can see that renewable, at least wind power, is not one of them, meaning not one of the categories. The renewable option that's on here is landfill gas capture. The reason for that is there was a good deal of debate within the RGGI group, and our decision was only to approve those offsets in which there was unquestioned science showing that you will achieve real carbon reductions, and these were six categories in which enough scientific study had been done to show that.

Do you recall that?
A. I take your word for it, Pam. I don't recall specifically but I take your word for it.
Q. You made a very strong pronouncement in your testimony about climate change when you said, "There's no debate about solutions," didn't you? Is that still your testimony today?
A. I thought I said there was no debate concerning existence of climate change.

The issue of solution is one where there probably will continue to be debate. In my testimony, as in prior testimony, we outlined that there is a toolbox, a variety
of solutions, to this problem.
There's no one single silver bullet and that it will take a combination of a number of actions to get us there, primarily in renewable sources, more efficiency, and a decrease in our demand, which is probably one of the biggest ones, and new technologies.
Q. So are you acknowledging today that there is debate about solutions?
A. I don't think there's debate about what the solutions are; the debate is to what extent should one solution be used over another?
Q. In your discussion of the science magazine article in your testimony there's a number of wedges of the pie depicted that are said would be needed to stabilize the climate, and you say there were seven wedges but you only portrayed five; correct?
A. I think that's right.
Q. Would you agree that some of the obvious things that individuals can do here in Maine are not included in this pie or at least the ones you presented, such as wood heat and solar domestic hot water?
A. I think that's correct.
Q. And isn't it true that these wedges portray, for the most part, technological solutions that have nothing really to do with what the average person is capable of doing?
A. I think those approaches would fall under renewable sources of energy. My testimony I focused on wind power but I would agree.
Q. Do you acknowledge that there's nothing in any law, including LD 1920, which was actually passed or the public utilities law or LURC's law that requires approval of this particular wind plant?
A. Well, the decision as to whether or not approve the zoning petition rests with the Commission, and that decision is to be based on the law and the regulations that are applicable to the application.

I think part of that consideration would be consideration of 1851, LD 1920 as far as whether or not those, in my opinion, satisfy the demonstrated need criteria which is part of what the Commission needs to consider.
Q. But there's nothing in the PUC's laws or the comments that they've made that requires approval of the Kibby project; isn't that right?
A. No, I don't think any of those are binding on this Commission to say that, to approve this project.
Q. Would you agree that there have been not grid studies showing which, if any, dirty plants will be forced to reduce emissions if this project is built?
A. Yeah, further none of the dirty plants are going to be
shut down because of this one project. I don't think anybody is saying that.
Q. Would you agree there have been no studies done to show how often the introduction of wind power from Kibby onto the grid would actually lower the clearing price and thus the cost of electricity to Maine consumers?
A. I don't think I can say that. I would imagine the applicant may have done some of those studies to determine the economic feasibility of the project. I haven't any of those studies if that's what you're asking.
Q. Do you think the applicant did studies to see how often their plant would actually lower the clearing prices for electricity?
A. No, that's not what I -- what I said was I would imagine that as part of the economic viability analysis they would have looked to see how often power generated from Kibby would have been picked up from the grid, and since the cost of renewable energy is minimal compared to other costs that most likely when it's generating power, it's going to be picked up on the grid.
Q. What studies have you seen to show this?
A. That's just the practice of the market.
Q. It's not studies, in other words?
A. It's the day-to-day practice of the energy market in New England.
Q. Have you seen any scientific evidence that the Kibby project would reduce emissions and thus slow global warming?
A. No.
Q. So you've just seen projections by the applicant and assertions?
A. No; again, as I said, the operation of the market, if the project is approved and if it generates power, that power will go onto the grid and that power will displace power from more expensive sources which will tend to be power from oil- or coal-generated facilities.
Q. Have such studies been introduced into the record in either the Black Nubble proceeding or the one at Redington?
A. I believe that the presentations on August 1st, the presentation by ISO New England and the Energy Independence Office were, I believe that's part of their testimony. Don't hold me to it.
Q. Going back to what Commissioner Littell stated at the August 1st meeting, you don't deny that he said that there was a good deal of debate within the RGGI group, and they decided that they would not include wind power as one of the options for carbon offsets because there was no scientific evidence -- there was no unquestioned science showing that real carbon reductions could be achieved?

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A. I don't think I agree with that. Even if that was
    Commissioner Littell's position, CLF would not support
    that position because we would believe that renewable
    sources should be considered as part of the offsets, but
    that process is underway with the ongoing RGGI rulemaking.
        MS. PRODAN: Thank you.
        MR. MAHONEY: Thank you.
        THE CHAIR: Commissioners, any questions? Rebecca?
        MS. KURTZ: (Indicates no).
        THE CHAIR: Steve?
        MR. WIGHT: (Indicates no).
        THE CHAIR: Ed.
        MR. LAVERTY: Mr. Wilby, I just want to follow up. I
unfortunately was not here for part of the testimony that
discussed the province of Quebec's approach to issuing an RFP.
        EXAMINATION OF DAVID WILBY
BY MR. LAVERTY:
Q. You did mention it, and I just thought I would take this
    opportunity to explore that a little bit? You suggested
    that the process is not unlike that which is used here in
    the state of Maine.
    Isn't it, though, the case that LURC, as has been
    demonstrated in the last few months, deals with
    applications as they come, deals with it discretely, it
    doesn't have the capacity to compare one project with
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another?
A. I would feel more comfortable letting you tell me exactly what you're asking.
Q. What I'm suggesting is that I find this whole idea for the Commission, a governmental entity, although it is not now captured within the rubric of our regulatory approach of a governmental entity issuing an RFP for X kilowatt hours and then allowing various entities in competition with one another to submit RFPs and allowing the governmental entity to compare those and to identify projects that it turns out, perhaps, efficiencies, in terms of capacity, in terms of siting impacts, and make decisions on a comparative basis that that might not be an advantage from a regulatory perspective?
A. I think you can argue it both ways. My point is essentially, this is the system we've adopted with the RPS, and basically it's we'll throw a target out there, we'll throw some policies out there, and let the market sort of determine rather than government receiving RFPs. Now, there was a time not so long ago when essentially that RFP process in essence existed when utilities owned and operated all the generation.
Q. That would have been conducted by the PUC; correct?
A. It would have been conducted by the PUC. No, the energy aspect of that would have been conducted by the PUC. That
would not suggest that in that era a project that was going to pursue contract through that process in those days may not have needed to come right here -- or the DEP -- in fact that did occur.

I can remember a site, for instance, Greenville Steam Company, which got a contract in those days with CMP under that system. They had to go through a very complete process with DEP, so they were separate; but yes.
Q. But the initial determination of public benefit based on the energy policy considerations was made by an entity other than, in this case LURC, or DEP?
A. Yeah, I am a little unclear as to the sequencing, whether it was an initial; but yes, I think I absolutely agree with your fundamental points that that determination was made by energy regulators essentially.
Q. In your view, even though we then moved in the State of Maine to a process of deregulation where the PUC no longer undertakes that role with regard to specific projects, that the legislature through several legislative pronouncements have been referenced here today, as well as PUC through it's both policy statement and rules, and through the executive office --
A. Office of Independent Energy and Security.
Q. -- that there have been statements with regard to the public benefits, alternative renewable energy sources, and
those statements have to a certain extent established a public benefit, at least from the public benefit perspective?
A. I agree wholeheartedly.
Q. How do you think that relates to the proceedings before us here today?
A. Well, I guess I will tie this back into something I heard Director Carroll say last week about the Commission generally in that it relies a lot on sister State agencies for expertise in bird issues with IF \& W, energy issues with the PUC.

So I would think this would be, you know, very similar to all those circumstances. When you turn to folks who have expertise in an aspect of a project that you're looking at, and I would think -- and I would certainly encourage -- that the comments and the direct comments that have been filed, the comments at the forums that you've held with the PUC, with the DEP, and others about demonstrated need, that weigh heavily in your consideration.

MR. LAVERTY: Thank you.
MS. KURTZ: I'm not sure which one of you gentlemen will be able to answer this. I'm not sure. It relates to Ms. Prodan's statement about David Littell's carbon offsets. EXAMINATION OF SEAN MAHONEY

BY MS. KURTZ:
Q. There's no unquestioned science that wind power will provide offsets.

Since we've been looking at wind power for a couple years now, back and forth, back and forth, and back and forth, and I understand and respect your -- Sean -- you're respectfully not supporting what Mr . Littell said, and I just wondered what science you have, if you're saying that there is no unquestioned -- his assertion is there's no unquestioned science, what science -- help us -- what science do you have that shows there is a carbon offset?
A. First I want to say I agree. The first part of Sean's response to that question was that he didn't think that Commissioner Littell said that in those words, and I absolutely agree. I was there that day and I had spoken to the commissioners since on that very same topic.

It's confusing enough to make my head hurt, so I question my ability to explain it. Commissioner Littell was very clear that wind energy will displace fossil fuel, in fact, fossil fuel-fired generation. In fact, here's one of his slides of Page 18 of the slides which has been entered into the record says exactly that: Wind energy, as available, will displace fossil fuel-fired generation in the regional power pool. That was, in his mind, unquestionable and I assume
scientifically and technically tested.
What he was saying is that within the RGGI program, the offsets -- the decision was made during the development of that program, and I personally went to meetings in Boston and other places to sit in on many of those discussions and I heard first-hand some of those conversations -- and in the end they decided to only provide offsets to things that could be done that had a direct, you do $A$, and $B$ happens, $B$ being carbon emissions are reduced.

Anything that was, you do $A$ and $B$ happens and then $C$ happens, and $C$ is carbon reduction, they weren't going to put that -- within the offset -- they all understood and appreciated the fact that there was a displacement effect occurring but that wasn't going to be pulled into the program and offsets awarded under those circumstances.

There are a lot of reasons -- some of which I can articulate, some of which I don't fully understand -- why they made that determination, but it had to be that direct.

So if you look at the list of the offsets -- I don't have it in front of me -- but it was a very direct thing.

So something like wind power that causes, which causes an action like carbon displacement, was not included in the offsets, but it doesn't reflect on the
science that wind energy will displace fossil fuel. It will displace carbon reduction and emissions. So it's between the direct and the indirect.

If a carbon-based fuel source reduces its emissions, those will qualify as offsets. If a wind farm operates and puts 50 megawatts onto the system, onto the power system, which will undoubtedly -- as Commissioner Littell said -- displace 50 watts of oil- or coal-powered energy. That 50 watts of coal-powered or oil-powered energy won't go on the grid.

That, while it displaces it, won't qualify for offsets, which can be used -- which offsets are like chips which then can be used essentially to make money. It costs maybe, I don't know, an oil-powered facility, I'm going to reduce my emissions by 5 tons.

It's going to cost me, the technology or whatnot, to reduce the efficiency that we put in, $\$ 100,000$. I'll get 5 tons of offsets for that. That has a value to it that somebody who can't reduce their emissions and is over their limit is going to need to buy in order to keep operating.

I know, I'm sorry.
THE CHAIR: I was going to say thank you. That's probably the most clearest statement we've ever heard about it.

MR. MAHONEY: So what I disagreed with is not the
science but the policy decision not to include wind power generation within the set of actions that would qualify for offsets. That's what $I$ would disagree with. I think that should be included within the potential in this process. Right now it's not.

BY MS. KURTZ:
Q. I think follow it. Hopefully the rest of these guys did.

I guess the next question that $I$ have to ask though, will this -- what we have to look at in this particular project not one planned in $X, Y$, or $Z$, but this particular project, there was testimony made suggesting that if due to the limited capacity of transmission line this project were permitted, if there were two wind projects on that transmission line, the one that would be shut down would be the biomass plant in Wyman, and I just have to question whether this particular project is going to result in the kind of carbon reductions of the whole grand scheme of wind power?
A. I don't think that premise is correct. I would suggest that when the PUC is here they can clarify that. My understanding is that that is not correct, that the capacity will be improved in order to handle that load, that means adding more capacity to existing lines. That's what will have to be done.

Again, it's beyond the scope right now of what's in
front of you, although I understand from a practical point of view you don't want to have to permit these if we can't get the energy to the grid.

That, based on what I've heard, is not an issue. Obviously the applicants wouldn't be here if it were, and I believe that Mr. Tannenbaum from the PUC may be able to add some more to that.

MS. KURTZ: Thank you.
THE CHAIR: Go ahead, Ed.
MR. LAVERTY: I kind of hoped they we wouldn't have to get into this. Let me see -- I realize that this is cross-examination. The difficulty we're having, at least I'm having -- I don't want to speak for everyone else -- is that when you look at the output of a particular facility of a particular project, and that output goes into a grid, and based on displacement displaces energy from other places throughout the grid, it is exceedingly difficult, if not impossible, as science has advanced, to trace the electron from this project to an identifiable specific reduction cause and effect reduction somewhere else.

In the aggregate it's easy to do. It's a methodological epistemological problem. We, in our regulatory regime, are supposed to make findings based on a particular project.

It's exceedingly difficult to do that, it seems to
me, and this is the issue that we've got. It is almost impossible to make a finding that a particular electron generated at this facility, what it's going to do once it gets into the grid.

Therefore, it seems to me, what we need to do is we need to recognize the limitations or the ability to do that and accept the aggregation and disaggregation of information based on the activity of the grid as a whole.

I think the problem we're trying to deal with here is, if you say, you know, take an electron -- I remembered someone last time said, you cannot follow a specific electron, so you have to disaggregate from the activity of the grid as a whole and say generally speaking this amount produced here will in aggregate reduce or displace something over here, but to actually follow the cause and effect relationship, which we are used to doing in terms of site-specific impacts of projects, may be an inappropriate regulatory approach to undertake.

MR. MAHONEY: Let me make a comment, Commissioner
Laverty. I think -- I understand your point with respect to the electron. The difficult part is what you can't do, what is the epistemological, is trace the electrons generated, let's say the project is approved, the Kibby project, to trace those electrons to a specific house or business or end user.

However, what you can do, what is undebatable, is that if 100 megawatts of power are generated at that facility
and transmitted to the grid, then 100 megawatts of other power, existing power, will be displaced and that power will be carbon-based power. That's undeniable and there's no debate about that.

So the real question, the struggle -- and I agree with you and I know Commissioner Harvey, I think, is struggling with this, too, what's the benefit for Maine if this is going, we're generating it here, and it's going to end users someplace else within the New England power pool.

MR. LAVERTY: And that may change.
MR. MAHONEY: And that may change, and it may be here. Somebody talked about how Sugarloaf is buying wind power. Well, where are they getting their wind power? You can't say -- and quite frankly, they can't really say that they can be 100 percent certain that the power that they're using is generated by wind.

It's a leap of faith type of issue. They're paying for it and they may be paying a premium for it to get this.

So I understand where the struggle is. I think that, again, as Chairman Adams and Commissioner Littell had said, there are undeniable benefits, real and tangible, in Maine regardless of whether that electron turns a light on in Hartford or Portland or Eustis, and it has to do with not just $\mathrm{CO}_{2}$ reductions within the region and Maine but also other reductions and more standard criteria pollutants, particulate
matter, SOX and NOX.
So the real balancing that you all have been struggling with is what are the benefits in Eustis, and LURC, in Maine, and New England as opposed to what are the down sides, which are some of the things that Mr. Kimber talked about. That's a difficult role for you to have.

Obviously we feel very strongly from our point view that it's a tradeoff that is very much one that is a positive one for the state and one that we really need to make before we deal with some of those issues.

MR. WILBY: A quick example, maybe, and we call it the power pool for a reason and for the reasons you essentially outlined. It's a pool, and you toss your energy in one end, and pretty quickly it's in a pool, just like when you throw water into the pool, you can't tell which water you threw in.

But let's say, for instance, Sean's office is next to TPL's 20, 23-megawatt hydro facility on the lower Androscoggin between Brunswick and Thompson, it's generating today. Let's say tomorrow, for some technical reason, they've got a problem with a turbine, they're off line.

You can compare the two days in the grid and see that there's going to be tomorrow another 20 -something megawatts of the marginal producer, which is most days it's going to be natural gas, 21 megawatts are going to be made from natural gas tomorrow than would have had to have been made but for that

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project, if that project were still on line.
    It's that sort of mitigating effect. You can't trace
it, but you can see. If you push on one end of the balloon,
the effect on the other end.
    THE CHAIR: I can't even say that word, Ed, so I'm
not going to try.
    MS. HILTON: So gas-fired plants you can pretty much
just turn off; right?
    MR. WILBY: (Indicates yes.)
    EXAMINATION OF SEAN MAHONEY
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BY MS. HILTON:
Q. What about coal-fired plants, same kind of thing?
A. Yes.
Q. So in other words, if you looked at the whole picture --
if you looked at the whole pool and you said, okay,
altogether $I$ have renewable, this amount of renewable
power, coming into the system and therefore I have this
amount of nonrenewable, more polluting power that's goes
off.
Those kinds of numbers we have, don't we?
A. That's correct. That's the way the ISO system works. We
send it out early, and then people bid in, and then you
create the energy uses.
Q. So the producers know this at the beginning of each day?
A. They will. And, of course, for your renewable projects,
the cost of operating is minimal, if nothing, once your capital costs are paid, as opposed to the cost of operating a coal-fired, pulverized coal plant or a natural gas plant, which takes energy and feed stock.

For renewable projects, once you're up and going, you've got water, you've got wind, you've got tides and you're not paying for it.

So they're always able to -- so as long as the resources are there, they're always able to get into the grid and they're always going to be able to sell to the grid. That's not true with the marginal producers.

MS. HILTON: Okay.
THE CHAIR: Gwen, just listening to the answer here on one question, it's not my job to testify or correct people, but I don't think I would agree with you on your answer about the coal. You can't turn coal plants on and off instantly. MR. MAHONEY: I think that's right. Relatively speaking, there's a switch. It does take some time to fire up -- cycle up -- and cycle down.

THE CHAIR: Thank you.
MR. MAHONEY: Thank you, Mr. Chairman.
THE CHAIR: The problem we have, a lot of us, this is the third hearing we've gone through. There's thousands of questions that we'd like to ask or things we'd like to talk about. Once we're done, we can't talk to anybody, so I'm stuck
with asking some things here that the parties might object to as being irrelevant, and I'll let them do that if they wish. I'm sorry, but it's the only way we can talk about this is obviously in a public forum.

You mentioned that this project was consistent and others have been consistent with public policy; but I'm wondering how consistent has public policy been with respect to energy in the State of Maine?

My experience -- and I'm not directly related -- but I've been through a lot of -- it's been very choppy and we've incentive-ized things and then we take away the incentives, we shut down, we start, we stop. I would only like your view on how wind power might -- what's going to happen to wind power. I hate to see it get caught up in this choppiness that we've had, that we don't seem to know what we want to do.

MR. WILBY: I think that's a very valid observation. I think that would apply to most types of public policy.

It's a fact of democracy and it's a fact of governors, legislators, president, they come and go. We could obviously be very consistent if we had a King, but I would -I'm not saying that to make light of the observation of energy policy. It may have been a bit choppier than many, maybe not the choppiest, but I think -- my -- I don't have a crystal ball, but my sense is that we're at the beginning of an era where wind power is going to be I think a very important piece
of the energy picture, and so $I$ think we're going to have quite a bit of time before that's going to change.

We're in the early stages -- not in the middle or the late stages -- when something is likely to change. I think this is going to be part of policy for a good long time.

The slide showed earlier illustrated the demand in 2015. There are policies in place today that are out a decade or more. And particularly with wind being such a long-term resource, once you spent the capital on that, the value is there and you're going to want to produce energy from it.

I sort of make the analogy, if you went to a theme park, you put your money in upfront to get inside. Once you're in you're in, you're in. You're not going to leave until you're done with the theme park.

If something changes, you're still going to be there because the capital is up front. With other types of energy policies and energy generators that are more fuel dependent, every single day you can get up and make that determination of is it in my economic interest to put money -- to put fuel in the boiler today or not. Once the wind facility is built, it's in your economic interest to produce every single time you can.

I guess to answer your question, I think this is here for a long time, and $I$ think energy policy will come and go, but $I$ think this is going to be a piece of it for quite a while.

MR. MAHONEY: I would agree with that. I can understand where you're coming from if one looks at the development of hydro power. That's gone up and down all the time.

I think the issue of hydro power is that we really don't have any -- there are few untapped resources -- but it's unlikely that those are going to be tapped in the future. I can think of the Big A project.

Now, we do have efforts where some dams are being -there are cooperative agreements to take them out, restore some rivers, but those are fairly creative. The work that's being done on the Penobscot with taking out two dams but increasing the size of another so that the same amount of energy is being produced, thus freeing up a big stretch of the river, that's a real creative solution to addressing some of the impacts of hydro as well as maintaining the same amount of energy.

I guess the other thing $I$ say is the market drives a lot of it as well. Solar technology has been something that's been pushed for a while but we can't get past that threshold, whereas wind is something that there is a lot of market movement for that.

MR. WILBY: One quick thing I should have added is that these wind policies are not a partisan matter, and that should give you some sense of their sustainability.

On the federal level, republicans, democrats control
the White House, they control Congress. They've all pushed in the same direction on these issues. The same in Augusta.

So I don't think this is a situation where if one party or one group of people leave office that you're going to see a change on this. This is something that is a bit more stable in my view.

MR. LAVERTY: In the spirit of being able to talk about things in this forum that we can't talk about otherwise, and taking advantage of you unmercifully to do that, the business about the persistence of this policy, I mean, I have to say that $I$ was on the Board of Environmental Protection during the 1980s when we licensed numerous -- in the space of a very few years -- numerous biomass energy facilities throughout the state of Maine, and it was at a time following, I think, the Natural Energy Act of 1978, and the concern there was the shortages of petroleum and displacing petroleum. You needed energy that produced power from a source other than petroleum, displaced petroleum energy, received a preferred rate in the grid.

This then created an incentive along with, quite frankly, temporary tax reductions in the early '80s, you know, 25 percent across the board, elimination of capital gains for a whole bunch of people to take advantage of PURPA rates to build these projects, and we built them all over the place. When the PURPA rate was withdrawn, they were all mothballed.

Now, you argue that they're up and running again today, but to say because a project is built, you know, the amusement park analogy, my experience has demonstrated that it has a lot more to do -- not so much with the energy needs -but with the financing mechanisms and the tax mechanisms that are in place that create incentives or disincentives of certain types of projects to be built irrespective of their long-term sustainability or their actual contribution to energy.

So I guess one of the things -- and I don't know how to say this, $I$ don't mean to imply -- that any of the projects before us are constructed this way, and I mean constructed in terms of the deal that's being put together where it's to put the project together becomes fundable, let's settle with the management company what the management company wants and go on with it, but I have to say that I think there is some concern about given if for some reason -- what are we dealing with, $\$ 80.33$ a barrel today, as we speak, something like that -- we drop down to 65 or $\$ 60$ a barrel for whatever reason, what's going to happen to the viability of these projects?

So I think the notion that once they're built they're going to continue to the operate to me doesn't completely satisfy.

MR. WILBY: If I can -- and I should have made that a little clear on my comment earlier about you get up in the day and decide whether to put fuel in the boiler. That applies to
the biomass situation. So representing most of the State's biomass facilities, I'm acutely familiar with, a biomass facility in fuel costs is an enormous part of their economics.

The fuel costs of a wind facility once built is quite easy to calculate, it's zero. And so the capital cost up front is the key question.

Once you get that capital cost at some common ground, you won't operate. As opposed to a fuel-driven generation facility, which has very different day-to-day economic, sense of economics, it's one of the reasons why wind, until recently, has been challenging to do financially because you have to put all your money up front, whereas a natural gas facility, it's quite cheap on the capital side to build, it's every single day paying for the fuel down the road, but from a development standpoint that's easier.

So there's a real distinction in my mind -- I'm trying to draw here -- there is a real distinction between facilities you develop that have a fuel cost -- and no biomass -- and those you don't, like hydro and wind.

Once you've sunk that, you just want to -- you've got to run the thing. Even if you're only going to get 98 cents back on your dollar, 98 cents is better than zero.

MR. LAVERTY: Thank you, I think that's an excellent point. What about the subsidy part of it?

MR. WILBY: Well, generally I would say -- I would
say first, this is my personal opinion and I don't know whether TransCanada or any other developer agree with this -- but I think wind power would be better off in the country from a financial standpoint if every single energy subsidy disappeared.

The problem is that every other type of energy is so heavily subsidized that the wind production tax credit is only sort of chipping into the advantage that the other types already have.

If you pull a dollar out of your pocket to represent the amount of federal energy subsidies that come from your tax dollar, 1 penny goes to wind; 99 cents goes to coal, oil, et cetera, et cetera. If you want to talk about, again, ethanol, said Sean, very heavily subsidized.

So this notion that wind is somehow incentive-ized or subsidized out of line is just not correct, and, in fact, again, it also seems we've done away with it. Probably wind energy would come out probably ahead of the game, frankly.

I don't know if that answers your question but I think it's an important point.

MR. MAHONEY: I was just going to make the exact same point. All of our energy is subsidized. Unfortunately, the tax policy, our taxes tend to be the way we implement public policy, and wind is the new kid on the block and its share of that tax benefit is minute compared to big coal and big oil and
ethanol, big ethanol.
THE CHAIR: Were either one of you here last night at the public session? Did you hear -- I don't know if it was Senator Gooley or Representative Carter spoke.

MR. MAHONEY: I was here for both those gentlemen.
THE CHAIR: One of them I mentioned something about 1000 megawatts thing.

Do you know what he was -- the site, I don't know if he was talking about the siting commission or somebody decided that we needed 1000 megawatts of wind power or something like that in the state of Maine.

MR. MAHONEY: That was in reference to the wind power commission. I'm assuming Senator Gooley -- I don't want to change his title, he used to be a representative -- serves along with a number of us here today on the Wind Power Task Force, and 1000 has been bantered about. It has not been landed above by the task force, at least, as the goal.

One of the responsibilities that the governor gave us in his executive order was to in fact try to put up a target of maybe 1000 megawatts by 2020 or what have you. I'm just making it up.

But that has been truly a discussion phase, it's been no specific number adopted. It does reflect -- 1000 does reflect some factors out there. I think that's what he was mentioning.

Separate from that, Conservation Law Foundation and Natural Resources Council of Maine, the Union of Concerned Scientists, and others are beginning on a scientific study of what wind resources we have in the state.

There's been a number that's been banded about, which I think was 8000 megawatts, but that, quite honestly, is kind of the back of the envelope estimate.

The idea of our joint efforts is trying to get some real substance that's separate and apart from the governor's task force.

THE CHAIR: At some point $I$ would assume it might be helpful to know that kind of stuff. It's obviously not going to have any impact on these deliberations that we're going through at this point.

Well, I think we've probably exhausted ourselves and you, so we really thank you for this discussion. I appreciate the parties allowing us to indulge ourselves a little bit in perhaps some of the far reaching discussion here, but it kind of helps us put this all into perspective.

So thank you very much.
MR. MAHONEY: Thank you. Again, I would echo what Dave said at the outset of his testimony, you have a very difficult task that you do with a lot of grace, especially you, Chairman Harvey.

THE CHAIR: All right. The last part of this

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schedule is to allow the parties who wanted to -- and I guess
the Commission as well -- to ask questions of the State
representatives who commented on this application, and I
believe that Mitch Tannenbaum and Dave Rocque are here, and
Steve Timpano from the Fish & Wildlife.
    If those folks -- I believe some are coming into the
room.
    Come on right down and sit at the table.
    Do you have questions of these people?
    MS. BROWNE: I do for IF & W; I just wanted to
reserve the right to ask questions of Mitch Tannenbaum and Dave
Rocque based on what comes out through --
    THE CHAIR: We'll let Pam go first, and she asked for
5 0 \text { minutes. Good afternoon Mr. Rocque.}
    MR. ROCQUE: Good afternoon.
        EXAMINATION OF DAVE ROCQUE
BY MS. PRODAN:
Q. Do you recall writing a memo to Mr. Frick in the
    Black Nubble zoning proceeding responding to some e-mail
    messages on soils?
A. Yes.
Q. Do you have a copy with you today?
A. I don't.
Q. In that memo you stated that because you believe that
    mountaintops are one of the most suitable sites for wind
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power generation and the wind power zoning applications are therefore, you mean, you would not recommend denying them; isn't that right?
A. I'm not sure if $I$ said it exactly that way but $I$ was inferring that because of the uniqueness of mountains and that is a suitable location that that was a justification that I would have for if there was any building of roads to get there.
Q. Fair enough. So in other words, you would not say today that this project should be approved, but you would not also say that it should be denied; isn't that right?
A. That's right.
Q. And that's consistent with you not being a regulator yourself; is that right?
A. That's right.
Q. Instead, you -- it's my understanding -- and you can correct me if I'm wrong -- instead your job is to assure that development is being done in the best possible way; right?
A. That's part of it, but I also think on rare occasions I do recommend denials when conditions are poor enough to warrant it.
Q. That would mostly be in rezoning situations where it is not one of the -- one of the -- excuse me, let me restate that question.

You might recommend disapproving a rezoning if you did not believe that the location was required for the project, in other words, like on a mountain where the wind resource is?
A. Yeah, I would probably -- if it was a suitable location to build the roads and somebody felt it was suitable for wind power, I would probably not get into that part.

My biggest issue would be the soil and water resources.
Q. Okay. However, it actually is true that you are on record as saying that the soils in both the Kibby project area and Black Nubble project area are not suitable for development right?
A. Yes, there are severe limitations based upon soil potential ratings.
Q. As you've described in your memo to Mr. Frick, it's your position that the lack of suitability of soils for road buildings doesn't mean that roads can't be built; correct?
A. That's correct.
Q. In the Frick memo you were quoted as having said that you struggled -- actually what he did was he took an excerpt from another document and in that document you were quoted --

MS. BROWNE: Who's he?
MS. PRODAN: We're still talking about Mr. Frick and
his correspondence that's referred to in Mr. Rocque's memo. Still in that one document, the Frick memo. BY MS. PRODAN:
Q. Do you recall that in the Frick memo -- I think it's actually on the third page near the bottom -- you were quoted by Mr. Frick in this excerpt as having said that you struggled to come up with what may be suitable techniques to overcome the unique challenges of building roads up to a northerly mountain, particularly with respect to hydrology; correct?
A. That's right.
Q. You have a couple of caveats in your memo, one of which is where you say -- and this was also quoted by Mr. Frick --

I cannot say with certainly that they would work as proposed because they've not been used so extensively in similar settings that I'm aware of; is that right?
A. That's right.
Q. Are you any more or less certain today?
A. No.
Q. Is this still your testimony today?
A. Yes.
Q. In your answer to Mr. Frick you say something similar, that they "are the most appropriately available and should work but they're not proven, at least on such large-scale projects in Maine. So there is a potential for problems."
Is this still your testimony today?
A. That's right.
Q. It sounds like you do have some level of doubt as to whether these techniques will really work, don't you?
A. Yes, and by working, that means the hydrology, not just structurally.
Q. Are you aware that in fact post construction monitoring was recommended in the memo from Mr. Timpano?
A. No.
Q. But back to your position, so you say the techniques should work, but if you can't remove that doubt, you probably can't give full-fledged assurance to the Commission that they will work to protect the resource; right?
A. That's true, and that is true basically any time anything's done, it depends on too many variables.
Q. Do you recall your memo for Plum Creek in the Plum Creek proceeding and your discussion on soil suitability?
A. Yes, I do.
Q. Did you say in that memo it's your professional opinion that the test for rezoning should be the natural suitability of the area for the intended use, not whether or not soils and slope limitations can be overcome by engineering regardless of the degree of engineering required?
A. Yes, I remember saying that.
Q. Is that because with technology and equipment today a lot more actually can be done to overcome the limitations?
A. That's not entirely the issue. The issue is the overall impact on an area with doing certain types of development projects. That was the biggest issue.
Q. And in the Plum Creek memo, did you not state, by focusing on these slopes and soils that are suitable for development, more passive engineering --

THE CHAIR: Pam, excuse me. What did I ask about Plum Creek? I'm not sure what the relevance of Plum Creek is to this proceeding.

I need you to kind of skip that if you can. I'm trying to avoid discussion of Plum Creek because it's such a big issue for us otherwise. I don't want to create problems for this Commission.

MS. PRODAN: I'm sorry, I will rephrase the question. THE CHAIR: Thank you.

MS. PRODAN: I apologize. Since I'm not involved in Plum Creek, I wasn't thinking about that. I apologize. BY MS. PRODAN:
Q. What is your position concerning the use of passive engineering techniques, in other words, what I'm asking is, why do you prefer that passive engineering can be used, if that is your position?
A. I much prefer passive engineering techniques because if they need to be maintained, the odds are they won't be well maintained, and if they're not, there may be some issues.

If you have passive techniques that don't need the maintenance, so therefore they're more likely to work.
Q. Did you see the review comments of the DEP's Jeff Dennis in this Kibby proceeding?
A. No, I didn't.
Q. They are in the record already.

Are you aware of the review comments now of Jeff Dennis in which he stated that for the Kibby project TransCanada plans to super elevate the roads?
A. I was actually at a meeting with Jeff back probably last winter when we talked about road building techniques and came to some agreements on what would be probably the most appropriate techniques to use.
Q. With regard to super elevated roads, would you agree that this type of road would require fairly exacting construction techniques?
A. Probably not any more so than otherwise would be required.
Q. But would you agree that they do require maintenance?
A. I suspect any road that's going to be built most anywhere, particularly in the mountains, would need maintenance.
Q. Are you aware of Mr. Dennis' comment that since the
treatment of roads are not -- the roads are being super elevated instead of crowned, LURC will have to consider how best to ensure that they're maintained in a super elevated condition and are not accidentally graded with a crown in the future?
A. I'm not familiar with that, but I'm sure you're right, that's what it says.
Q. Could you check that.

The reason why I'm asking is $I$ want to ask you a question.

Do you consider that practice -- roads that do require little or no maintenance are much less likely to fail and impact natural resources that are protected?
A. That's correct.
Q. So a road that has no maintenance would have less likelihood of failing and impacting a protected natural resource?
A. If it was built property, and it doesn't just have to be super elevated. It can also have a rock sandwich and be crowned and that would still serve the same purpose. There are other ways of doing it.
Q. Well, we don't have time for a soil lesson today, but I think that's a basic question about mountain soils.

First, are the soil units or series in the Kibby project area the same as the soil units found in other
townships in western Maine?
A. In the mountain areas they should be fairly similar.
Q. Would you agree that in the Maine mountains where there's a thick organic cover for the top of the soil, there's very little surface runoff in the natural state?
A. Except in the spring when the ground is frozen, there's no effects, yes.
Q. When the soils are in a natural state, does most of the water infiltrate into the ground below this layer of organic matter where it moves through the soil and stays cold and clean?
A. It does, but it also has -- the mountains have a very unique situation where they have boulder-covered areas and sometimes the water runs through the boulders into a stream.
Q. And it stays underground in those conditions?
A. Yes, most of the time.
Q. So is it fair to say that most of the times when a mountain area is not developed there is a natural equilibrium there with the soils, the slopes, the vegetation?
A. Expect for forest harvesting practices, which can be there, and there are natural events where you can get a tremendous amount of rainfall runoff that can change hydrologic patterns, but normally it stays about the same.
Q. If the soil was conserved by development and the organic matter is removed, would you agree there would be more stormwater runoff generally and the water becomes a surficial feature?
A. Yes.
Q. In that situation, the water wouldn't be as cold and as clean?
A. That's correct unless you used the right techniques to reintroduce it into the ground properly.
Q. And development without those techniques, sometimes wetlands and streams might dry up and sometimes wetlands and streams can become overwhelmed with water that's deposited from the drainage ways; is that right?
A. Yeah, that is the potential if not done properly.
Q. Do you recall the heavy rain event of July 12 th in western Maine when over 5 inches fell near Gilead?
A. I remember that event, yes.
Q. Did you go visit the area by any chance?
A. I didn't until a long time after, so $I$ never went there and saw any of the results.
Q. As a professional, what's your opinion about what could happen to the proposed road system in the Kibby project if during the construction phase a heavy rain event like that occurred there?
A. If they took their proper techniques, then it would be
minimal effect; but if they didn't, there could be disastrous effects.
Q. In your Comment 13 of the initial review comments, you mentioned there are around 2.25 miles of potentially poor to very poorly drained soils in the transmission line as reported; is that correct?
A. Yes; and that's based upon information that was provided to me in the application.
Q. I see. Does that include the wetland inclusions in the mapped unit not listed as being hydric?
A. I based my estimate on the soils, not necessarily what was mapped as wetlands. Wetlands poorly drained soils are usually wetlands but not always.
Q. So just to clarify so I understand, the 2.25 miles of soils identified as potentially poor and very poorly drained, those 2.25 miles do not count inclusions in mapped units that wouldn't be considered potentially poor and very poorly drained?
A. No, the mapped unit contained poorly and very poorly drained soil areas. And poorly and very poorly drained soil areas can include uplands. It can go both ways.
Q. According to the response of Comment 10 of Jay Clement of the Army Corps of Engineers, temporary maps of streams and wetlands are included in his definition of fill, but according to LURC and DEP regulations, they are not; is
that right?
A. I'm not sure of that one.
Q. All right. I won't pursue that.

Do you have any way to gauge at this time how much fill there would be for the whole project?
A. Not until I had specific details. What we have now are general ideas and concepts but not the specifics.
Q. So you would need more information about the actual construction techniques; is that correct?
A. What would be used and where, yes.
Q. Is it your understanding that the transmission line will be open to ATV use?
A. No, I'm not aware of whether it would be. It would be a concern but I'm not aware of what the final decision is.
Q. And you don't have any information about the ATV use of access roadways, do you?
A. No, I don't.
Q. But in your review comments you raise concern about ATV use of the transmission line corridor over poorly and very poorly drained soils, do you not?
A. Yes, I just raised the issue should that be allowed, then the soils will need to have some sort of protective measures.
Q. In your experience --

THE CHAIR: Pam, excuse me, would you just say those
letters again. I couldn't quite understand. Did you say ATV? MS. PRODAN: Yes, I'm sorry. All terrain vehicles. THE CHAIR: Oh, okay.

BY MS. PRODAN:
Q. How easily can ATV use be controlled in back country areas like here along a 25-mile-plus transmission line that doesn't go along a road?
A. I'm a soil scientist; I wouldn't know.
Q. Well, I'm curious whether you've seen -- since you did raise a concern about ATV and TransCanada in its response said it had inspection protocol, have you seen this protocol?
A. No, I haven't seen it.
Q. What's your opinion on this idea about having inspections and then going out and trying to fix a situation? Is implementing measures after the fact, does that actually protect soils?
A. As I raised in my comments, I would like to see some sort of process in place should those be allowed to be open for use by ATVs to provide some sort of protection, and I suspect that's probably not an easy thing to do, but I don't know because $I$ don't deal with ATVs other than try to fix what they do.
Q. In your opinion based on what you know how often it rains and how often soil conditions might change in that part of

Maine, do you know how often it would be necessary to go out and inspect areas along the transmission line to see whether there was damage or not?
A. No, because it would depend on if they had general -allowed to be used, if it was just for snowmobiles, and then how much are those actually used that would make a difference.
Q. Can you explain the meaning of the soil abbreviation suffix C or $D$ when you look at a soil map or listing of soils and you see, for example, SaC or SaD. What does the $C$ or $D$ mean?
A. The last letter is usually capitalized and refers to slope.
Q. And for a unit or series identified with a C, is it correct that it has a slope up to 30 percent?
A. That is a range. If you went by the NRCS soil mapping procedures, that usually means 8 to 15 percent slope. But each soil scientist can craft their map and their slope to be whatever it is that they prefer it to be.

So in this case the $C$ is 30 percent that they're using.
Q. I see. So we would need to look at the information in the --
A. Yes.
Q. -- application to see what the slope is?
A. Right.
Q. -- for each letter there?
A. Yes.
Q. Thank you.
A. Yep.
Q. However, would you agree that based on your review of the application that there are numerous locations in the project area where the slopes are 30 percent or greater?
A. I didn't do any analysis of the percentages, but $I$ do know that there are areas that do have very steep slopes, and that was one of my issues.
Q. Was it an issue for you because it's impossible for TransCanada to wholly avoid those slopes in the project area?
A. Generally speaking, if you're going to reach the top of the mountain, you're going to have to cross some steep slopes.
Q. In your initial review comments you mention steep cuts. Can you tell the extent of the steep cuts?
A. Steep cuts?
Q. I'm sorry. Deep cuts from these maps I'm going to show you in Volume 3 of the direct testimony of TransCanada. It's also in the application.

There are two maps, one is of Kibby Range and one is of the Kibby string. Can you tell the extent of the deep
cuts from these maps?
A. There is a map here that does show where they are proposing to make deeper cuts.
Q. So you can see the location of the cuts?
A. Hm-hmm (indicates yes).
Q. And you can see where the fills are also; is that correct?
A. That's correct.
Q. But you can't really tell the full extent of it, can you?
A. No; until it's actually specifically designed, those are probably estimates.
Q. Is it your opinion that mountain soils have severe limitations for more than just road building but erosion hazards and equipment limitations?
A. Yes.
Q. In the road detail filed July 23rd in response to your initial comments, do you recall that?
A. I don't remember seeing or getting responses to the comments.

It doesn't mean I didn't. I don't remember it. I get busy and -- I'm out in the field a lot.

MS. BROWNE: What are we looking at?
MS. PRODAN: We're looking at the response, 1 believe it was filed July 23rd.

MS. BROWNE: What is it?
MS. PRODAN: It's the detail, the road detail. So
that would be under the initial responses and it would be Attachment A, and it's called road traversing existing steep slope with shallow groundwater.

MS. BROWNE: Thank you.
BY MS. PRODAN:
Q. Dave, do you recall that this was in response to your initial comments?
A. As I said, I don't remember seeing the responses, so I -this is the first time I've ever seen this specific detail.

I'm not saying I didn't get them, I just don't remember seeing them.
Q. I understand. But taking a look at this now, how would something like this actually get built on a mountain?
A. Well, there's actually -- I took the people from TransCanada and the Black Nubble/Redington engineers to a site in Elliotsville Township where a road is being built -- just built, in the final stages of being built -using this technique, and it worked quite well. I went back this summer and it was still working quite well.
Q. But in construction does the equipment have to be on some steep slopes in order to construct it?
A. Either that or you would build part of it and you work your way all along on the part that you built.
Q. How long is the length of road in Elliotsville Plantation
where that technique was used?
A. I'd guess maybe 500 feet.
Q. When was it built?
A. The winter before last.
Q. So it's 500 feet long and it's been in existence through two winters?
A. A year and a half, two years.
Q. Regarding the rock mattress technique, am I saying that right, rock mattress technique?
A. Yep, that's good.
Q. How extensively has this technique been used in Maine?
A. It's been used on a number of roads, probably a dozen, that I am aware of.
Q. Isn't it true that the $I F \& W$ representative said that he was not familiar with the rock mattress technique?
A. I don't know.
Q. Are the toolkit techniques -- am I saying that right -toolkit -- are those techniques that you proposed included in any standards that have been adopted by any agency in Maine?
A. Most of them are. The only one that I'm thinking that may not be used is the rock sandwich or other rock applied layer or equal dispersion of the flow. That one I'm not sure, although other states have that technique because I've seen -- I've been given copies by people from other
agencies showing that.
Q. Do you have any idea what weight that rock sandwich can take before the integrity is compromised by compression or --?
A. No, but I don't see any reason why it would be compromised.
Q. So how many years do you expect the rock sandwich to perform as needed?
A. Hopefully indefinitely.
Q. Do you think additional research should be done before adopting the technique on a large scale?
A. Personally, I would like to see it used more frequently because I think that it has -- it reduces the impact on resources, and if you wait several years before you used it, then there may be some significant alteration of resources that could have been prevented.
Q. With regard to the first technique that we discussed where you said a road had -- 500 feet of road had been built using that technique in Elliotsville Plantations, would you like to see more of that being constructed also?
A. I would prefer to see less road built in those areas but if you can't avoid, that's a very good technique to use.
Q. What's your understanding of how many road miles of seeps are proposed to be stabilized using the rock sandwich method?
A. You're talking about for this project?
Q. Yes. I'm sorry, for this project.
A. I haven't done that analysis. I would do that during the actual development phase. This was a rezoning application, so I was more concerned about the techniques that would be used than to have the actual specifics and assume they would come later.
Q. I believe you stated in some of your comments that in this project pallets could be used or talus material could be used where it's shallow bedrock.

What would this material be used for?
A. It would be making a type of a rock sandwich.
Q. And where would the material come from if it were talus?
A. If it was talus, that just means that it's near a mountaintop. It's rock that has fallen off and rolling down the side and it's just kind of sitting there. It would be taken from that area.
Q. Are you anticipating these areas would be found very close to where the road's proposed, or would some of it reach part of the mountain, making it a steeper area where it would roll down?
A. It could be most anywhere that would be convenient for the contractor to obtain the material.
Q. But you didn't necessarily have any information that that would actually be available on the site?
A. No, I didn't.
Q. Is it your understanding that the applicant would use the techniques you recommend when and where they believe they're necessary?
A. Yes.
Q. If the engineer on the project disagrees with you as to which construction technique should be used in a situation, how would that issue be resolved?
A. I try very hard to be practical so that if the engineer had a very good reason why a different technique was required in his or her opinion and I agreed, then I don't have any problem with modifications.
Q. I'm not sure you know the answer to the next question, but I guess I'll ask it.

If your techniques, like with the toolkit, are adopted in some situation, who has the liability if it doesn't work since you're a State employee?

Do you have any liability if you recommend something and it doesn't work, or does the engineering company have the liability?
A. Generally speaking -- I've been doing this for 20 years -and it's always that $I$ sit down with the engineers and we come to an agreement such as if this rock sandwich technique was to be used, they could install a few culverts so that if the water was going to overwhelm the
rock sandwich, like if a person is building a dam, so you can put in measures that can be used to take care of a situation should it not work, and then after a while if we find that they work and we don't need those cross culverts, we don't use them. So there are ways to take care of that concern.
Q. How much of your job is engineering solutions to problems related to building on soils and slopes that are of marginal suitability for development or roads?
A. That, $I$ can't give you a percentage, but that's a common type of duty that I have.
Q. And you have worked for engineering firms in Maine; isn't that correct?
A. Yes.
Q. For ten years in fact, from '75 to '80 [sic]?
A. '75 to '85.
Q. Excuse me, '75 to '85; correct?
A. Right.
Q. But you're not qualified or licensed as an engineer yourself; right?
A. No, I'm not.
Q. Have you ever had the impression that cost might become an issue with the construction of this project?
A. That's not something that $I$ generally concern myself with, and particularly when there are significant or severe
limitations, I say these require significant techniques to be used.
Q. For a project of this magnitude and where it is, how much of your time do you think you would spend as a State employee on -- do you have any idea?
A. No, I don't. I would make myself available to -particularly in the beginning -- to make sure things were being as proposed and the engineer and I agreed and make sure things were working. Then I would just probably spot check from then on.
Q. Is there any arrangement with developers to reimburse the State of Maine for your time and expenses?
A. Not that I'm aware of.

MS. PRODAN: Thank you.
Good afternoon, Mr. Tannenbaum.
MR. TANNENBAUM: Good afternoon.
EXAMINATION OF MR. TANNENBAUM
BY MS. PRODAN:
Q. My first question to you is in regards to the Electric Restructuring Act. Under Section 7, when the Public Utilities Commission is mandated to inform consumers about the benefits of electricity generated in this state from renewables and the opportunity to buy it, doesn't it also say the Commission may not promote any renewable resources over others?
A. That's my memory, yes.
Q. So you're not here today to promote the Kibby wind project over any other renewable resources; is that correct?
A. Yes, that's correct.
Q. Are you aware that the FERC recently ordered a new transmission line to be built to get the power out of the Maple Ridge wind power development in New York and the Catskill region to downstate New York?
A. No, I'm not.
Q. Well, let me ask you, if transmission capacity in Maine is insufficient to transmit the electricity from a wind power project in Maine, can the federal government step in and order a new transmission line to be built?
A. There's a process in the Energy Policy Act that involves the DOE, the Department of Energy, for designating corridors.

Once -- I think they're referred to as National Interest Corridors -- and once they have done that, then the FERC, Federal Energy Regulatory Commission, can preempt State transmission siting for that.
Q. Are you aware of any of those corridors being located in Maine?
A. No. At this point FERC does not have the authority to preempt state authority.
Q. Next I want to ask you about Maine's portfolio requirement
that you mentioned on Page 7 in your comments. The amendment to Maine's portfolio requirement that you mentioned called, An Act to Stimulate Demand for Renewable Energy, that's public law, Chapter 43 now; correct?
A. I'll take that as correct.
Q. Would you agree that it actually has the potential to dramatically increase the amount of funding for community-demonstration project and research?
A. To the extent that suppliers choose to comply with the new requirement by paying into a fund as opposed to purchasing new renewable energy credits from a wind or other renewable facility, it would have the effect of increasing the voluntary renewable, RD-5.
Q. So in other words, is it correct to say that this law requires the PUC to allow electricity providers the choice of complying with them, new renewable resource requirement, by paying into the renewable resource fund?
A. Well, this is essentially a cap on what suppliers will have to pay in order to meet the requirements. So if the market value of renewable energy credits for renewable power is higher than that cap that the PUC will set, then the economic response would be to pay into the fund. It's not really -- technically the supplier has a
choice.
Q. I'm sorry, I didn't hear you.
A. I said the supplier would have a choice, but the idea is not -- the idea is to require suppliers to support renewable projects by purchasing RECs.

The alternative compliance mechanism is really a ratepayer protection mechanism that caps the rate impact of the renewable portfolio.
Q. Would you agree that the law for the renewable resource fund was also amended this year transferring the administration of the renewable resource fund from the State planning office to the PUC?
A. Yes, that's correct.
Q. Doesn't this new law also provide that the eligible projects that may be funded out of this fund now include projects by 501(c)(3) organizations, consumer-owned $T$ and D utilities, community-based nonprofits, community action programs, and municipalities, quasi municipal corporations, or school directs or school units?
A. I accept that that's what it says.
Q. If you want to -- I do actually have a copy of Chapter 18 here if you want to double-check that Paragraph D.
A. I have a copy.
Q. In other words, what I'm asking, were the groups that could apply for these funds actually expanded on this list
for inception?
A. Well, I accept that that's the case. I'm not specifically aware of that, but I don't doubt it and I accept it if that's what the law says.
Q. Would you agree that Section $D$ has new language in it?
A. Again, it's --
Q. You said you had a copy of it?
A. I'm sorry, I was looking at perhaps a different -- I apologize, Pam, I was looking at the renewable law.

The question was is this a new change?
Q. The question is concerning the groups that are eligible to apply to have a community-demonstration project, has that group been expanded?
A. Yes, it has.

MS. BROWNE: I'd like to object. I'm having a hard time following the relevance of community projects.

THE CHAIR: I guess I am, too. If Pam wants to enlighten us, I'd be happy to hear it.

MS. BROWNE: I'm also -- I know we're getting toward the end of the day and I don't want to lose my opportunity. THE CHAIR: We're going to finish. Don't worry, everybody will have a chance to speak even if we don't eat supper.

I guess, Pam, you can help us a little bit. I have to say, I'm a little lost by what you're trying to -- what the
point is you're trying to make. If you want us to be kind of sympathetic to you, you have to make sure it's clear.

MS. PRODAN: Well, I think I'll just move on to the next topic.

THE CHAIR: Okay, that's good.

BY MS. PRODAN:
Q. Slightly different topic. For the renewable portfolio requirement established in 2000 , would you agree that the TransCanada Kibby project would not qualify for that?
A. Because it was greater than 100 megawatts, that is correct.
Q. But under the new law you referred to in your comments to the Commission it would create a separate additional portfolio requirement for new renewable energy for which that restriction on capacity size doesn't apply; correct?
A. Doesn't apply to wind projects -- to wind projects it continues to apply to other renewable generation facilities.
Q. So the Kibby project would qualify for this; correct?
A. Yes, it would.
Q. My last question is just to get your perspective on the swimming pool analogy for the grid, which it's been referred to for many years, actually, and sometimes it's called the balloon analogy.

I was wondering if you or the Commission has a
position on whether this actually reflects the complexity of the grid. You can give your own personal opinion on this if you would like.
A. I'm not very good with analogies and I'm probably not qualified to testify on analogies; but I think the point is that with an electric system, at every given moment there's a demand for electricity, and in every given moment there has to be supply to meet that demand. Electricity is a supply that's generated as it's used. Electricity generally isn't stored, it's consumed as it's generated. So to the extent the load is giving in a particular moment in a particular hour and something generates, something else won't generate, and that was a little bit of what $I$ heard when $I$ walked in, that if the wind is blowing and a wind facility is generating, something else is going to back down because the amount of generation and the amount of load at any given moment in time has to match.

I'm not sure if that was the balloon analogy but I thought it was, or the pool.
Q. Isn't it true that with congestion and limitations in the grid, it's not always possible for electrons to easily flow from where there's supply to where there's demand; is that right?
A. There are times where there's transmission congestion
which would result in economic facility or what would operate.

Remember, the cheapest facilities operate first. As demand grows, the more expensive ones run. There are times because of congestion that a cheaper facility can't run because there's not enough room on the grid. Something else will run.

MS. PRODAN: Thank you.
A. That type of congestion, by the way, usually results in the lower prices. Congestion, Chairman Adams always likes to point out, cuts both ways.

THE CHAIR: Thank you. Thank you, Pam. TransCanada, are you --? I'd like to have the Commission have time to pose some questions before 5 o'clock, too, so I hope Juliet doesn't use this all up.

MS. BROWNE: I won't.
THE CHAIR: I would, somewhere between 10 and 15 minutes ought to satisfy you, I hope.

MS. BROWNE: I'll do my level best.
THE CHAIR: Then that gives us another 10 or 15 minutes.

MS. BROWNE: Thank you. I'm going to begin with you, Dave. Again, $I$ appreciate your coming in on your day off. Some might say you really know how to vacation.

MR. ROCQUE: Thanks.

EXAMINATION OF DAVE ROCQUE
BY MS. BROWNE:
Q. I think that you talked about the risks associated with road construction in these areas, which I certainly appreciate, and just one important point for context that I would like to ask you about is that in any construction project, you would agree that there are risks associated with construction and the most important -- or certainly one of the most important factors -- is to make sure that techniques to address hydrology and erosion are actually properly implemented during the construction process?
A. That's correct.
Q. You also talked about the suitability of soils. Just so we're clear, there's a difference between talking about soils that might be suitable for use in construction of the roads, and as I understand your testimony and as I understand the conditions that the Kibby site, there are soils that would not be suitable for use in construction of the roads; correct?
A. Yes, based upon the documents with the potential ratings for development, that's what I'm basing it upon.

Because as I've said before, engineering techniques are available today to overcome most limitations, it's just to what degree of limitation is it. The way you make the cutoff between what you call suitable and not
suitable.
Q. And there are techniques as we've talked about for addressing measures to ensure that during a construction process, whether you're using the soils present for the roads or you're bringing in other materials to build the roads, that you maintain the hydrology and you prevent soil erosion and runoff; correct?
A. Yes, there are techniques that should be employed to prevent any undue adverse impact during construction.
Q. Some of the specific techniques developed here have been the rock sandwich and other --
A. That's a different -- there's temporary measures to prevent a problem from happening while you're building it, but then there are permanent measures for the long term, and the rock sandwich is the long-term thing.

There are other measures that are temporary so that when you're in the process of building it, before it's done --
Q. And those are measures that TransCanada has discussed with you in several meetings during the application development process; correct?
A. That's correct.
Q. And there are also measures for addressing stormwater runoff after construction; correct?
A. That's what we spent a lot of time talking about.
Q. Okay. I guess I just want to be clear. There's a question on the transmission line. There are no roads being proposed associated with construction of the transmission line; correct?
A. As far as $I$ know, that's true.
Q. I just wanted to be clear on that.
A. Even though there aren't any, ATVs they still use them and they can be damaging and so that was the issue.
Q. I appreciate that. I think that in your August 31st memo to Al Frick you state that all of the western Maine mountains share similar unique soils and hydrologic conditions to varying degrees?
A. That's correct.
Q. It's true, isn't it, that there are a number of roads that have been built above 2700 feet in connection with logging operations; correct?
A. Not many that I'm aware of. Skid trails but I'm not aware of many logging roads, per se, above 2700 feet.
Q. So if there were roads used for purposes of logging above 2700 feet, those aren't roads that you've reviewed; correct?
A. In later years I have made reviews for LURC for those types of conditions, but it's pretty rare to my knowledge that they build roads that high. There are a few and I have been out -- in fact, it
was a couple of times -- and seen some high elevations with roads, so $I$ have seen a few up in that height.
Q. I think it would be fair to say that the roads associated with this project and a certain other project have received greater scrutiny and oversight than probably any other road that has been built or proposed in the State of Maine?
A. At least to my knowledge and experience, yes.
Q. It's true, whether it's in the western mountains or elsewhere, that there are many roads that have been built in high elevation areas with challenging soils and other on-site conditions; correct?
A. I'm assuming that's true, and particularly in other states.
Q. For example, there's a road that goes to the top of Mount Washington?
A. Yes, and there's one going up to the top of this mountain to a wind tower that washes out every year. I've been on it.
Q. In your discussions with TransCanada, there was a suggestion about measures could be costly.

Has TransCanada ever suggested that they were unwilling to utilize a particular construction, engineering technique because of cost?
A. No.
Q. And in your meetings and discussions with TransCanada over the course of the development of this application, isn't it true that TransCanada has agreed to implement the types of measures that had been discussed to minimize impacts, interference with hydrology, stormwater runoff, and other issues associated with construction of these roads?
A. That's correct.
Q. Isn't it true that TransCanada has experience with utilizing these same techniques in other locations?
A. That's what $I$ have been told.
Q. And I just want to turn for a minute to your comments in this proceeding and on Page -- I don't know if you happen to have those handy or not --
A. Yes, I do.
Q. -- on Page 2 of your comments, you state that it is your professional opinion -- could you just read that first item? You said it's your professional opinion that the applicant has. If you could read that first statement. Demonstrated an understanding of the soils, slope, and hydrology limitations that will be encountered while undertaking the proposed construction project located on mountainsides and tops and indicated a willingness to incorporate any and all appropriate best management practices recommended by experts in the field to overcome soil, slope, and hydrology limitations and thereby
minimizing environmental impacts. This included having an on-site expert on erosion control and hydrology, stormwater to assure appropriate measures are used where and when needed during construction. It also was provided in discussion of type of techniques which would be used, where it would be used, and when.
Q. Thank you. Is that still your professional opinion today?
A. That's correct.

MS. BROWNE: Thank you. I have just I think -- I almost hate to get into the questions with Mitch, so I'm thinking.

## EXAMINATION OF MITCH TANNENBAUM

BY MS. BROWNE:
Q. The PUC has submitted comments in this proceeding directly; correct?
A. Yes.
Q. Then you also provided comments to the Commission as part of your August 1st presentation to the Commission, not your personal, $I$ understand it was Chairman Adams, you had a hand in it?
A. Yes.
Q. Those comments specifically address wind power; correct?
A. Yes, they do.
Q. Just so we're all on the same page on this issue, I understand it is the PUC's belief that there is a need for
wind power in Maine; correct?
A. That's correct.
Q. And that there will be real energy benefits resulting from wind power in Maine?
A. Yes, there will be.
Q. That wind power is consistent with a number of State policies?
A. That's correct.
Q. Congestion, if it exists, will be resolved through the marketplace?
A. It should.
Q. And the generator, it's your belief that the generators have an economic incentive to solve any congestion?
A. Yes, they do.
Q. And then as you noted, to the extent there is some congestion, that should result in a benefit to Maine ratepayers?
A. Yes, it will in most cases.
Q. Thank you.

MS. BROWNE: IF \& W, probably, Tom, these are for you, but obviously if I'm asking the wrong person, somebody else should feel free to jump in and interrupt. EXAMINATION OF TOM HODGMAN

BY MS. BROWNE:
Q. I think you've suffered through all two days of these
hearings, at least I think you were all here today when there was a discussion about the avian and bat surveys that TransCanada conducted as part of this project.

Were you here for that, Tom?
A. I was here today; I wasn't here yesterday.
Q. Great, the discussion was today. There were some questions from some of the commissioners about potential concerns over the quality and sufficiency of some of the pre-construction surveys that were done, so $I$ just want to go through a few items with you if $I$ could.
A. Sure.
Q. The protocols that were used by TransCanada in connection with this study, they were shared with IF \& W prior to implementation; correct?
A. Yes, they were.
Q. And TransCanada has incorporated any of the recommendations requests, suggestions by I F \& W; correct?
A. Yes, they certainly did. In fact, some of the details were more than we asked for.
Q. And that's true with both the avian and the bat studies?
A. I can't really comment on the bat studies. My assumption is yes. I was privy to those discussions but I don't pay the same level of details -- attention to those as I do the bird.
Q. So the bird studies would include, for example, the spring
foraging studies, daytime foraging studies?
A. Spring foraging studies, the nocturnal radar work, any corrections based on NEXRAD radar, and the hawk, the hawk work. I, of course, was present during discussions of many of the small mammal work and bat work.
Q. There was some discussion about concerns over a sighting of a golden-winged warbler that was identified in the field and reflected in some of the survey results. I guess I have a couple of questions.

What's your understanding of what TRC, or the folks from the field, did when they sighted that bird?
A. I don't have a great deal of recollection of -- much has been made of that observation today. I didn't get really too excited about it when I heard about it.

I did notice it in the data and I did hear a little bit of discussion about it. I can't remember the source of it, whether it was through Dana or just through general birding on-line discussions, which are quite common in the birding community.

I didn't make a whole lot of it.
Q. I guess, are you aware of other sightings in Maine of that species?
A. I believe it 2001 there was a male that set up territory, I believe, in the town the Dexter, spent most of the summer there. It was pretty irrefutable.

I didn't go to see it. Many people did. It was singing on its territory all summer. I believe it was 2001. I don't believe it was paired.

There have been, in the town of Eliot, right on the New Hampshire border, there may occasionally be a golden-winged warbler; of course, I don't know where they are but I know where people have reported them or indicated that there may have been.

In the extreme southern tip of Maine would be the -would be sort of the northern extent of their range, although I would not call a golden-winged warbler a regular breeding bird in the state of Maine.
Q. But based on your knowledge of its potential presence, certainly as migrating through the region, and based on your knowledge of the field personnel that were involved in these surveys, did you have any concern that this sighting somehow reflected fieldwork that was -- a mistake by the folks in the field?
A. I have no knowledge of the skills of the individuals that did the fieldwork. In fact, today I asked for the name of the individual and I don't recognize the name. I have no knowledge of that.

With regard to the possibility of a golden-winged warbler showing up in Maine during migration, birds are highly mobile. Birds probably return from Central or

South America. The fact that it didn't stop in Connecticut and it overshot by 100 miles or so, in the bird world it's no big deal, it happens all the time.

But it takes a tremendous amount of skill to pick that up. Of course, the counterargument would be that somebody -- an overzealous individual -- could record that as a golden-winged warbler when it was indeed another species.

I guess I prefer to assume that it was the former rather than the latter. Birds -- odd species show up in odd places, and that's -- there's whole lists of weird bird observations in different places. In fact, you heard today that there are so many records of golden-winged warblers in Maine because people do keep track of those observations.
Q. Then there was also some discussion about the Connecticut warbler. Did the sighting of the Connecticut warbler raise any red flags in your mind about the quality of the fieldwork that was being undertaken?
A. I would just echo my comments about the golden-winged warbler with regard to the Connecticut warbler.
Q. And $I F \& W$ has actually been credited in the field during some of these survey efforts, it's my understanding; is that correct?
A. I know that my colleague, Bob Cordis, has been in the
field to a certain degree, with me and without me, did that on some of the studies.

I also was present -- I hiked Kibby Range in the middle of the night to look at the nocturnal monitoring studies to see the radar studies in process as they were collecting the radar data.

So I've been on the site a couple of different times for different aspects.
Q. And based on the consultation that's occurred, the work that's occurred, your understanding of how these surveys have been implemented, the results that you've seen, do you have concerns with the quality of work that's been done by TransCanada and its consultants with respect to the pre-construction bird surveys?
A. I really don't. The communication -- the overall communication that we've had with TRC has been excellent, and with regard to study design, things like that, they are very accommodating.

In terms of the amount of data and the multiple small studies that we asked for, have really -- I mean, I've gotten to the point where I'm beginning to use the level of detail that they provided us as a standard for which to ask other projects to adhere to.

I think we had a really good working relationship in designing and carrying out those studies and I believe our
comments sort of stated that and summarized that.
MS. BROWNE: Thank you very much. I have no further questions, Chairman Harvey.

THE CHAIR: Thank you.
MS. PRODAN: There was some new information by Jody Jones and Mr. Hodgman, so I just wanted to remind you that we did reserve time for rebuttal.

THE CHAIR: I've been painfully aware of that as we go along this afternoon. We'll make arrangements for you both to have a few closing comments after the Commission has a chance to ask this panel any questions, if indeed they have any.

MS. HILTON: This is for Dave, and I think I've asked you this before.

EXAMINATION OF DAVE ROCQUE
BY MS. HILTON:
Q. It has to do with having some sort of a third-party civil engineer on-site during the construction of this project and as a condition of the permit.

Is that something that you recommended or --
A. Yes.
Q. -- would support doing?
A. Yes, because if you don't have good data to know where every one of the conditions exists in every bit of the roadway, then you may encounter these situations in places
you didn't anticipate which will be the case. It's very, very high because of the uniqueness.

So having somebody on site that has the knowledge and ability to say, that's what that situation is, this is what needs to happen, construction to me is important.
Q. Is that something that has been required of any other projects that you've been involved in in Maine?
A. No, because we haven't really -- I haven't been involved with projects with the kind of limitations this has other than that road in Elliotsville Township in which case I did go out to inspect it when it was first being constructed to make sure everything was being done the way it should have been done. That was a smaller piece.
Q. Just one other thing, you mentioned ATVs being a concern, and I assume that's particularly of concern on very steep slopes?
A. The concern wasn't so much on the mountain roads; it was the transmission lines, because the transmission lines won't have roads but they will be open corridors, and so there are places where I would expect snowmobilers to use them. If ATV users use them and they aren't roads and they's soft soils, they can really do some running and mucking up.
Q. So you don't have too much concern about them; it's on the mountain use themselves?
A. The roads themselves --
Q. Even with the steep slopes?
A. Because there will be a road that's suitable for any kind of traffic. They won't be mucking. If they spin their tires, I suppose they can do some harm.
Q. On the steep slopes, though, if you've got --
A. They won't be because the roads will be built on steep slopes, but the roads can only be a maximum of like 10 or 12 percent for the trucks to get --
Q. Okay --
A. -- so they'll be going like this and around. That's why they'll be going along steep -- the road itself won't be steep. That's one of the problems.

MS. HILTON: Okay, thank you.
MR. LAVERTY: Most of my questions were answered through cross-examination and also your submittals.

I have a just a general comment. Sister agencies, we rely on you people, we really rely on you people. I really want to thank you for your diligence and the quality of your work. I think we're very fortunate to have you.

I do have a question of Mr. Hodgman, Tom, and one question for Mr. Tannenbaum.

EXAMINATION OF TOM HODGMAN
BY MR. LAVERTY:
Q. Maine Audubon has suggested that as part of mitigation for
potential bird mortality, that decommissioning is an important consideration, and I guess this is one of the first times I've heard this, and the point being that should the project no longer be operated, that the structure be removed in order to limit the continued possibility of bird mortality.

Does the department have any position on that?
A. I'm probably not the best person to ask that question of, but I -- perhaps Steve is. If the -- and I'll just ask a question -- if the project is no longer operable, yet the towers remained in place, wouldn't they still have to be lit so then the whole issue of lighting and bird collision is there.

I'm very much aware and in tune with Maine Audubon's concern about decommissioning. Of course, we haven't had the opportunity to have too many of these discussions yet, and this is again an example of communication where we haven't really had discussions yet, although we have had an entry to those discussions, that decommissioning is a priority. If approved or even prior to approval, that would be discussed.
Q. Are there others that would like to comment on that?

MR. TIMPANO: I guess I would ask that you repeat the question. I was writing and not paying enough attention. EXAMINATION OF STEVE TIMPANO

BY MR. LAVERTY:
Q. Maine Audubon has testified that they consider decommissioning, the removal, should the project no longer be operative, that the structures be removed and that they be removed -- we have some other general concerns about decommissioning -- but specifically as an opportunity to mitigate for potential bird mortality.

This is one of the first times I personally have heard decommissioning related to bird mortality, and I was wondering if the department shares that same concern as Maine Audubon?
A. I would respond, yes, we do, and as you were receiving the response from Tom, I was rechecking our prefiled comments, and we had recommended that on a previous project and I neglected to make sure that it was in these comments.

That is -- that is also a concern of ours that decommissioning should be a part of any permit that might be issued to assure that they were removed.

MR. LAVERTY: Thank you.
Mr. Tannenbaum. EXAMINATION OF MITCH TANNENBAUM

BY MR. LAVERTY:
Q. Earlier, both through the testimony of Mr. Wilby and Mr. Mahoney and also interchange between the members of the Commission and the two senators, the dialogue, were
you here for that dialogue?
A. I believe I walked in in the middle of a question.
Q. Well, if we don't have a lot of questions for you, we've spent ourselves on them. I don't know whether that's good or bad.

I was going to give you, I guess, the opportunity for plausible deniability. What you heard, was there anything you objected to or felt strongly about that needs to be underscored or modified or amended?
A. No, on the contrary, I thought the comments of Mr. Wilby and Mr. Mahoney were absolutely correct.

MR. LAVERTY: I want to thank you and the Public Utilities Commission for your contributions to these hearings. Thank you very much.

MR. WIGHT: I just figure while we have three people from IF \& W here, maybe we can hear what happened to the Red-eyed Vireos in 2006.

EXAMINATION OF TOM HODGMAN
BY MR. WIGHT:
Q. Do you have any understanding why they're not there?
A. I guess that's a question for me. To be honest with you, I did not pick up the missing Red-eyed Vireo, the missing Red-eyed Vireo in the data, and kudos to Dr. Wilson for seeing that. Those data sorted alphabetically.

Bird folks generally don't work in alphabetical lists
of birds, you work in taxonomic lists of birds. So all the Vireos would have been right together.

So if I had seen blue-headed and red-eyed, I would have picked it up immediately. Sorted alphabetically I've got to go to "R," Red-eyed Vireo. I missed it.

The first thing that came to mind is testimony you heard today, an identification mistake. It's probably the most common, you heard today, it's probably the most common or one of the most common birds -- probably the more common forest bird -- in North America.

How could that have been missed and I've been wracking my brain, since $I$ heard Dr. Wilson's testimony this morning, trying to sort of wrap my head around it.

The only alternative explanation other than misidentification other than it clearly not being there is with regard to timing of migration that Red-eyed Vireos migrate a little bit later than do blue-headed Vireos, and if that window of sampling didn't entirely overlap a period when they were here, then you would have less opportunity to pick them up.

But he should have gotten some, and actually Dr. Wilson is probably the most knowledgeable person on bird migration timing in the state of Maine, so I'm not the person to be discussing that, certainly not in his presence.

It's almost embarrassing. I submitted information to him for some of his studies.

The other -- to me what was important about this discussion of Red-eyed Vireo is not whether it was there or it wasn't there, but was the context in which that study was done.

What we tried to do with those -- what I always called the morning stopover count, which is how it started off back with the Redington/Black Nubble project many years ago, was to put some species on those blips on the screen.

We did radar work and we got information on targets, so we got the target information. That's bats and that's bird, but we don't know. If it's one species versus another, maybe certain levels of mortalities are more allowable than others.

So we wanted to know what the species were, and what we asked Endless Energy at the time was to do two things, was to do some morning counts, like you've heard here, and we also asked them to do some acoustic monitoring where you actually record the little call notes given by the birds.

But acoustic monitoring, we never asked anybody else to do it thereafter. It amounted to very little usable information, and over time even the morning counts has
become questionable whether it gives us anything we don't already know.

What it does tell is roughly when the warblers are moving, roughly when the sparrows are moving, roughly when fly catchers are moving, that sort of thing. That's about the only useful information we got.

It's not great. It would probably have to be done at a magnitude of ten times greater sampling than we're doing now to really say anything and then I'm not sure if it really tells us anything.

We were hoping that it would be a way that if there were a mortality event -- not so much a mortality event -but we might be able to assess risk in terms of species instead of just targets. That's really all we can say with the radar data.

So there's been a great deal of discussion over what's not on the list, what not on the list when really the list was just trying to come up with a way to qualify -- to qualify the number of targets, put some species' names on there.

As is typically the case with TRC, they've taken that one step further than was necessary and put diversity data. Diversity has really embellished the data, which sort of led to this being a stand-alone study when it may not have had quite that much information behind it.

I wanted to put that Red-eyed Vireo information in context of what was the purpose of doing those counts in the first place.

There is an interest in knowing what bird species were there, but really it was to qualify the radar, the nocturnal radar work.

MR. WIGHT: Thank you very much.
MS. KURTZ: This is a question for Dave Rocque. EXAMINATION OF DAVE ROCQUE

BY MS. KURTZ:
Q. Yesterday we talked a little bit about the calendar, I guess, or the time frame of the road construction. Mr. Goulet had indicated that the road construction would be from April to November, I think.

We talked about your concerns about soils and saturated soils and what Mr . Goulet said was if the time was -- if they didn't start in April and go through as possible, but they would change the schedule to accommodate that so the road construction would start and perhaps stop and actually put off by a calendar year.

My question is, if for some reason the applicant finds itself in a position that it really wants to build roads when it's frozen or saturated, will any of the techniques that you describe, no matter how well implemented, will any of those prevent catastrophic
problems described as being possible?
A. This was discussed with the other application when it was for both mountaintops, that they would propose to do the work in the winter, and we got to the point where they had to even use more extreme measures but they were willing to go to that extent to do that work.

So theoretically it's possible but the magnitude of costs and expense goes up, and then there's not just the issue of the impact of the mountain but structural integrity of the roads, safety of the people, because if you use frozen material when thaws and moves and shrinks, then there's a whole issue there.

So it becomes several degrees more difficult but in the world of engineering nothing is technically impossible.
Q. Could the risk of something going wrong be --
A. Yes, they would be. Yes, definitely, and it's not just if you built it in the summertime and didn't do it right, you might have some washouts, but if you did these things at the wrong time of the year, the winter, not properly, there could be actually some accidents happening to the trucks and other things because the road just won't be stable to secure. It's a whole other magnitude of issue.

MS. KURTZ: Thank you.

EXAMINATION OF MITCH TANNENBAUM

BY MR. HARVEY:
Q. Mitch, you just -- what other renewable power sources are we dealing with here? Is wind the only one that really we have in the pipeline?
A. Wind is really at this point in time based on the economics of renewable technology. It's where the vast majority of new renewable resources are going to come from, at least in the near term.

Certainly biomass facilities could be built. Landfill gas, there as been a lot of land fill gas facilities constructed in response to the portfolio requirements in other states. Of course, there's a limit on that resource.

So there could be others. People are looking at tidal that may become economic down the road. It's not now, but certainly solar is not near being economic right now.

So, yes, for the most part wind is likely the renewable -- type of renewable facility that will be out there to meet not only Maine's portfolio requirement but those of other New England states.

THE CHAIR: Thank you.
EXAMINATION OF DAVE ROCQUE
BY MR. HARVEY:
Q. Dave, were you consulted on the Mars Hill project?
A. No, that was a Department of Environmental Protection project. I've been there twice and looked it over, and I can tell you that the soils and hydrology there are completely absolutely different.
Q. So it's not constructive in terms of what we're faced with?
A. No, you can't look at that and say, see, there it is. Those soils are well drained. There's really no seeps. It's a whole different ball game.

THE CHAIR: Thank you. I don't think we have any further questions of the panel and we thank you all for coming today, particularly Dave, who came in on vacation. The others have been here for two days, I believe, Fish and Game, so we appreciate that, and, Mitch, we obviously appreciate your being here responding to the questions of the parties.

MR. ROCQUE: Is there cross-examination?
THE CHAIR: I don't think there's any that I'm aware of. Pam cross-examined you already I thought.

I don't think he realized that being a soil scientist would bring him so much attention.

Again, we thank you all for being here and your comments. So I guess you're free to go.

The last -- the only thing left on the agenda is the request by at least two of the parties for some closing comments. Now, I can do this one of two ways. It's 5 o'clock
and you know we have to be here at 6 . So supper, sometime we've got to take a little break here for the court reporters, but we will allow you to do this. You can do it in the next 15 minutes between the two of you, or we can give you a little time at 6 o'clock to make whatever comments you think you need to make.

MS. BROWNE: I don't think either of us have asked for closing comments.

THE CHAIR: Oh, okay. I thought that's what we were talking about this morning.

MS. PRODAN: No, we were reserving time for -- what did we call it, rebuttal?

MS. BROWNE: Redirect.
MS. PRODAN: To bring Mr. -- Professor Wilson up here to respond to some new information that just occurred this afternoon. We had reserved time for that.

THE CHAIR: Is that what you're asking me to do is bring him back up here?

MS. PRODAN: Just for one question by me.
MS. BROWNE: I guess I would just like to ask, I mean, we're not -- we don't have any rebuttal, so I don't -her rebuttal, $I$ guess $I$ didn't hear any new information, so I guess I would like to hear what the new information is because any rebuttal should be limited to new information that came up after she put on her case.

THE CHAIR: Right.
MS. PRODAN: We agree with that. We were not asking for a closing statement.

THE CHAIR: Okay, that's great.
Do you want to tell us about what you want Professor Wilson to deal with?

MS. PRODAN: I would ask if Professor Wilson has any comments in response to testimony of Jody Jones in response to commissioners and Mr. Hodgman in response to commissioners concerning these unusual sightings of the warblers and the Vireo.

THE CHAIR: If you can do it real quick, I'll let him do it.

DR. WILSON: My only point was that the Connecticut warbler and the golden-winged warbler were sighted, we're told that the biologist contacted DIF \& W and also local birders, and Jody Jones indicated that Maine Audubon had been contacted, and she made a comment about the Maine Bird Hotline, which is a valuable resource that gives a recorded telephone message, which is done weekly, and it gives notable sightings of birds found in the state.

Over the past 10 or 12 years it's also been transcribed and sent as an e-mail list, and I keep those e-mail lists.

The reason I was -- that I'm talking to you now is
that Jody had indicated that Maine Audubon had been notified and that the birds had been reported on their lists, and in fact I keep those lists because I'm a subscriber, and I just wanted to point out that none of the people that were informed of these two birds saw fit to report it to Maine Audubon because it did not appear on any of the recordings in mid May until the middle of June 2006.

So I can't tell you whether the lack of reporting was due to lethargy, skepticism, busyness or whatever, but I certainly wanted to point out that I did not discover the existence of these two sightings until I got the materials this summer and it was not distributed widely.

Again, I can't really say why the people that were notified didn't want to notify the rest of the birding world in Maine but they did not.

THE CHAIR: Thank you. I think with that we're going to take a break.

Oh, I'm sorry, the date -- just a reminder, since this is the conclusion of the parties' testimony, based on what we said at the beginning of the hearing, if you wish to make findings of fact and conclusions of law -- I think I said that right -- proposed, okay -- that those need to be into LURC's hand by November 21st. That's 30 days from the conclusion of the record closing from the final time.

Is there anything else I'm supposed to tell them?

We'll be back here at 6 o'clock for the final public session in this hearing. Thank you.
(There was a dinner break in the hearing at 5:03 p.m. and the hearing resumed at 6:07 p.m.)

THE CHAIR: Good evening everyone. My name is Bart Harvey and I'm chairman of the Land Use Regulation Commission.

This is a continuation of hearing on Zoning Petition ZP 709 concerning TransCanada wind power development proposal for a wind farm on Kibby and Skinner Townships, and in a few minutes the applicant is going to give you a brief overview of the project.

I see a few familiar faces from last night and also some new folks here. Other members of the Commission present this evening, Gwen Hilton, Steve Schaefer, Steve Wight; Commission staff, Catherine Carroll, Diana McKenzie, Scott Rollins, and Melissa Malacuso, who is somewhere here collecting sign-in sheets.

I remind you if you wish to give testimony tonight, you need to sign up. I have a couple sheets in front of me but there's another one up back that you can put your name on. I'm going to call you in the order in which you signed up.

The first -- and the other thing is for those of you who are going to testify, we'll have to swear you in. I'm going to do that after the applicant has made their presentation on the project, and we'll go right to the
testimony from you all.
Are you ready?

MS. CINNAMON: Hi there. My name is Christine Cinnamon and I'm the environmental manager for TransCanada for the Kibby wind power project. Welcome to the public session for the LURC hearing for the project.

I'd like to just introduce the project elements. The project consists of 44 proposed turbines on Kibby Mountain and Kibby Range. I'll show you exactly where that is in a moment.

There will be a total of 132 megawatts of installed capacity. The turbines proposed are Vestas V90s, 3-megawatt turbines. The rotor diameter is approximately 295 feet. The tower height to the center of the hub is approximately 263 feet, and the total from the top to the bottom of the tower would be approximately 410 feet.

Proposed is approximately 17.4 miles of new roads. We would be able to utilize about 19 miles of existing roads. There will be an electrical interconnection system between the turbines. There will also be a substation, as well as a service building.

During construction we'll need some laydown areas as well as some concrete batch pads. Finally, the project involves a 27.6-mile transmission line.

This shows you the project location in relation to the state as well as in proximity to major roads.

That's the project area right there, Route 27 and 201. This zooms in a little bit on the project area. You can see the two ridgelines that we're proposing the build on. There would be 17 turbines proposed for the southern portion of Kibby Mountain, and 27 proposed for Kibby Range. That's the wishbone shape.

Also on this map you can see the proposed transmission line road. That goes into the Bigelow substation.

Why did we choose the Kibby site? The winds on these ridgelines are ideal for wind power generation: They are strong and steady. The site is currently under active forest management and there is good access available. There was a project involving these ridgelines some years ago proposed by a company called Kenetech. There were over 600 turbines proposed in that project and involved a number of other ridgelines. You can see that in the map here. We're proposing to build on these two ridgelines.

Given our wind data, the previous developer's wind and environmental site information, as well as the previous LURC decision, we decided to pursue this opportunity as an acceptable site.

We have done numerous environmental and community assessments. I won't go through all of these, but this is a list of some of them. Many aspects of the site and the surrounding area were studied in order to characterize distinct

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site uses, the natural resources, as well as the other
considerations you see here.
We did numerous ecological field programs. This is a list of them. Again, I won't go through them. These are all available for review, but TransCanada, alongside our environmental experts, undertook these over the last two-plus years. We worked to understand the natural resources in the project area, as well as the potential impacts related to the project development.
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These studies have allowed the environmental and engineering team to coordinate closely in minimizing the footprint, as well as potential environmental impacts.

Specifically, avian and bat considerations typically come up in relation to wind power development. The studies done by the previous developer indicated that the avian risk was low, and our current studies have confirmed this to be the case.

Project design, and specifically the turbine placement, as well as the construction method, will ensure that risk to birds, bats, and other natural resources is low.

There are a number of project benefits. The project represents an investment of approximately 250 to $\$ 300$ miliion and that will contribute over $\$ 1$ million in taxes to the State, as well as approximately $\$ 25,000$ in taxes to Eustis, and we've proposed to contribute to the Town of Eustis/Stratton $\$ 1000$ per
megawatt of installed, should the project be built. That's whether the project would be generating electricity or not.

The project will need 250 people at the peak of construction, as well as ten to twelve permanent jobs once it would be in operation.

Our mandate is to hire locally whenever possible. We've already been meeting with local contractors, and given the nature of the work, we found that we can find a lot of what we need right here.

Finally, wind power does not generate emissions such as other fossil fuel generation would.

As far as project timeline, we submitted our LURC application in January of this year, and we subsequently submitted transmission line information shortly after that, and that resulted in this October hearing.

The current plans are to begin construction in 2008 should we have a LURC decision and the other necessary permits that we would need at that time.

We would start clearing in early winter of 2008, we would stop work during mud season -- or the spring wet season -- and then we would then start road construction in the summertime.

And then we anticipate, again, should we get all the necessary authorizations, to go into operation later on in 2009 .

Thanks very much.
THE CHAIR: Thank you, Christine. All right. I guess we'll move to swearing in, so all of you who are planning to testify, you need to stand up, please. The usual, raise your right hand.
(Witnesses were sworn en masse.)
THE CHAIR: Thank you, have a seat. Now, I just want to review my rules. Some of you from last night may remember those, but one, I'm asking you all to keep your remarks to five minutes or less and that there be no applause for people who you like what they said.

I think you can tell them tomorrow morning at coffee, but as I said last night, applause doesn't really do much for us and it kind of wastes a lot of time. So we would appreciate it if you didn't have these demonstrations of support for whatever you hear. As I say, you can talk to people later and support what they said.

With that we can begin. Now, I notice on my list I have one member of the legislature here. As a courtesy to them, I'm going to let him speak first if he so wishes or he can take his turn. It's his risk. I won't tell him where he is on the list.

REPRESENTATIVE FITTS: I'll go. Thanks. Chairman Harvey and members of the Land Use Regulation Commission. My name is Representative Stacy Fitts, and I'm from Pittsfield. I
represent House District 29, which is Pittsfield, Detroit, and Clinton, and I sit on the Utility and Energy Commission, as well as the Wind Power Task Force. I'm trained as an engineer by trade and spent most of my career in the generation business. I bring that eye to the task force and hopefully to the Commission in the their deliberation.

One of the things $I$ just wanted to come forward tonight and stress, I guess, is that the legislature has demonstrated an interest in advancing wind power in Maine.

I think through all of the various meetings that the Commission's had, it's been demonstrated that Maine is not in an energy crisis but is in an energy crossroads. New England in general is dependent on natural gas for the majority of the energy that we consume, and anything that we can do to offset the use of natural gas -- especially as it sets the price for electricity today -- will be a benefit to Maine and the rest of New England.

I think the legislature has demonstrated without a doubt that its preference is to advance renewable generation in Maine, especially indigenous renewable generation, and that being hydro, wind, and biomass as the primary sources that we have available to us here.

Maine in general has been classified as the primary source for potential wind generation in New England, and we need to exploit that as much as possible without harm.

So I bring to you at least my perspective as what the legislature's intent was as they passed 2000 -- or LD 2041 -last session, which basically set a priority for us to, as a State, increase our use of renewables by 10 percent by the year 2017, and the only way that that can happen is with wind generation as one of the primary sources to fill that void.

We also in the last session passed LD 1920, which implemented the policy and set the tone for moving through that 10-percent increase. Again, the only way that that will happen is by us, as a State, recognizing wind power as one of the primary vehicles to achieve that.

One of the interesting things is that the legislature, I think, probably spent as much time studying this as you guys have. I know how painful that can be at times. The utilities and energy committee spent long hours deliberating how we arrived at the wording for the bills that we have passed and those were generally unanimous votes.

We also, as a legislature, recently passed a joint resolution to encourage wind development, so I think -- and that was a unanimous vote -- and I think what that means is as far as how the State is headed, that we are setting that as a priority for us to move forward and we can't ignore that.

It's my perception, anyway, that this isn't a policy that's here today and gone tomorrow. It really is the only alternative that we have to move forward and to get off of
fossil fuel dependence and to try to offset some of those high-cost fuels that are now setting the price for electricity. I guess I want to close with this isn't necessarily a busy time for legislation but it's a busy time a year for legislators. So I guess the reason you don't have a steady stream of legislators here is because some of us have a life and that is difficult in the off season.

But I guess the only thing I would ask is that you review with diligence the letters that do come from the various legislators. I know the chairs of the utilities have put forth their thoughts on this matter and that and leadership, I would ask that you spend some time looking through those letters and I thank you for the hard work that I know you guys are up against and how at times it is a thankless job.

I certainly appreciate the hard work and the dedication that you have and the difficult choices that you have to make sometimes.

Just as somebody who's been in the energy world for a while, I don't see any other alternatives, and we need to, where appropriate, as the legislation said, advance as much wind power as we can to help offset our issues with natural gas. Thank you.

THE CHAIR: Thank you, Representative Fitts. Just so you know, we did have two other legislators come last night. REPRESENTATIVE FITTS: They came from a little less
distance.
THE CHAIR: Yes. Well, I don't know, Mr. Carter came from Bethal. That's a long.

Thank you anyway for coming.
REPRESENTATIVE FITTS: Thank you.
THE CHAIR: All right. Working on the list, Sidney Shane, are you here? And then following Sidney is Vera Trafton.

MR. SHANE: My name is Sydney Shane, I work for the Maine DOT as a mechanic. I belong to Eustis Fire Department, I'm the assistant fire chief. I belong to Carrabassett Fire, and we belong to North Star Rescue, Backwoods Rescue. And look around the room and everywhere you go you see computers, cell phones, all new electrical stuff, so that power's got to come from somewhere and nothing is free in this world, even the wind power, we've got to give and take a little bit.

The roads are already -- most are in there, if anybody goes up in there, there's a lot of roads, 30, 40 feet already. If they can't get tractor trailers up there because they weren't wide enough, so they're making them wide.

We've been on rescues in back woods for hikers and some of these hiker trails where they don't want nothing going, but we've lugged them out and their trash, too, where other people have left.

So people have to look around. We've got to give
somewhere because fossil fuel is going to run out, it's killing our ozone, and just everything, and I think it's a good idea. I'm for it.

No, I don't want a lot of our lands to change because our lands, Mother Nature ain't making any more of it, but we've got to save something somehow, and we've got to give. And it's not my backyard. If we don't put it in somebody's backyard, we're not going to get nothing and we're just going to end up ruining it ourselves.

Thank you.
THE CHAIR: Thank you, Sidney. Vera. And following Vera is Chuck Knox.

MS. Trafton: Chairman Harvey, commissioners, my name is Vera Trafton. I live in Phillips. I'm here tonight speaking for myself and for my husband Dain to urge you to deny TransCanada's request to build a wind plant on Kibby Mountain and the Kibby Range.

What is at stake in this hearing is the preservation of a beautiful and wild place, a large section of the boundary mountains surrounding Kibby Mountain and Kibby Range.

This section of mountains with its narrow forested valleys and small streams and ponds is the kind of place that defines the western mountains of Maine that makes them what they are.

On a clear day you can look out all the way to

Katahdin in one direction and to the Presidentials in the other and feel you're at the heart of an enchanted land. Such places are becoming rare in our developed world and will almost certainly become rarer. Their value is not just environmental and aesthetic, but economic as well.

I think the economic future of this part of Maine depends on its wild and beautiful places, which draw people to them: Hunters, fishermen, snowmobilers, hikers, ATV riders, outdoor people, including retirees. You heard all this from Bob Kimber, one of the fine writers who has celebrated the area so eloquently.

Of course the mountains around Kibby and Kibby Range have been logged and heavily, but trees grow back. There is a great difference between a logging operation who's traces are soon covered by new growth and a wind plant, such as TransCanada wants to build, with its 44 turbines, most of them above 2700 feet, many of them lighted, its miles of road, and its 27-mile transmission line.

This very large industrial installation won't soon disappear. On the contrary and in spite of the effort of mitigation by AMC, NRCM, and Maine Audubon, this plant will be visible for miles around for years to come.

I think it is indisputable that if this wind plant were to be built, a place of great value in northern Franklin County would be compromised and for what. For the investors of

TransCanada it might prove to be a great deal, but for the people in this area, the compensation for our loss seems to be doubtful at best.

TransCanada talks about a $\$ 270$ million project and has spread money around in an effort to create the impression that their plant will be a good deal for everyone, not just for investors in TransCanada.

But if this is really such a good long-term proposition for northern Franklin County, why all the hang ups? In fact, industry of wind plants in areas like ours suggests that very few of the project's profits will end up in local pockets. The 44 turbines, which will account for more than two-thirds of the budget, will come from Denmark. The engineers and other specialized workers who erect the turbines and maintain them will be from away.

It is not at all clear how many of the 150 to 250 temporary jobs mentioned in the application will go to local people rather than to workers from Denmark or Calgary.

As for permanent jobs, ten or more are promised but commonsense, as well as practice in other wind farms, suggests that TransCanada will not need a maintenance and clerical staff of ten constantly available in Stratton.

Finally and most importantly, we don't need this plant. Maine already exports electricity and produces more renewable energy than our renewable portfolio standard, the
highest in the country.
As for LD 1920, which was enacted by the legislature during 2007, nothing in its language requires that the 1 percent of new renewable power each year come from wind power. In fact, providers can satisfy the requirements by purchasing renewable energy credits or by alternative payment mechanisms that the MPUC will devise.

Some seem to think that we are morally bound to build wind plants almost everywhere in order to combat global warming. But questions have been raised about whether a plant in the western and central Maine area of the grid can do much or anything to cut emissions at dirty coal plants or oil plants.

TransCanada has not shown precisely which fossil fuel plants could be expected to be forced to cut back by operation of a plant on Kibby. The emissions displacement analysis in TransCanada's application is based on marginal emissions rates, that is, on averages of Maine and New England as a whole, not on grid modelling that matches expected operations of a wind plant at particular times with past experience of the grid, including congestion at those times.

Without such modelling, the commissioners and the citizens of northern Franklin County are being asked to accept TransCanada's sales pitch on faith.

Thank you very much.

THE CHAIR: Chuck. After Chuck is Tony Owens.
MR. KNOX: Good evening. Thank you, Mr. Chairman and members of LURC.

My name is Chuck Knox and I live In southern New Hampshire but I know northwestern Maine very well. I've been coming here for over 50 years hiking these mountains. In fact, my wife and I about ten years ago built a camp in Adams Township.

Why do I come? I didn't come for wind power, to see wind power plants. But I do come because I love the mountains and I particularly love the Kibby area, the area north of Stratton.

I've sat up on Kibby probably as much as anybody in this room over the years, oftentimes by myself, sometimes with my daughter who loves to hike as well. This summer, I was sitting up at the top and looking out across the vast sweep of peaks and ridges and clouds were going by when it was one of those days where it was sunny and cloudy, sunny and cloudy; and I love the area because of all the peaks you can see, all the ridges you can see, and I got to thinking, I know it's unique but how unique is it?

Afterwards, after we got down, I did as objective studies as I can, I suppose, by looking across the state of Maine on a Delorme map -- I read the entire application of TransCanada and got some information from them -- but just to
count how many peaks there were above 3000 feet. I just selected that number arbitrarily, it sounded like a reasonable number to base some decision on, see how concentrated the peaks were. I arbitrarily picked 20 miles because I figured, well, I can certainly see 20 miles' worth of peaks -- in fact you can probably see 40 or even 60 miles on a clear day -- and the converse is true, of course, as well. From the peaks you can look back on Kibby Range.

I didn't know what to expect. I thought, well, maybe eight peaks over 3000 feet, maybe 12, 14, 16. Twenty-six peaks, 26. For a wind power project to go into this area so special to me is like a stake in the heart of what is the most corrugated region in the entire state of Maine.

Indeed, I studied the entire state of Maine after I checked that, and there isn't one area in the entire state where you can put your finger down and draw a radius of 20 miles and come up with that many peaks -- not in Rangeley, not in the Bethal area, nowhere. Certainly not up in the Greenville area. This is it, this is it. And knowing how urbanization is creeping its way northward up the eastern seaboard, for me it was always northwest Maine and the area around Kibby and the mountains I love to climb, Snow Mountain, Bigelow, which you can see from Kibby; but, again, for this to come, it would mean the loss of a precious area. In fact, it's more than precious, it's irreplaceable.

I would just add also as an aside, you know, one thing that I've been reading about and hearing about is that there is no impact on the avian -- birds. I find that a little bit hard to believe.

Granted my experiences are strictly antidotal, but I've spent so many hours up in that range in that area, and I have never, ever, ever been there without seeing raptors soar over the summit, and I'm not talking about 1000 feet over the summit, far over the tops of the wind blade; but as high or as low as this roof, as this ceiling. I've seen broad winged hawks, Buteos, I've seen Sharp-shinned hawks, and it stands to reason for the very reason that this area was chosen by Kenetech and now TransCanada because the winds come off, the northwest winds sweep down from the flat St. Lawrence Valley, hit the boundary mountains and actually get funneled by the Bernoulli effect that comes right through Coburn Gore and that area and goes up over Kibby Mountain, down over Kibby Range.

That's the very reason why birds, why hawks especially, love to soar over this area from one ridge to the other.

I just -- maybe I'm totally erroneous that somehow I missed something, but $I$ know that $I$ certainly have seen many, many birds, and I hate to see them run the gauntlet of these 44 wind towers.

So once again, I would simply conclude that in my
mind, this is a special area. It is the most corrugated landscape in the entire state of Maine, and I would urge you folks, commissioners, to adhere to LURC Chapter 10-E, the Scenic Character, which as you know requires that all structures be located so as to minimize -- to create the least impact on ridgelines and mountain peaks.

To me this is sort of just the opposite. So once again I thank you for your consideration. I appreciate what you're going through.

I've been in your seat, I've worked in conservation in the environmental field my whole adult life. I've worked for an environmental agency for 20 years and been in your seat, and $I$ know how tough it is to make these decisions.

But I would urge your to refer to your regs strictly and consider the special quality that is unique, not only to Maine, but this is it. This is it for the eastern seaboard.

Build these, again, this would create -- virtually a stake in the heart of this much corrugated landscape and 44 stakes with three blades each. Thank you.

THE CHAIR: Thank you, Chuck. Tony. And after Tony is Jack McKee.

MR. OWENS: Chairman Harvey, I saw you cupping your ear. Can you hear me okay?

THE CHAIR: Some people's voices are soft, and I have a little hearing loss. You need to bring the microphone very
close, that's all, and that will help everybody.
MR. OWENS: Is that any better?
THE CHAIR: That's great.
MR. OWENS: Good evening, my name is Tony Owens. I'm from Cape Elizabeth and I'd like to thank the Commission for the opportunity to address my concerns regarding this project.

By way of introduction, I visited this site prior to its originally being proposed as a wind site by Kenetech in 1994. I've also visited the site within the last year with the meteorological towers in place.

I have to believe your busy schedule wouldn't have included this hearing if it weren't for the coming together of numerous factors, including oil and subsequent electrical costs at record levels, taxpayer comments, production tax credits at 2 cents a kilowatt hour, and delay the acceptance by our society that global warming is an emergent problem, private enterprise with lucrative opportunities to receive generous return on investment resulting in rapidly growing number of wind power applications on your desks.

Like our Maine municipal zoning boards, you have laws and regulations to guide your decisions. Absent among them are discussions about global warming, guidelines on wind turbine siting; yet this project's supposed contribution to carbon abatement and global warming has become the significant issue in the discussion.

I will address three areas: The environmental impact, mitigation, and contribution to carbon abatement. Environmental impact. The construction and daily maintenance of this project with its 44 turbines, thousands of tons of concrete, miles of new and improved roads, greater than 25 miles of new transmission lines, and hundreds of construction workers will not have a negative impact strains my credulity.

Experts have testified that there will not be any impact on threatened habitat or fauna. If this information is already known, why isn't it all graph to perform study after the fact on the impact of construction and operation to birds and bats.

Mitigation. If there were no impacts that would be required in mitigation to compensate for the damage or loss of the project, why is mitigation proposed? The promise to not do any more damage further up the mountain, that's like asking the fox not to come back to the hen house two days in a row. $\$ 500,000$ of purchased land removed from the Kibby Range. This amounts to less than one-quarter of 1 percent of the $\$ 250$ million construction costs and is a one-time payment; however, taxpayers, through the production tax credit of 1.9 cents per kilowatt hour, will be contributing $\$ 6.8$ million annually to TransCanada.

Carbon abatement. Global warming is a global problem

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requiring global solutions. TransCanada's project amounts
literally to a drop in a 55-gallon drum of production
nationally in the United States.
There is a finite amount of financial resources to be used in limiting carbon emissions. Logics and economics should compel us to do things, first, that would give us the best return to pick the low hanging fruits, so to speak.
Energy production costs account for less than one-quarter of carbon emissions globally, while 75 percent of the opportunities for carbon abatement, like in the areas of manufacturing, building efficiency, transportation, and forest and agriculture. Finally, it is twenty times cheaper to keep a ton of carbon out of the atmosphere through conservation and efficiency than through wind power development.
In conclusion, I believe deeply that global warming is a crisis demanding an immediate, cost effective response, that using it as a justification for the trade-offs required in permitting this project is illogical, poor economics, and bad public policy.
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Additionally, the governor's task force on wind power siting is scheduled to submit their reports soon. It makes sense to defer any decisions until this information is available for public comment. Thank you. I'm happy to answer any questions.

THE CHAIR: Thank you, Tony. I appreciate it. All
right, Jack, are you here? After Jack is Richard Jennings.
MR. MCKEE: Chairman Harvey, members the Commission, Director Carroll, my name is Jack McKee, a resident of Kingfield, retired -- I wish I stayed retired. I've got to say one thing before $I$ go. TransCanada, you know, has done what I think is a pretty fair job of meeting with the local people, and I don't know if our board of selectmen has adopted a resolution one way or the other. I know speaking to them individually, they are quite supportive, but I want you to know that there are some folks in Kingfield that are supportive of the project as well.

I'm going to skip over the records to the legislature. Representative Fitts, I think, did a superb job. There's no point in me trying to repeat that.

I am dismayed -- and incidentally, you will or have a hard copy of this, so you don't even have to listen, you can read it if you want it -- I'm dismayed by those who profess to support wind power but in the same breath express the view that the facility should be constructed elsewhere, perhaps anywhere but here.

The NIMBY philosophy to me is both ancient and intellectually repulsive. This position reflects a myopic view I find totally unacceptable. Reliance on conservation, laudable as it is in which some identify a solution, have spent little supporting and is but a dream at this point. All you
have to do is try to follow the United States Congress to see what's going on with conservation: Nothing.

Members of this Commission were exposed to a report from the Northeast Climate Impact Assessment at recent hearings on the Black Nubble project. You will recall that report was produced by the Northeast Climate Impact Assessment Synthesis Team -- that's a mouthful.

That report, in and of itself, provides ample evidence of the absolute necessity to take major and immediate action to provide new, clean alternatives for the generation of electric power. It is that impact that drives us to the most obvious conclusion that construction of the Kibby project, and many others like it, is essential.

According to this report, "The primary drivers of climate change are the burning of fossil fuels such as coal and oil and tropic deforestation." Admittedly, our ability to do much about tropic deforestation is pretty limited, but that is most assuredly not the case with fossil fuels.

We can do things which will assist in reduction of our reliance of fossil fuels as a primary source of electric power generation. This Kibby project, like the Black Nubble project you considered previously, gives Maine an opportunity to give an actual factual demonstrable evidence of the State's commitment to a cleaner, more healthful environment.

If we permit this continued warming to continue
unabated, it will -- and according to the report and many other reports, by the way -- have a significant impact on not only the environment but the economic structure of the entire region.

For those who would have us believe the problem is not really serious in Maine and the rest of the northeast, I suggest you hear what $I$ consider to be the most stunning and frightening fact. In a table identifying energy-related carbon dioxide emissions in the world, this region -- this region -stands No. 7. In other words, this region produces more energy-related carbon dioxide emissions than do nations such as Canada, United Kingdom, Italy, Australia, and others.

The report I noted at the outset defines with almost frightening clarity the impact of climate change on the northeast. I recall listening to one of the witnesses during the Black Nubble hearing defining the impact both in present and projected of growing air pollution on the health of Maine citizens, primarily the young and the elderly, of which I'm one by the way.

She did not paint a pretty picture. A brief by the Northeast Climate Impact Assessment focusing on Maine offers the following: "We have an opportunity to help protect our children and grandchildren from the most severe consequences of global warming by reducing emissions today."

As described in the NCIA report, the negative impacts

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of our continued reliance on fossil fuels are defined in lurid
terms. I will not go into detail here, but recommend you, if
you've not already read that report, you do so.
For those who claim we cannot clean things up without seriously damaging the economy of the region, I say, make yourself aware of the potential damage to agriculture, winter recreation, forests, water supply, et cetera. It is glaringly obvious, these impact our economics.
Folks a whole lot smarter than \(I\) have given ample evidence that the environment and economy can move forward together.
It is not an either/or situation. Every baby step we take towards the elimination fossil fuel power generation is a step toward a better state. This is one of those steps. I'm going to close with the same paragraph I had at the last time at Black Nubble.
My eldest great grandson is 12 years old this year. If he's to enjoy the same longevity I have, he will reach my age in the year 2077, that's 70 years. I pray this nation will not deprive him of the good life, that life that \(I\), for the most part, have enjoyed.
The Commission has an opportunity to strike a blow for him and the millions of his peers by your support of wind power in Maine, and I urge your support for this project. Thank you very much.
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THE CHAIR: Thank you, Jack. Richard, are you here, and after Richard is Wilma Stack.

DR. JENNINGS: Thank you. I am Richard Jennings, I'm a retired physician. I'm from away, I grew up in Belfast and now I live down near Augusta, so I don't come from this area. I don't know how many of these meetings I have to go to be a groupie but I'm working on it.

I'd like to comment on something I heard this afternoon in the cross-examination of Sean Mahoney, and I think it was alleged that cutting the cost of electricity would discourage people from conservation.

As a psychiatrist I like to think I know something about human nature, and I like to believe that human nature can change. We saw a change in attitude towards slavery, then women's rights.

I think we are at the point now where we have to change our attitude about conservation and we have to start conserving. That's one step.

Beyond that, I would like to relate a really
almost -- I don't want to exaggerate -- but an almost transformation last Saturday when I had the occasion to go to Mars Hill and that was a very impressive visit. It did make me somewhat thoughtful about all the time, however, that was spent on visual impacts and auditory impacts in these hearings, which I heard over and over, and I think that was really unnecessary
perhaps, because obviously these things are going to be seen, and driving from Houlton up to Mars Hill, you did see them.

In my view they were not ugly and they were not bad. I thought perhaps after I saw them close up and stood under them and walked around them, I would think -- believe me, the Washington Monument in Washington or the Air Force Memorial, and if you've seen pictures of those, you might get a sense of what I'm talking about. In my view they're really quite lovely and quite beautiful. I know that's my view and a lot of people share that.

However, the people that we talked to in Mars Hill seemed to the think that they're nice, not just because of the tax benefits. We were visiting one family that lived less than 3000 feet from about seven of these things, and we were there about an hour, and not only can you see them, you can hear them. We heard these.

I don't want to get too much into my personal life, but I do have sleep apnea, and if you're familiar with that there's something called sleep ap, which is a machine that helps you breathe at night. My sleep ap machine makes at least as much noise as those turbines.

I grew up on the coast down in Belfast, and the sounds of those turbines is very reminiscent of the surf at night, and $I$ found it rather relaxing.

So I won't go into greater length, but think even if
every adverse impact thing we've heard, even if they were all true -- and I think there's ample evidence they're not -- but if they were all true, we still have to have alternative energy. We still have to have wind power.

If the ship's going down, you can't say, well, we're not going to use that lifeboat or those oars are the wrong color. You're going to do that. You're going to take what you've got. Thank you.

THE CHAIR: Thank you, Richard. Is this Wilma? Then following that is Lou.

MS. STACK: Thank you, Mr. Chairman. I don't like to get up and talk with people, but I feel that I have to on this one.

I've lived in this area on and off since 1947 and people say not in my backyard. This is in my backyard.

THE CHAIR: Wilma, just -- just state your name for the record, please, so Lisa knows who you are.

MS. STACK: Wilma Stack.
THE CHAIR: Okay, thanks.
MS. STACK: This is in my backyard and I see nothing wrong with it. The transmission line will be 400 feet from my dwelling. We've had this since 1947.

We must have clean energy, and this is a clean energy source, so I strongly urge the Commission to vote in favor of this project. Thank you.

THE CHAIR: Thank you, Wilma. Lou, are you here, and then after Lou is Herbert Bachelder.

MR. STACK: I'm Lou Stack. I'm from Standish, Maine. Our family has owned a camp in Shapleigh Township since 1947, 60 years now.

It's kind of ironic, if you looked at this handout by TransCanada, you see a reference to Vine Road. Our camp, I want to put a face with a place here. Our camp is on Vine Road, it's the only one on Vine Road.

They came out with what you call Vine Road, they just named it a couple of years ago. You turn left. We've done that probably hundreds of times and we intend to continue to come out that road, turn left, and view those mountains.

We've hunted and fished here for, oh, 40 years in my experience. I don't see that these wind power turbines are going to affect our enjoyment of the area. The -- when we -when I come out to turn left, I will not see an ugly site, I'll see pollution-free power being generated.

And I just want you to know that we support this project, and we're hoping to enjoy these mountains hunting and fishing for the next hopefully 20,25 years. Thank you.

THE CHAIR: Thank you very much, Lou. Herb, are you here? Here he comes.

After Herb is Louise Tesseo.
MR. BACHELDER: My name is Herb Bachelder. I used to
work for Kenetech back when they was up on Kibby trying to get the wind turbines up there then.

I spent a lot of time up there, and I don't see a thing wrong with wind turbines up there myself. That's my opinion.

These people that are squawking about the wind turbines, you watch and they're out there talking on their cell phones. Well, how do they think they're talking on their cell phones? If it weren't for them towers on top of the mountains, they wouldn't be talking on the cell phone. What's the difference? A cell phone tower or a wind tower?

As far as the people that own that land up there, they've been real good, the paper companies have, about letting people in there and things. They aren't going to keep that land if they can't make a profit up there.

Putting turbines up there helps them, as far as the amount of money that they get per year, and if they can't make a profit, they're going to sell it and maybe to some developer and then what you're going to see up there is no trespassing signs.

So I think this -- the idea of wind power up there is a real good idea, and it's going to help to keep it open so the public can be up there.

I appreciate you giving me this time. Thank you. THE CHAIR: Thank you, Herb. Appreciate that.

Louise, are you here? And then following Louise is Terry. Just take a deep breathe and relax. Come right up to the microphone because we want to hear everything you've got to say.

MS. TESSEO: My name a Louise Tesseo, and I strongly oppose this project and any industrial wind farm on our protected mountains.

LURC protected these mountains 30 -odd years ago and has an obligation to continue to set strict guidelines in order to maintain Maine's pristine environment.

Our planet is in trouble because we have bulldozed it to death. Why add salt to an already gaping wound? Why not put these monstrous things next to all coal-fired power plants where they belong and leave our important ecosystems alone.

It's not just my backyard, it belongs to all of us who live here and visit here. These beautiful mountains will be gone forever if you allow money to talk. Please do your best, do the best things for our mountains, and let them stand tall and intact. Thank you.

THE CHAIR: Thank you, Louise. Terry, are you here? There he is.

MR. TESSEO: My name is Terry Tesseo. I'm a NIMBY. I'm opposed to the zoning change of the Kibby Mountains.

It's not about wind power, it's not about global warming, it's a zoning change to take these protected mountains
out of protected zoning.
Unlike the governor of Vermont who said the amount of power from wind plants is not worth the loss of Vermont's mountaintops, Governor Baldacci wants to house thousands of these things because of southern Maine's insatiable thirst for energy.

So we destroy our mountains, our natural resources in Maine for Connecticut and Massachusetts. They can put them down there and do it down there. Why should we have to supply their energy, any of it.

The Brookings report says, to save Maine and special places and protect our natural resources, I thought that's why the mountains in Maine above 2700 feet are protected.

So with Governor Baldacci's commitment to wind power, I say there will be many, many more wind plant permits being applied for by tons and tons of people because our governor and our legislature and everybody wants the wind plants, and we'll have tons more permits coming down the road.

It is unwise to take our mountains out of protected zoning for anything. Maine's about natural beauty and the lakes and mountains and ocean, not wind development on protected mountains. I say to the commissioners of LURC, honestly, can you say that ten miles of wind turbines, 410 feet with flashing red lights on mountaintops where the trees are no taller than 30 feet and the turbines are a quarter as tall as
the mountains will fit harmoniously into the natural environment?

We need to protect our mountains for our kids and for Maine. Thank you.

THE CHAIR: Thank you, Terry. Kenny Wing, is he here? Following Ken is Michael Bobish.

MR. WING: My name is Kenny Wing. I'm retired and I've been a lifelong resident of Eustis. I represent myself. Good evening LURC commissioners and LURC staff. I will be brief read as fast as possible. I also have a copy of this to hand in.

I've already chiselled some things out. I will say here now that I'm opposed to any development, including that which is before us now, mainly, TransCanada's proposed wind power project on Kibby Range, which would require a rezoning of LURC districts above 2700-foot elevation.

I'm not opposed to generating electricity by water, wind, tides, solar, and even nuclear. I also support and practice conservation religiously. I am very familiar with our western mountains, and my opposition is not based on a "not in my backyard" attitude.

As I've already stated, $I$ have been a resident of the town of Eustis all my life. I am a graduate forester, and until last month $I$ enjoyed status as a State-licensed forester. I've worked a real job as a forester for Scott Paper Company in
the early '70s, and I crisscrossed that land's ownership many
times from Route 27 to the other side of Moosehead Lake. I did
this even before there was a LURC.
I've always supported land use regulations in our
unorganized townships and applauded LURC in the late 1970s for
being forward thinking when it comes to zoning the fragile
environments at higher altitudes.
I started working as a forest ranger for the State in
1987 and in '89 I became the district ranger of Rangeley
District, a position I held with great satisfaction until my
retirement two years ago.
I was directly responsible for fire control in a
district that encompassed 3 million acres. That's an area from
New Hampshire to Greenville and from Jackman to the Kennebec
County line. I supervised eight other forest rangers to
accomplish this important task.
conservation law enforcement tasks. one such important arena
was dealing with non point-source pollution in LURC and DEP
jurisdictions.

During the mid to latter part of the 1980s the Maine Forest Service entered into a memorandum of agreement with LURC and DEP to help those two agencies deal with non point-source water pollution. The commissioner of the Department of Conservation signed this agreement and promised to pledge his

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active participation to stand and prevent environmental degradation.
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One important aspect of all this was activities above the 2700-foot elevation in LURC jurisdiction. We were taught about this environment by LURC staff, and as such, I was asked many times by LURC to comment on proposed landowner activities in that district. I can assure you I read ever proposal and permit request and took that task very seriously.

For many years $I$ was the one in the Maine Forest Service who authorized enforcement procedures of LURC regulation violations in the western mountains of Maine. Every major landowner developer knew my name. Was I one of their more favorite people? Probably not, no more than LURC enforcement staff, but $I$ did it because it was good for the environment.

As one of the conservation law enforcement staff in the State of Maine, I told landowners they could not build above the 2700 -foot line. I worked with landowners to find better solutions.

I don't blame the large landowner for wanting to enter into an agreement with a developer in order to gain an income from land, such as a lumber job. Before I agree to the proposal, I would rather see it change to allow more timber harvesting above 2700 feet.

From everything $I$ know and experienced and feel in my
heart, I am firmly convinced that allowing rezoning and creation of wind power business on these terrains is a bad idea. It's the location, location, location that disturbs me the most.

In my opinion, based on my education and years of working experience, what I've been taught by LURC and LURC support staff, company foresters, publications, and information from groups, such as the Friends of the Boundary Mountains, allowing that development, in this case wind power, in any LURC zoning -- prohibiting [sic] such activity above 2700 feet, it's just wrong for the environment.

I believe it's worse than timber harvesting. Wind power is of a permanent nature, it's not like harvesting timber between temporary roads. The roads created for wind power, turbines, and the pads at the towers will not be put to bed. Mother Nature will not have the opportunity to heal itself.

The roads at the site will be wide and straight and very permanent. Concrete for the tower pads is very permanent. I will guarantee there will be environmental problems with these types of construction activities in that area.

I can't count the number of times $I$ had seen a hard rain make the hillside run brown with silt during the road construction, normal road maintenance, and even normal road use.

As I already stated, I believe LURC was very forward

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thinking in the 70s when it was time to form the zones and
regulations. Everyone was saying we are protecting our
environment for our future and the future of our families. The
year 2007 is the year we stop forward thinking and rezoning,
important ecological areas.
    It will also be very easy for anyone to say to me now
wind power is protecting the environment for our future and the
future of our families. Please don't misinterpret my comments
here tonight.
I like the idea of generating electricity by wind and water and the sun and renewables. I will support all of these in the right place. I've seen wind-powered plants on the Gaspê in Quebec and in Kansas and in Colorado and Wyoming. From what I observed, they are located correctly, such as being in agricultural fields, existing clearings, near existing roads and power lines. I support that.
I do not support rezoning high altitude environments in Maine to accommodate wind power. I do not support the creation of miles and miles of transmission lines from the Kibby Range to Eustis over hill and dale and over two wetlands of PS-L2s.
I think a better way to do this is just slow down for the environment's sake, let the governor's task force of wind power do their job and report back to us on what is best. It all boils down to location and the method of the electrical
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generation.
I'm not a hypocrite. I even support wind power in my home town versus Kibby Range. Why wouldn't anybody agree to this? It's a no brainer. I think the best idea yet is for each and every one of us to conserve on a scale never dreamed of before.

This issue is fraught with big business, politics, tax subsidies, green credit, big business, and politics -excuse me, I think I said big business and politics twice.

I have learned many aspects, much is greatly discouraging, like turbines are only one-third efficient, existing coal plants will go idle and not really off-line when the wind is generating power, hydropower taken off-line when wind is generating power for transmission line capacity, tax credits and true profit, misrepresentation of figures, global warming, et cetera.

It's very confusing. If you open Pandora's box and vote to rezone Kibby Range, then I fear there will be a domino effect in many other restricted zones. I also feel large landowners could, and probably should, request to rezone the lines above 2700 feet to accommodate their forest practices.

I believe TransCanada to be a company I can support in the right location. Their people have treated me kindly and have listened to me. I thank them for that. I sincerely hope we can get this location thing down in such a manner that is
unquestionably harmonious with our environment.
I thank you for your time and patience tonight.
THE CHAIR: Thank you, Kenny. Michael, are you here?
And following Michael is Brian Ricker.
MR. BOBISH: My name is Michael Bobish. I'm a resident of Maine and I live in Eustis. Thank you for the opportunity to speak tonight.

When I pulled in the parking lot, the first thing I looked at was the Bigelows, and my first thoughts were how grateful I was that it's a State preserve and it's guarded by the State and it will never be developed. Unfortunately, the entire western mountains of Maine are not under that same protection in my viewpoint.

I drove with a friend today through New Hampshire -by the way, before $I$ forget, $I$ am very much against the Kibby project and the wind power that they want to propose up there. I would like to see those mountains stay the way they are, free and wild.

As I said, I drove through New Hampshire and at different pockets through the White Mountains there were signs that said, White Mountain National Forest, and again, it gave me that good feeling that this land would never be developed because it's guarded by the State.

As I stand here in front of you and share my ideas and my views and my values, I have a voice but that's as far as
it goes. I do not have a vote in this matter.
What concerns me more than anything is just that there's a small number of people, such as you all in front of me, that have that vote, and you're the only ones that can protect and keep our mountains beautiful and free from development.

I don't like the fact that $I$ don't have a vote on this. I don't like it at all. I'm powerless over it, and I go back to what I've learned since I've gotten involved with what's going on up in my area, what's going on in the western mountains of Maine. It's the values that LURC established 32 years ago not to do any developing above 2700 feet.

Those values were good then, I believe -- I believe that they're still good today and they should be abided by and not undone at -- for the sake of instant gratification.

I believe that TransCanada is a strong and powerful company. I believe they're also a very successful company and perhaps in a lot the ways very positive.

But what thought goes through my mind is what their motive is to being here. I can't help to think that a little bit of that motive is that there's an awful lot of our US federal dollars that is going to be available for them and huge, huge profits for them to be made.

I'm very much for keeping our state and our western mountains as free from development as possible.

You know, it took -- it took this country and this world about 50 to 60 years to do the damage that our environment has been exposed to. I believe it was a God given gift, the earth. I believe that the creation and nature is a perfect harmony and balance, and I believe the intrusion of population has gotten into that to the point where there's so much damage out there, it scares me to think that we will make another decision that will be the wrong decision and to sell our mountains out to any kind of development for a few bucks would be awfully sad.

If I had a vote, it would definitely be no, go somewhere else. Take it to Canada. Take it back to your country.

I thank you all for my opportunity to speak tonight, and I hope you respect the people that put the -established -- the people before you with LURC that established the conservation guidelines of developing in these mountains. I hope you respect that as much as I do. Thank you.

THE CHAIR: Thank you, Michael. Brian Ricker is it. There's Brian; and after Brian is Ray Craemer.

MR. RICKER: Good evening. I'm Brian Ricker and I live in Eustis. I'm also a resident of Chain of Ponds. I have a camp up there. We spend approximately five to six months worth of time up there each time off and on depending on where I'm working.

I'd like to see the windmills -- I'd like to see this -- I'd like to see it happen for a couple reasons. I work for local contractors and we'd like to see some of the work, of course, but the biggest thing is I think it would help the community a lot, and I can't see where it would hurt the Chain of Ponds area at all.

I spend a lot of time up there. I'm on Kibby Range a lot, off and on. It is a beautiful area, but, I mean, this is a good opportunity for us to do something. I would just like to say again, I think $I$ would like to see it happen.

In closing, I am a contractor and construction worker, and I know I've done a lot of work in the -- certainly Maine Yankee over the years when it was up and running -- and I always think back about when we're getting done at the end of the day and we're working on the so-called hot side of the plant like that, when you all have to stand in line and get decontaminated, we'd look at each other and say, there's got to be a better way for us to be doing this, what we have to go through.

Thanks a lot.
THE CHAIR: Thank you, Brian. Ray. And following Ray is Hellmut Bitterauf.

MR. CRAEMER: My name is Ray Craemer. I'm a resident of Eustis, Maine, and I am speaking to you in opposition of the Kibby Mountain wind project.

The issues pertaining to preserving the mountaintops, protection of the native species, and the beauty of the area are as valid as ever. The Kibby project also has the issue of a company from another country invading our country, using millions of our tax dollars to build a wind turbine plant to take the power and sell it out of state and take the profits out of our country. That doesn't pass the smell test with me. Other issues concerning the fact that we in Maine do not need the power and by increasing our production, enable states that should be taking action on their own to avoid their responsibilities. They need to address the pollution they are causing.

As I see it, your major concern is whether to abandon all your longstanding principles of protecting the high mountains and rezone this area. This probably may very well be a moot point.

Recently the governor's task force on wind mills received testimony from an expert in the windmill manufacturing field. That report stated that recent improvements in the windmills allow them to operate effectively with strength 2 and 3 wind, strength 5 is no longer essential. I don't know if you read this report; I'm sure one of the intervenors will be sure that you receive it.

Assuming that the facts are correct, there is no reason to consider defacing the mountains at all. Some other

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areas of Maine are looking at large wind farms and some farmers
seem interested in leasing land for windmill operations.
That's a win/win to me.
I realize that the proponents of wind power in the mountains spent a lot of money getting access to the sites they have, but the State of Maine has no burden to rezone just to accommodate those. They knew that rezoning was never a done deal.
Another issue is power lines that would be built. Not only are they an eyesore for miles, but the cost of construction and maintenance would be borne by the consumers. The cost the producing power is a small part of the total electric bill.
I urge you to deny this petition. If windmills in the mountains are truly the only way Maine can survive, that will be true years down the road and can be addressed at a later date.
If not and the intervenors are right, you will cause a travesty we will never recover from. Thank you.
THE CHAIR: Thank you, Ray. Hellmut. Following Hellmut is Larry Bulin, I believe it is.
MR. BITTERAUF: Chairman Harvey, commissioners, and staff, thank you for letting me speak.
My name is Hellmut Bitterauf, and I live in New Sharon. We moved to Farmington in 1978 and raised four
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children with the help of these mountains. We hiked, skied, and pitched a tent and we enjoyed the beauty of this mountain. A tragic accident will connect me forever to these mountains. LURC commissioners are asked to change the zoning of the mountains above 2700 feet. The Land Use Regulation Commission has recognized the special features of mountain areas and the distinct contributions the high mountains make to the ecology, water quality, culture, and identity of Maine.

LURC created a zone called protected mountain areas that prohibits development. The Commission is now asked to permit installation of 44 huge industrial machines called windmills. These structure are 410 feet high, more than twice as high as the Capitol dome in Augusta.

The mountain edge is jagged. There's cliff and enormous boulders. How much bedrock has to be blasted away to level an area big enough to lay down and work on 160-foot windmill blade. Are we looking at 300 feet of level ground per turbine, that would be up to more than 2 miles of mountaintop removal?

You know that the concrete foundations will last hundreds of years and can never be removed. What is the life of the turbines? Are they operating five years, ten years, twenty years? Who's taking the turbines down when they are outdated or the use ceases to be economical? Are we assured that this project will even shut down a single coal-fired
plant? Or is it true that the green credits received from producing wind-generated is used to offset the pollution of coal-fired plants not performing to improve emission standards. This would mean a sacrifice on our mountains and get additional acid rain from the Midwest.

We're all concerned about climate change. It's the most serious long-term challenge we're facing. Destroying the pristine mountains to drop a few megawatts into the growing energy pocket will not solve the problem. Windmills on top of high mountains are not the solution. Reducing energy consumption is the only solution. Thank you for letting me speak.

THE CHAIR: Thank you, Hellmut. Larry, are you here? Following Larry is Jo Craemer.

MR. BULIN: My name is Larry Bulin. I'll make this short and sweet.

We all know we have a problem with energy and the high cost of energy. We can't continue on this way. People just can't afford to do, people paying the cost of energy, so something has to be done. I think wind power is a good thing to get on-line.

I've seen the Mars Hill one. I don't feel that they're an awful sight by any means. I've seen them in California, also. I think they're kind of neat actually.

So I think that I'm in favor of it, and I've talked
to TransCanada. I think they're well educated about this kind of project, and I think they're the type of people who do a good job installing and putting this together.

So I am in favor of the wind power. Thank you.
THE CHAIR: Thank you, Larry. Jo.
MS. CRAEMER: My name is Jo Craemer. I live in Eustis, Maine, and I am in opposition to this project. Thank you once more for your patience and attention in yet another public hearing regarding the proposed wind turbine development in Maine, this time in the Kibby Mountain Range location.

During the past year it has become obvious that opposing factions have two major reasons for supporting or opposing this project. The folks in support found the project would be a statement -- a statement of Maine's commitment to help save the world from global warming by reducing greenhouse gases; those opposed felt that the very small benefit from this wind-generated project was not worth the catastrophic and permanent loss of long protected mountaintop wilderness in one of Maine's most beautiful scenic areas.

Supporters of this wind turbine farm make the assumption that there is actually a significant man-made causative agent for global warming, that the use of fossil fuels is causing imminent, catastrophic climate changes for our kids and our grandkids. I submit that they are taking at face
value biased pseudo environmental reports which do not represent the realty of Mother Nature's natural cycles.

What is being blatantly ignored is that it takes millions of cyclic warming and cooling. Our Maine mountains clearly show sculpting from the advance and the retreat from the last period of glaciers.

Over eons the arctic snow pack grows and shrinks and grows and shrinks with subsequent raising and lowering of the oceans' depths.

Do you know how Greenland got it's name? It got its name when it was discovered by the Viking explorers. It was green. It had a temperate climate perfect for farming.

Allowing this huge wind turbine to designate and desecrate the scenic wilderness of the Kibby Mountain Range is beyond comprehension. We do not need to destroy our mountains.

It's with a feeling of irony that today I'm asking you to review the Land Use Regulation Commission. Just this morning in my dentist's waiting room, I picked up the September issue of the Down East magazine. The magazine cover photograph and the leading article was entitled, "Maine's Wildest Places: How do you save them forever."

For over 20 years the LMP program, the Land for Maine's Future program, has preserved more than 147 of our most beautiful and fragile places. This program, funded by bond issues, has been a successful tool for conservation groups to
protect precious places in the state, places like Tumbledown Mountain.

The article says this group is down to their last dollars and members are being asked to approve new bond funds. Here you sit, you at LURC, able to make the decision to protect a massive scenic Maine mountain range at no cost. Maine needs these mountains far more than she needs the wind turbine farm, which will destroy them.

In summary, this wind turbine project will not have a significant effect on the global warming or cooling cycles. This project has been pushed and justified as a demonstration of Maine's environmental concern rather than as a meaningful contribution to solving the problems of greenhouse gas emissions.

This wind turbine farm will destroy a rare and beautiful mountain range, one of Maine's most precious geographical assets, for our lives and for the lives of our children and grandchildren, and their children's children.

Please do not approve the rezoning that would open these peaks to such inappropriate industrial use. Thank you.

THE CHAIR: Thank you, Jo. Nancy O'Toole. Is she here? Lauri? Are you Nancy?

MR. SIBRILKIN: I'm going to read Nancy O'Toole's. She took ill about midday and had to go home. You've asked me to limit the time. I'm going to have to chop this speech up a
little bit. It's all written, and you'll get the full copy.
THE CHAIR: Thank you.
MR. SIBRILKIN: Nancy O'Toole is my wife. Nancy planned to address road issue excavations. She has comments on other parts of the project.

The first one is about what TransCanada is proposing for this project. It's stated in the application that it will be producing up to 700 cubic yards of concrete per day and using 28,000 gallons of water per eight-hour shift. Will they be reusing their wastewater, and if not, where is all this wastewater going? Nancy looked through the application and totalled up the number of streams and wetlands that are likely to be impacted.

Unfortunately, with no final plan, she could only assume that these numbers will rise but she found one stream and 36 intermittent streams that will be impacted and a potential for 36 wetland areas of varying sizes that will be directly impacted.

With this said, she wanted to go over to LURC's comprehensive plan and just quote from it a great number of very pertinent points that you and your predecessors -- and this is a recent edition -- use as your guidelines to work with. I'm not going to read it. They're typed out here verbatim, but you guys know your plan, so that's how I'm going to cut this back.

However, she would like to quote from Chapters 3, 4, and 5. Now, testimony yesterday on behalf of TransCanada, all those folks read was from Chapter 3, Page 40, Regulatory Approach on Energy Resources.

A number of protection zones are applied to resources that can be used for energy production, such as high mountain area protection zones, shoreland protection zones, and wetland protection zones. Nancy points out that what was not quoted was the sentence that followed these, which is, In all cases, the focus of these zones is the resource, the mountain location, not the energy which can be produced from it.

In the regulatory approach for forestry, Page 46, there's a fairly detailed comment. Nancy says, LURC deems it important to protect the timber harvesting areas as shown by the preceding paragraph. This emphasizes the importance that she presumes LURC places on protecting the higher, much more fragile and thus far unrestricted ridges and summits. Each one of these comments is a compliment for your protective status.

Later on, in regulatory approach for soils and surface -- surficial resources, the Commission has established a soil and geology subdistrict to protect areas that have precipitous slopes or unstable characteristics. She wanted that one pointed out.

And now she comments, given the commissioners' protective regulations from modestly interested activities in
valleys and lower areas, all of the controls you place on below 2700-foot development -- logging and so on, we use the word modestly a little loose there -- any requirement that you would impose to protect soils, hydrology, et cetera in protected zones would very justifiably be so intense, so detailed as to curtail any big developments in these higher and more fragile places.

In the section labelled Mountain Resources, Page 56, the $P-M A$ zone regulates certain land use activities in mountain areas to preserve the natural equilibrium of vegetation, et cetera, et cetera, rather long paragraph.

Nancy notices, Kibby Range is rightfully included in the $P-M A$ zones. It is one of the last untouched ranges in the western mountains.

In geologic and mountain resource issues, Page 58, now this one is a dilly so I'm going to skip all of it because I couldn't read it when she gave it to me, but her comment is, yes, the mountain ridges have good wind; however, as this paragraph points out, the intrusion and irreparable damage to the area is to understate tremendously -- and she said -- to accent this "extensive."

To get up there and build these turbines, et cetera, will rip the heart right out of the work areas. I believe this project is a great example of compromising the values the P-MA zone is designed protect. I believe she's congratulating you

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on protecting these high places yet again.
    The final sentence, which I didn't quote here, is
important because it shows the Commission's feelings concerning
mitigating adverse impacts.
    Nancy believes this means that the fact that this
project will presume -- produce green credits that will offset
other pollution generating activities at other TransCanada
projects is totally irrelevant as a theory. It just doesn't
count.
Under principle values and location of development, Page 114, you have written this: To effectively evaluate growth trends and the Commission's approach to development, one must first have a clear understanding of the values that make the jurisdiction so special.
What makes the Kibby Range so special? You have four principle values -- Nancy's written up three of them -- and her comment is, the Kibby Range fits these criteria beautifully. Any high-elevation developments run contrary to these principle values.
Under impact on development, again, Page 114, the Commission has determined that development that occurred in the latter part of the last century had minimal adverse impacts, and so on. Then I quote, the most effective method of minimizing adverse impacts on these type of resources is to guide development away from it, and over the past two decades
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the Commission has effectively pursued this approach. I'll skip the rest of that quote.

The key -- Nancy says -- the key point is the most effective method of minimizing adverse impacts on these types of resource is to guide development away from them. This is an especially important concept because these high mountains and ridges are not the only places where wind power projects can be effectively situated.

The Commission does not effectively doom wind-generated electrical power in Maine when it elects to continue protecting our already established $P-M A$ zones.

She quotes from Chapter 4, Page 131, in the mid-'90s there was considerable interest in this jurisdiction as a location for wind-generated electricity. While the Commission recognizes that wind power projects must be located where the wind resource exists, they have potentially significant on-site impacts due to their high-elevation location and equally significant potential to adversely affect the jurisdiction's principle values.

Nancy says, need I say more? This potentially significant on-site impact is not just a bit of a disturbance, it is a gross invasion of the surface, the soils, and the hydrology. Kibby Range would never be the same.

She lists quotes from your goals and policies for the future, where the very first sentence is, The Commission is
charged with planning for future growth, not just reacting to it. Later on your document says, Maintain the natural character of certain areas within the jurisdiction having significant natural values and primitive recreational opportunities. Limit the scale of new or emerging energy technologies where feasible to allow time for the Commission to evaluate the technology and its impact in large-scale applications.

Nancy's comment is, your own words are perfect. Don't forget that you are the best protection these places have. You use phrases like "limit the scale and allow time" in Paragraph 8. Good for you. Stick to this protective stance. Once the mountain is torn up, there is no repairing it.

Mountain resource policies, Page 137, notes, Regulate high-mountain areas to preserve the natural equilibrium of vegetation, geology, soils, and so on. Nancy's comment is, Preserve the natural equilibrium is the key comment here. This is not possible in a heavy construction scenario.

Her wrap-up is, I have lived in this area for almost two years and have been visiting, along with my husband -that's me -- for 16 years. Nancy's from Utah and has lived there and Montana and has seen the destruction of similar fragile mountainous areas where development has gone unchecked.

Please don't let big development get their foot into the western mountain range. Once it begins, there's no

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stopping it. She says, thank you.
THE CHAIR: You can thank you Nancy for me. And you? MR. SIBRILKIN: My name is Lauri Sibrilkin, I'm from
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THE CHAIR: Okay. I just would let -- before you begin, Lauri spoke to me before and told me the circumstances he was in. I told him he could read his wife's testimony, and I would let him testimony. That's what's going on here. I'm giving him a little more time than normal. I hope he doesn't take advantage of it.

MR. SIBRILKIN: Mine is 16 font and a lot less pages.
Dear commissioners, my name is Lauri Sibrilkin, I live in Phillips.

I understand that the primary function of the Land Use Regulation Commission is the protection and oversight of much of Maine's undeveloped back country. I understand that in many cases this Commission has seen fit to allow logging contractors access to tracts of forests for the purposes of harvesting the timberland.

I understand that you've committed to building roads and bridges that accommodate the transportation of this material.

I note that for better or worse, this has long been part of Maine's economic system. I note that very rarely do these rise into the protective regions above 2700 feet. As far
as I can tell, no roads have been permitted recently that run along the ridges and reach the summits of our higher mountains. I commend your protective action.

Given this protection, this precedent, and what is written in Chapters 3 through 5 of your Comprehensive Land Use Plan, I see that you are very wary of opening up the highest country to road building, the installation of heavy industrial facilities, and other very intrusive development.

My point that this project is intrusive. I'm a construction worker and a truck driver and an equipment operator with an interesting resume. I have considerable experience with the following: The construction of roadways that will support 12 -axle trucks with 70 -plus-ton payload is quite an engineering feat. We looked up the photographs of what would this need to haul the sections of the turbine towers, and the cells, et cetera. I counted the axles.

Especially when this road must climb to ridgelines on slopes that could reach 75 degrees and hold up under our very moist climate, this road project will be tremendously intrusive to the ever more fragile environment as it reaches higher and higher up onto the Kibby Range.

The construction supply and utilization of a concrete batch plant high up on the construction zone will be another extremely intrusive event. I've been a concrete worker and drove a concrete truck. Where will the sand come from? Oh, in
trucks up the road. Where will the cement come from? In trucks up the road.

Well, trucks get into difficulties. Trucks that lose their way in this setting will wind up spilling their guts -please read oil, fuels, antifreeze, and cargo -- all over parts of real estate that is not zoned for industrial waste disposal.

Where will the thousands of gallons required every day for the mixing of the cement, the clean out of the plant, clean out of the cement mixtures, and dust control come from? And where will the contaminated washout water go? Think about additives, aggregates, cement, slurry, and so forth.

Once the actual construction of the towers begins, there will be machinery service areas, fuel and oil storage areas, and the ever present garbage pile that every construction that I've ever been on has.

All of this material and machinery must travel up and then down the road. This constant stream of trucks and vans has a predictable rate of accident. Uh-huh, more industrial waste disposal.

None of these things are harmonious with the ecosystem of a high-mountain ridge. Once the construction is completed, the roads will remain changing the hydrology on the ridgelines and mountain sides.

I've seen some of the mud and rock slides that result from human interference in the higher elevations. These can be
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truly huge and devastating events that transform the area
impact for decades and even centuries to come.
Please do not allow this project or others asking to
be located in similar high altitude environments to proceed. I
agree that our civilization needs ever increasing amounts of
electricity, the place to harness the wind is in friendlier,
somewhat attainable locations.
Let the wind energy industry design a wind farm that the CEO of TransCanada actually installs in his own personal backyard, then you will find plenty of applicants, like myself -- and I own most of the hilltop -- willing to host these generators in construction friendly places where the wind blows reasonably well. Until them, keep the faith and keep protecting our high fragile places. Thank you.
THE CHAIR: Thank you, Lauri.
I've got Dain Trafton here, but your wife said she spoke for you. I'm assuming you don't need to speak.
MR. TRAFTON: I didn't intend to bother you.
THE CHAIR: But you're going to.
MR. Trafton: That's right. My name is Dain Trafton. I'm from Phillips and I'm here to speak in opposition to the project.
I want to dwell on just one of my reasons for opposition. I am skeptical of the emissions benefits claimed for the project. In discussion with Dave Wilby and Sean

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Mahoney this afternoon, commissioners raised the question of how one could be certain that the operation of the Kibby plant would reduce emissions and thus help to combat global warming. The explanation given by Dave and Sean was that whenever a certain amount of renewable electricity is put into the grid, an equal amount of electricity and related emissions from a fossil fuel plant will be displaced. This can happen but it is not guaranteed to happen.

It would not be guaranteed, for example, under circumstances when there is congestion that causes competitions among renewables for transmission capacity. Under those circumstances, renewable energy would end up displacing other renewable energy, would reduce and in fact in some cases may be no emissions benefits.

This could have, in the western and central Maine subarea of the grid, which is heavily endowed with hydro and biomass plants, and although it is undoubtedly true as the applicant has insisted that if such a situation were to occur, it would be resolved by already existing methods of the market.

Nevertheless, it is highly likely that this market solution would involve displacement of renewable, not fossil fuel, sources. Notice \(I\) don't say certain, but likely.

Also, it's important to understand that emissions that are displaced are not necessarily avoided, that is, they may be simply moved to another place.

In fact, under RGGI cap and trade programs for \(\mathrm{CO}_{2}\), \(\mathrm{SO}_{2}\) and nitrous oxide, which will become effective throughout the RGGI region starting in 2009, fossil fuel plants that might be forced to cut back operations as a result of the Kibby plant will have -- almost certainly will have -- emissions allowances which they will then be able to sell to other businesses, who will as a result be able to emit more.

This is what we mean when we say emissions are displaced but not avoided. The net result, of course, in such a situation -- won't always occur but will occur frequently -is that emissions -- that the net reduction in emissions will be less than are claimed by the applicant.

It is not at all clear -- not at all clear -- exactly how the Kibby plant will reduce emissions when, where, and by how much. Thank you.

THE CHAIR: Thank you, Dain. Hugh Verrier, is he here? Followed by Jean Gutnand.

MR. Verrier: Hugh Verrier from Eustis. I'm a resident here, have been for a few years.

From the start I'm all for this project. We have to have it occur somewhere to start, and it would be nice and it would be wonderful if we here in this part of Maine could have the courage to say yes to a project like this.

I'm not sure it's the answer, but it certainly is the start, and I feel that further down the road -- maybe in my
lifetime -- we will have better renewable sources of energy, maybe we'll have super conductivity, but we don't have those right now. We have fossil-fuel generation.

We're sucking all of this out of the earth, it's doing terrible things actually to the diameter of the earth. Eventually we're going to implode it if we don't do something. We just have to start.

We just can't keep saying, not in my backyard. This is not a development of Kibby Range. These are towers that are going to be set on that range, the construction is temporary, the roads are pretty much temporary. All of that will be gone once these towers are in place.

If down the road -- \(20,30,40\) years -- they're not viable, they're not worth producing power, TransCanada has to remove them. They're not going to blast off the top of the mountain, they're simply going to set these units up there, and let's hope they work because we just have to make a start somewhere.

You know, the expression about so goes the nation. As Maine goes, so goes the nation. Maybe if we make a start like this and show that we really have the courage and the intestinal fortitude to start a project like this, you'll say we want to prevent what's happening, we want to curtail all of this, we want to get rid of the fossil plants.

We're not talking about creating Flagstaff Lake and
eliminating villages. We're talking about putting towers on the top of a mountain to generate power with a renewable resource. It's a great idea. Let's try it. Thank you very much.

THE CHAIR: Thank you. Jean, are you here somewhere? And then after Jean is John Townsend.

MS. GUTMAND: Good evening to the Commission and thank you very much for coming to our neighborhood to hear us. My name is Jean Gutmand, and I am a homeowner and registered voter in Eustis. I've lived here on and off for 30 years, and I am very happy to be retiring here and to be able to look forward to taking advantage of this beautiful region. And I am in favor of the wind power project in the Kibby Range.

I think that there is just no question that we have got to try these new sources of energy, and I think Maine should be proud of having tried it already. I think it's a very smart and clean alternative to what we've done to the environment thus far with fossil fuels, even the hydropower projects, which some people think are ugly and couldn't wait until the dams were removed.

But I love these mountains. I love these mountains dearly, and I spend time outdoors north of Eustis every single day. Sometimes I'll camp out up there for a week at a time, and I would not find the towers and the turbines to be offensive.

I have been around towers and turbines out west, and when you come across them in a pretty wilderness area, I think they're elegant, and I'm proud of the region, especially in western Canada, that embrace the idea and have large wind power farms.

So I am not offended by the turbines and I would welcome them in our region. So I encourage you to approve this project and bring more wind power to Maine. Thank you.

THE CHAIR: Thank you, Jean. John, is he here?
Following John is Basil Powers.
MR. TOWNSEND: My name is John Townsend. The question before us today is whether or not Maine's Land Use Regulation Commission will rescind its zoning regulation in order to allow TransCanada to build 44 wind turbines that would produce 132 megawatts of electricity, power lines, access roads and over 27 miles of \(115-k V\) of transmission lines on protected lands.

The reason this question is being considered includes that fact that using wind turbines to produce clean energy can't help but address the threat of global warming.

This project would provide some economic benefit to the local community. I think we all agree that wind power is very stable and a desirable source for consumer electrical needs. It's clean, it's renewable, it's fairly straightforward. Few people will disagree with the notion of
building wind turbines.
Let's take a closer look at the anticipated economic benefit to this region from this proposed plant. This zoning petition asks LURC to remove some longstanding regulations that were established by LURC, to allow TransCanada to build extensive infrastructure in this protected area.

This company proposed a yearly tax contribution to the region of about \(\$ 1\) million, approximately a dozen full-time jobs, and a community benefits package, and a \(\$ 500,000\) contribution to help purchase some plots of land equal to about 750 acres on the Mahoosucs Mountain Range.

What does a Canadian company, TransCanada Limited Energy, get in return for these gestures? They get ready access to develop and use Maine's protected lands to make their product. For \(\$ 270\) million in capital costs, they will have the opportunity to make electricity cheaply and continuously and then sell it back to us.

If the average Maine resident uses only \(\$ 100\) a month in electricity at the current rate, and this complex is supposed to produce enough electricity for 50,000 Maine households, that would take in \(\$ 60 \mathrm{million}\) per year for TransCanada Power Marketing Limited.

Based on the current price of electricity, combining \(\$ 270\) million in capital costs, the \(\$ 1000\) contribution, the annual \(\$ 1\) million annual tax payment, and the 1000 per megawatt
installed community benefits costs, TransCanada Power Marketing Limited could essentially pay off the entire amount of all these interests in five to six years and then be able to rake in significant profits from then on from the sale of their Maine-produced product.

This all assumes that all those benefits will
actually happen. While the firm has extensive experience with gas pipelines, currently TransCanada has only one operating wind powered electric production facility. This 110-megawatt facility has come on-line in December of 2006 . The remainder of the Cartier wind energy project will not be completed for another five years.

Concerning wind power generation, TransCanada has a track record that is only ten months long; however, according to the 2006 annual report, TransCanada operations have averaged over 36 environmental noncompliance events since the year 1999.

In the same annual report, TransCanada boasts a net income for last year for over \$1 billion. TransCanada has, and I quote, made significant progress towards our objective of being the leading North American energy infrastructure with a strong focus on gas transmission and power generation opportunities. We're located in a region where we enjoy significant competitive advantages.

Even as we consider these facts about the company that is asking for these zone concessions, we have to look
closely at important questions that are not addressed in this business proposal.

Why shouldn't a \(\$ 500,000\) contribution to buy a parcel of land, develop and expand the existing parks in the Mahoosuc land unit be kept close to the actual effective site? Instead, use to expand the Chain of Ponds public lands unit.

The benefits paid to local communities are capped, but the rate that TransCanada can charge for electricity is not. There is no mention of repair to the damage that will be inflicted on the State infrastructure, such as roads and culverts. Increased heavy traffic will damage the surface and roadbeds, plus interfere with the established commercial trucking that depends on local highways.

Each turbine requires over 30 truckloads of poured concrete for its foundation. That means there will be over 1300 fully loaded cement trucks transporting across local roads before they wind their way up to newly established roads in route to the Kibby ridgeline. This is before any heavy cranes and transport trucks arrive to set up the 44 proposed turbine towers and lift in place the 132 turbine blades.

Afterwards trucks will be hauling cables and towers, a 115-kV transmission line that will be strung along 27 miles of cleared land between the mountains and Bigelow.

How can these 27 miles of cleared forests for high voltage lines remain clear? Is TransCanada planning to keep
the brush down, or do they depend on chemical applications. When this whole project is completed, what fossil fuel plants will be taken off-line as a direct result of this construction.

There is no doubt that we must find ways to provide electricity in a way that will also address the problem of global warming. Construction of wind power generators is an excellent approach if it's done in locations that do not present other significant environmental problems.

As seen in Quebec along the St. Lawrence River, the Cartier wind energy project that TransCanada is involved with are massive turbines located on the low hills next to the seaway. The surrounding regions are small dairy farms and light industry.

Despite the fact that there are 3000 -foot high mountains nearby on the Gaspê Peninsula where the Cartier project is located, all installations are located only hundreds of feet above sea level. It is clear that the current technology does not require that turbines be placed above current zoning permits.

I'm here tonight to say that the location of TransCanada's proposed power generation facility presents an extensive list of environmental problems.

Industrial construction in these areas would drastically change the landscape and the function of this region. The mountain area protected subdistrict regulations
are in place for a reason. The question is, are you, as stewards of Maine's land, ready and willing to discard all the reasoning and rationale of your predecessors that instituted these specific protection regulations in the first place all for the sake of the projected economic gain outlined in the corporate proposal from TransCanada Power Marketing Limited. In their amended application TransCanada offered to conduct studies of bird and bat mortality when the project is operating and share the results with environmental organizations. What will you do if these studies are not done or the results show that extensive power lines and tall turbine towers are extreme dangers to migrating waterfowl or resident bird populations? What will you be able to do if other projections and predictions are not accurate? What do you do if the promises turn out to be empty?

I was introduced to Maine's beautiful boundary mountains' area over 20 years ago. The pristine wilderness and undeveloped vistas around the Chain of Ponds were and have continued to be a rare jewel in the northeast. I have continued to return frequently to this area since then neglecting travel to other places. Instead, during my free time over the past 20 years, I have chosen to return with family and friends to share with them the wonders of the Benedict Arnold Trail, the Dead River, the Chain of Ponds, and the surrounding mountains.

Over these 20 years we have leveled and restored and maintained camps that were originally built in 1887 through the Megantic Fish and Game Club before there were trucks or commercial electric use with the wisdom of what a valuable resource and pristine wilderness of the boundary area was. It gave incredible amounts of effort and resources to protect and preserve this unique region for generations to come. This is the most fantastic thing that's been passed on to us.

Our labor to keep these old camps active have been done with this in mind. Now, 120 years later, six generations of countless people have benefited from their foresight.

I urge you to exercise wisdom and vision and make sure that this legacy doesn't die at your hands. The TransCanada proposal, \(Z P\) 709, needs to be rejected.

The protection of wilderness was clear when the Land Use Regulation Commission developed the mountain area protect subdistrict. This protection must be continued.

I urge you to preserve the State of Maine's current regulations and zoning and that you preserve Kibby Mountain and the Kibby Mountain Ranges and the land bordering the Chain of Ponds public land unit.

I ask you to encourage the TransCanada energy company to pursue their worthwhile endeavor in generating electricity by wind power turbines and the generation of corporate profit margins in areas that conform to established zoning
regulations.

Thank you.
(There was a break in the hearing at 8:02 p.m. and the hearing resumed at 8:13 p.m.)

THE CHAIR: Basil, if you want us to write your name down officially, you have to tell us your name first so Lisa has it on the record.

MR. POWERS: First I'll address the Commission and the staff, good evening.

THE CHAIR: State your name, first, Basil, for the record.

MR. POWER: Basil Powers. I live on the other side of this mountain on Coplin flat for 55 years. Have always, will. Anybody don't know where that is, it's halfway between hell and high water mark.

But I'm not going to beleaguer you. You notice that I don't have a script to read to you tonight like a lot of people have, and that's probably to your benefit.

If words written on a paper are going to do anything to stop this project, I'm going home and spend the next 30 days writing, and I'll make sure to hand deliver it to Catherine Carroll. I know that she'll put it in the right place for me.

What could I possibly say to you tonight. You know how I feel; I don't have to say it. What could I say to you that would help you answer this problem.

I've heard it all, you've heard it all. I just hash over old things, but just for the fun of it, I would like to say, look, if you go into the barnyard with a bucket of whole corn and you start scattering whole corn around, every chicken in the barn that day is going to be plucking corn off your shoes.

Now comes TransCanada with their little bags of gold nuggets into a little community that is not used to seeing gold scattered around or thrown around, and that's exactly the same thing as feeding the chickens corn. The chickens see all these gold nuggets in these small communities, and they're going to jump on the band wagon and pluck as many of them as they can.

What I believe is, TransCanada believes, that these chickens are going to lay on a golden egg. You know the fairy tale, don't you, about the goose that laid a golden egg? You scatter gold nuggets around, perhaps he'll lay a golden egg. To me that looks like bribery. That's bribery.

But one thing I would say to TransCanada, I have been travelling to Canada for 55 years. I get my grain there and other things that I have bought in Lac Megantic, and I have never gone through the town of Woburn, Canada and go out of town going on up to the open farmlands when the dam wind pretty near blows you right off the highway.

What the hell is wrong with putting the windmills up there? The farmers would be tickled to death, it's right along
the highway way and not desecrate our high mountain, fragile mountain areas.

I just can't think of anything else that \(I\) could say to you that would help squash this application. If I could, you'd hear it.

Never in my life have \(I\) ever been at a loss for words and I don't think I would be tonight either. I'll tell you right now, you have the regulations and you have the law on your side, and if \(I\) had been sitting behind that table as a commissioner and this application came across my desk to my attention, the very first words would be no, N-O. What part of that doesn't TransCanada understand? That's my answer. I would have said no right up front.

I heard some good testimony in the past couple of days here, and I want to bring one of them to your attention. You remember Richard Batt from Farmington hospital, he stood here last night and he gave very good testimony. It brought back a lot of memories to me when \(I\) was fighting an ordinance in Coplin and I went to a Town meeting, and Tom Gott was there, and he stood up and spoke, and he said, what's the hurry, what's the rush? The barn ain't on fire.

Well, I thought about that and I think about it tonight right here in this situation. The barn may be on fire but it ain't going to burn down.

So I heard Mr. Batt say, maybe you should step back
and take a few breaths, take a leave of absence if you have to, take a vacation, and think about this a little bit more. He said, with the task force that the governor has put in place, maybe they'll work out a lot of the wrinkles for you.

But you heard me say the other night, just say no. And that's what I'm going to leave you with until we're back here again for the same project probably.

How many times do we have to regurgitate this stinking mess, because you have the law and I ask you -TransCanada and the Maine Mountain Power is asking you to make new law for them, and I don't think that you have the power to make new law. Maybe you do, but I thought our laws were made by our State representatives who are elected to represent us in Augusta.
(Ms. Hilton excused herself from the hearing at 8:19 p.m.)

I was there one time, I know. I don't think it's possible for you to make new laws at this particular time, but I'm going to let somebody else speak.

I said I wasn't going to be at a loss for words, but what could I possibly say that would help you make a decision. So good night. You've been here a long time.

THE CHAIR: Thank you, Basil. Paul McGuire.
MR. McGUIRE: My name is Paul McGuire. I am a native of this part of the state. I grew up in the little town of

Mexico, I taught for 40 years at Fryeburg and Gould Academy. I spent a lot of my youth at the headwater lakes of the Androscoggin and hiking around on the Kennebagos, and I do love this area, I'll tell you that. I don't make any apologies for that at all. And I don't represent anybody here tonight. I belong to several organizations who have an oar in these waters, but \(I\) wear too many hats to be recognized, and so I speak for myself.

Like many in the room \(I\) was raised here. I did pursue a career as a teaching historian, so I'm not an engineer, \(I ' m\) not an environmental guru of any kind.

I do follow environmental issues, particularly as pertains to -- if you you'll excuse the expression -- my backyard, along with everyone else in this part of the state.

I've heard and I've read comments for and opposition to the project under consideration. Many of them are very instructive indeed, and anyone would be hard pressed to get a better education on both pros and in opposition to this particular project.

I'm not an enemy of wind power; I'm not an enemy of hydro power; I'm not an enemy of solar power, something which is not mentioned enough in these discussions. I am an enemy of waste, and I think that part of your charge in deliberating these issues, since people have asked you to look beyond the immediate and into regional considerations, is that of waste.

The word insatiable was used in hearings in
Farmington some time ago. We must do our part to supply power for the insatiable demands of lower New England.

In pursuing that word, \(I\) can only conclude it can't be done. No matter what happens, no matter how many are built, insatiable means unfulfilled, it won't happen.

I don't believe one single coal-powered plant will go off-line if we have insatiable demands. By that \(I\) want to address a single point. Maine can take a lead, perhaps, by simply changing their light bulbs, by simply putting in appliances that are all Energy Star, by simply doing everything they can do to reduce the use of electricity itself.

A few words that some lip service has paid to conservation. I think it is the key. I think it is the key to all. Our president used the words, we're energy addicts, was the word. I don't know how you can cease being an addict unless you cease being a glutton, and we can only do that by truly addressing our excessive use of precious resources.

If I thought that it would be more amenable to chewing up another piece of our irreplaceable high mountain country to take care of the problem or even to make a big dent in the problem, I might have to go back and rethink my position, but \(I\) don't see that happening. I don't see the gluttony being addressed. I truly don't.

Before I leave -- and you have been very patient,

I've watched you and you people put up with a lot of long hours of sitting with people like me trying to make a point to you, and I do appreciate that.

I want to leave you with just a little bit of a dream allegory. It isn't heavy duty like Plato's Cave, but on the other hand I think you might get the point and we can all go home.

This is about a ship. This ship is laden -- laden -right way up above the line with passengers -- with men, women, and children -- and tremendous amounts of stuff down in the holds, and it's sailing out into the future on the sea of hope and denial, it's a sea that's full of reefs and full of rocks, and a few passengers are nervous about that. They're just nervous people. They don't like to go politely along without paying much attention.

So they're way up on the prow of this vessel, and they've got their charts, too, of course, they don't trust the captain much, and they see the reefs ahead -- or they think they see the area where they are. They call back, we're approaching a reef zone and these are wide. We're going to have to make a major alteration in this ship's course.

And the captain says, no, we're right on time, we're right on schedule, just don't worry about it at all. They look and ask the captain, well, what time do you have? And he gives them that and they discover that he's wrong. The tide has
dropped. That reef is a lot closer to the bottom of that vessel than they thought.

Well, these people get so nervous that they began to demand the captain take stock of what he's doing, and the captain says, \(I\) know what I'm doing, trust me, trust my corporate crew, we know what we're doing. You folks below, go to the gift shop, hit the casino, have fun, don't worry about it.

Most of the passengers did except for this nervous crowd, and they got over to the side and they said, we've got to do something. Somebody said, let's put some life boats overboard. We'll put some hobblers on those, and we'll hook it to the side of this vessel and we'll pull her off that course.

So they said, yeah, but you're going to have to go about 45 degrees. They said, we can do it, and they did it. They meant to save that ship, and over went those life boats, hooked the lines, they rowed, and they rowed with their oars, and they put more hard work than you can imagine into it, and sure enough, they moved that vessel 10 degrees off her course as she headed towards the rocks. Thank you.

THE CHAIR: Thank you, Emerson [sic]. Harriet
Powers. Is Harriet here?
MS. POWERS: My name is Harriet Powers. My husband is Basil Powers and he stole my line.

My name is Harriet Powers, and I live in Coplin

Plantation. I oppose the Kibby Mountain project.
Here I stand before this LURC committee again, and I'm going to tell you why. Kibby Mountain project, TransCanada, in my eye is no different than Black Nubble.

Although Kibby Mountain is not in my front yard, it is still a pristine mountain and it is in the 2700-foot protected zone.

I would like to set the record straight as a selectman who testified yesterday is a paid official, and I do not think that they should say they are representing all of the voters of the Town.

There were several public meetings with TransCanada, and as far as \(I\) know, only one in the community building. The others were held in barrooms or a bed and breakfast. Some people do not desire to voice their opinions in these establishments.

As far as I can find out, there was no -- I repeat -no official Town meeting in Eustis so people could really vote against this project.

The petition spoke about yesterday, I picked up a copy of it today. It is not in my estimation a legal petition. It is a typewritten list of names who is to benefit from this project if it was to move on. It looks like to me there are a few greedy people in Eustis looking to pad their own pockets and they don't care about our heritage or our wilderness.

They are not looking forward, because the tax
incentives that will be paid by the government to TransCanada, comes out of whose pocketbook, we the people. If a legal vote was to be taken in Eustis, TransCanada would be turned down.

Last, but not least, if TransCanada wants wind power, let them go to the field in Woburn, Quebec where there is a constant wind, no mountaintops to tear down. What about the tax incentive? You figure it out. Why are they here? Thank you.

THE CHAIR: Thank you, Harriet. Emerson Dyer. I'm sorry, I skipped over you.

MR. DYER: My name is Emerson Dyer. I'm a retired Air Force rescue helicopter pilot, and I live in Eustis, Maine.

Good evening, Chairman Harvey, commissioners, and LURC staff. I am a new member of the Friends of the Boundary Mountains, but I am speaking to you tonight on my own behalf.

I'm not opposed to wind turbine powers as a supplement to help supply the ever increasing demand for more energy, but I do feel strongly that it needs to be placed in appropriate locations.

I heard it said today that the best wind resources in Maine are in the mountains, but a chart that Maine Mountain Power had on display for its recent hearing clearly showed the larger suitable areas were closer to the coast. The small dots in the western mountains were all on tops of mountains and
ridgelines, mostly already protected areas that require extensive removal and relocation of rocks and soil that would result in large permanent scars that will remain forever, unlike the towers that would some day be obsolete.

I would also rather see the federal government offer the 1.9 cents per kilowatt hour to the coal-fired industry with the stipulation that it may only be used to put scrubbers on their smoke stacks. That would actually reduce the amount of carbon and other pollutants released in the air.

Unfortunately, your Commission isn't charged with changing federal policies. You have to make the decision that this one wind tower turbine project is important enough to trump the protections provided to these high mountaintops and ridgelines for the past 35 years.

I heard suggestions last night that the Commission already did that and you should just follow the earlier decision to allow Kenetech. I certainly hope that you will put more thought into this decision than that.

I heard TransCanada officials say that they were not planning any further projects in this area, but \(I\) am submitting a copy of an article from the Lewiston Sun Journal about a tour of the Kibby site in which Christine Cinnamon said, "TransCanada has an option of an easement on 67,000 acres of Plum Creek land with a footprint of the project across about 443 acres within permitted impact on about 100 acres."

Also why do they need to rezone 2900 acres protected land above 2700 feet and then turn around and say that they have agreed as part of a conservation agreement with the AMC, Maine Audubon, and NRCM not to develop the areas C and D. These are already protected areas. Why don't they just leave them out of the request for rezoning.

Now I would like to address this conservation agreement package that they made to gain support of these three groups.

An article in the Original Register, which I am also submitting, on September 12 , ' 07 states that, "He -- and they mean Nick Di Domenico -- explained that it is this agreement that gained project support from these agencies." Eustis selectman, Jay Wyman, brought up the issue yesterday, that no one was being bribed. I know and respect Jay and don't think for a moment that he or anyone else is being bribed under the table to support this project.

However, one of the definitions in Websters 9th Collegiate Dictionary for bribe is something that serves to induce or influence.

If this project is worthy of approval, why can't it stand alone on its merits without TransCanada's need to offer these financial incentives to these groups, some of which have opposed other similar projects.

You must consider the impact of these expenditures --
this is what they call them -- whether they are called a conservation agreement package or a community benefit package -- when you are weighing the degree of support being given to this project. You must also consider that these expenditures are also tied to the approval of this project.

If someone put \(\$ 132,000\) or \(\$ 500,000\) on the table in front of me and said, if I win approval to do something, I'll give you this. I'd like to think it wouldn't influence my decision whether to support it or not, but I'm only human.

And, how does the 500,000 TransCanada is using to buy land above 2700 feet in the Mahoosuc Range provide any benefit to northern Franklin County or the surrounding communities. Wouldn't it be more appropriate for them to buy and protect some of the boundary mountains, the Friends of the Boundary Mountains, have proposed for protection. Even I might have second thoughts about whether to support or oppose this project if they did that.

I'm not going to address the taxes that they will pay because those will be based on assessed values of the project and the transmission lines, but \(I\) will predict that if the project goes through, one of the first things TransCanada will do is try to negotiate a TIF if one is allowed.

Bob Kimber was asked a question this morning by one of the commissioners, how bushwhackers would compensate Plum Creek for the use of their land if the towers were not allowed.

Well, they don't now, and they would continue to not pay whether the towers were there or not. This does bring up the issue, though, of why this project is proposed for being built in this protected area. I say it's all about making a lot of money.

At this time Plum Creek cannot log above 2700 feet without jumping through so many hoops and requirements, they, like most other companies, don't want to try.

This is a win/win situation for Plum Creek. They get to lease the land to TransCanada for a profit and let TransCanada fight the battle to gain approval to rezone. Whether the wind towers are approved or not, they still get to log up to 2700 feet, and then they even get to use some of the new roads that TransCanada builds if it is approved.

TransCanada has chosen this site rather than the equally windy mountains just north of the Canadian border because there is an owner who can't use all of its land now for a very good reason, and they will gain from leasing it. And they can get -- okay -- and they can get tax subsidies from the US but not Canada.

Their investors get accelerated depreciation benefits, and they get US green credits to use or sell. And finally, TransCanada gets to use the now fashionable momentum of global warming to gain support for the project, even though it has been shown this project will have virtually no effect on
carbon emissions.
If you approve this project, you will allow these mountains to be permanently scarred. Maine has been logged for the past two centuries. Most of the logging going on today is second- or third-growth stand and yet it is still the pine tree state.

Once they blast down the bedrock, carve 32 -foot wide roads to support a 300 -ton crane and sink 30 -foot deep concrete pads into the landscape, they won't be able to put it back together again.

Thank you for allowing me to speak and for the time that you're going to put into making this decision.

THE CHAIR: Thank you, Emerson. All right. Where are we here? Bob Weingarten, and I know that Ms. Browne raised a concern, Robert, because you are the president of the Friends of the Boundary Mountains, who are an intervenor here who have a substantial amount of input to the project already.

On the other hand, we've had a whole bunch of board of directors testify unbeknownst to me because I didn't know they were on your board.

When I spoke to your attorney about this, my concerns and what Ms. Browne had indicated, she pointed out to me that perhaps a member of the board for the Natural Resources Council of Maine also has testified. So I'm kind of caught in a quandary here.

MR. WEINGARTEN: I am speaking, Mr. Chairman, as an individual. I've been involved in the boundary mountains for a very, very long amount of time. I have personal interest in the boundary mountains.

THE CHAIR: I'm not arguing that. I'm just telling you the position you're in. I'm not going to tell you you can't testify, to answer the question, and Ms. Browne will have to make her own decision whether she wants to object to your testimony or any of the other members of your board who have testified. I'll leave that up to her to file that objection if she wishes to, but I just wanted you to be aware of the risk you're running.

I'm not -- at this point in the night -- I'm not interested in engaging in a long legal discussion about whether or not you should testify, so I'm going to let you go and she'll have to make her decision. Just be aware of where you're at.

MR. WEINGARTEN: So I may testify?
THE CHAIR: You can go ahead.
MR. WEINGARTEN: Thank you very much.
My name is Bob Weingarten. I live in Vienna, Maine, and I'm here as an individual to speak in opposition to Zoning Petition ZP 709.

The first thing I would like to say is that I support and I have experienced the fact that the boundary mountains and
the Kibby area, in particular, do have a sense of remoteness that I do not find in other trails and other areas that I've hiked in. Fortunately, I'm able to bushwhack in the boundary mountains, and the experience of going in there is so different than hiking on the Appalachian Trail because the adventure and the feeling of wilderness and being without the guide posts and the trail is just very, very significant; and I think that in the future this is the kind of experience that many people will want to have. I just wanted to mention that because of the discussion today about the remote values of the boundary mountains.

The major thing \(I\) want to talk about, though, is two aspects where \(I\) feel TransCanada has not come in with the burden of proof in terms of their application for a rezoning. The first is the community benefit of avoided air emissions, and the second is the question of site selection due to the premier wind power on Kibby and Kibby Range.

For the past 30 years I have worked here in Maine in public health. My career has included the development and management of rural community health centers in Franklin County, including the Kingfield Health Center and the health center in Rangeley.

As a public health consultant for the past ten years, I have conducted community health assessments throughout Maine. I have also served on the board of Franklin Memorial Hospital
and the Healthy Committee Coalition of Farmington.
The reason I raise this background is because I also understand the awful consequences of bad air towards the health of the people in Maine. I have statistics, I have made presentations, and I have worked in that field. I share a lot of the same concerns of the people who are in favor of this application have in terms of the need to improve Maine's air quality, reduce dependence on burning fossil fuels, and address the problem of global warming; however, I do not feel -- for several reasons -- that rezoning Kibby and Kibby Range will make any kind of change in those problems here in the state of Maine.

I believe that the applicant makes unsubstantiated and unfound claims concerning displaced air emissions of the Kibby project. I believe that TransCanada has not understood -- or has chosen not in their application -- the actual operational processes of the electric grid which operates more in the nature of a group or Goldberg machine than a simple linear model.

Implicit in TransCanada's argument is the notion that simply adding more wind installations will mean less conventional generation, especially that which creates carbon emissions, like coal.

To counter that and to bring some information to the Commission, I have done a major research paper on the operation
of the grid, and I have drawn from many different authors -including John Boone, who has appeared as the expert in Maryland on several wind energy projects. I'm not going to go into all the details, I have put that into my paper which I submitted, but \(I\) just wanted to bring to your attention a few of the observations of the authors who I have studied.

One observation is that as more wind installations are added, almost an equal amount of conventional power has to be brought on-line. Crucially important, wind technology, because of the inherent random variations of the wind, will not produce or reduce meaningful levels of greenhouse gases, such as carbon dioxide.

The grid mechanisms involve load balancing, whereby power generation meets forecasted demand in ways which also protect the security of the grid, claims that wind energy can displace conventional generation and significant amounts of carbon emissions.

What has been demonstrated is that wind energy and industrial scales operating within a grid system as a whole must be considered as only one of the reciprocals in a fuel mix. It must be entangled with conventional fuels to make it even as a viable sporadic fuel substitute.

Grid stability requires that the fluctuations of wind be batched or compensated for immediately by conventional reliable generate on a minute-by-minute basis.

There are two consequences arising from this fact: Existing conventional generation must run harder just to stand in place and using more fuel to compensate for wind's fluctuation, and two, the more wind energy that is installed on the grid, the greater the need for expanded or new conventional sources.

I know that this flies in the face of so much stuff that you have heard and has been presented, but if you take a look at the literature about this, you will find that TransCanada has not even addressed any of these issues in their application and the electrical -- the Electric Power Research Institute in California has affirmed the finding that whatever fossil fuel capacity that wind might replace, will not be on a megawatt-per-megawatt basis, which I've heard said over and over again.

In their report they conclude that in real operating situations, storage of electricity is not possible. Any \(\mathrm{CO}_{2}\) savings will be small.

Now, many people bring up the issue of all the wind power that's used in foreign countries. If we look at other countries, performance data from Britain, Denmark, Ireland, and Germany show that a substantial part of the theoretical \(\mathrm{CO}_{2}\) savings is not a proven practice. In some circumstances they offer only minimal benefit. And I have documented and footnoted all these sources for this paper.

As it does by Norway and Sweden, wind energy in Denmark displaces a significant amount of hydropower, and that can happen in Maine also, where hydropower is available. However, since hydropower emits no greenhouse gases, there would be no net carbon savings.

An Irish grid study in 2004 rather conclusively showed that high penetration of wind energy, even backed by flexible responsive natural gas units and many relatively low levels of greenhouse gases, produce diminishing returns in terms of the realizable fuel savings and consequent \(\mathrm{CO}_{2}\) reduction.

Absent a contractural relationship between
TransCanada and a fossil fuel-fired utility, take carbon generating capacity off-line, the claim that a few kilowatts of this project will generate will have any impact on global warming is wishful thinking and is not based on the reality of the electrical generation process. As Tom Hewson has pointed out in his Redington/Black Nubble testimony, it may have the opposite effect by taking green generation capacity out of the mix.

Now, in the TransCanada's prefiled testimony --

THE CHAIR: How much more do you have to go here?
MR. WEINGARTEN: Just a minute or two. All I want to add, then, is I spoke to Suzanne Watson, who is the director of innovation for the Maine DEP, and I asked her for the data that

Commissioner Littell used in his August 1st presentation to LURC.

And what Ms. Watson told me was that there was no specific data that she could make available to me, that his statements were made in a general context -- even though TransCanada has used that to support their wind power application -- and that the reason they don't have the data is because they didn't have the funds to do a real study of what the Kibby project or any other project would actually do in terms of avoided air emissions.

So I don't think that that data that is not there can be used by TransCanada to claim that DEP supports this project.

I have other information about why you could use Class 2, Class 3 winds, but in the interest, of course, I don't have the time. It's in my paper, and I hope you take a look at it.

THE CHAIR: Did you leave a copy of it, the paper you quoted?

MR. WEINGARTEN: Yes.
THE CHAIR: This is a paper that you wrote.
MR. WEINGARTEN: I have copies of all my papers and I have footnotes I'm referring to.

THE CHAIR: All right. Then they're in the record, then.

MR. WEINGARTEN: The footnotes are, yes.

THE CHAIR: No, but is the paper in the record? MR. WEINGARTEN: I haven't put them in there, but I can.

THE CHAIR: You have a week, a couple of weeks to get it in the record if that's your wish. MR. WEINGARTEN: I shall do that. THE CHAIR: Thank you. MR. WEINGARTEN: Thank you very much, Mr. Chairman. THE CHAIR: Peter Richmond, is he here?

MR. RICHMOND: Thank you, commissioners. My name is Peter Richmond and I live in Brighton Plantation. I'm a planning board member in my home town and studied environmental science in college. I'm here as an opponent to this application.

Some of what impresses me about the ordeal of deliberating on all the complexities of this issue include that the scale of the output of this Kibby project should equal Wyman Dam, I understand, and that that represents the watershed of all of Moosehead Lake, Spencer lake, Flagstaff Lake, all trickled down into a controlled dam, which will operate at peak capacities of demand and schedule, that enormous amount of water flow over such a huge area, and that these wind towers have to be able to make an equivalent -- or intended to make an equivalent -- amount of energy in 30 percent of their scaled capacity because of the unevenness of the wind flow so that
these towers have such a scale of magnitude to them, that unless they were functional, I don't think anyone would choose them as a functionless art form to decorate the landscape with. There are communities that will put cattle, and artists and visions have unlimited scope; but it's the functionality of these windmills that suggest their appeal to me that as an art form I would say that I'm satisfied with the appearance of the mountains as they are.

I see that the urgency for the creation of these is not imminent because we have wars going on out there. There's Christmas wars getting ready to start, and we're going to have lights coming on. In the south of Skowhegan where everyone has to have an inflatable snowball all lit up at night, and until our culture is willing to accept the degree of comfort that we get from our wasteful habits, we have no chips to hold back with.

If we were playing a game of strip poker where we stripped the natural character of our landscapes in order to fulfill the promise of a strip mall somewhere out of town, we are left naked with nothing left; and if the model for sustainable forestry has become a thing of the past, then that itself needs to be embraced as the breakdown in the system that leaves Plum Creek in a financial crisis, or whatever they would argue for their sustainability for growth, and that --.

It seems that it's -- it's putting the horse in front
of the cart. There are proposed seven nuclear power plants. There's 5th and 10th generation nuclear plants being designed, there are seven proposed in the United States.

It is hard to imagine that Canada won't be compelled with their radioactivity resources to provide a nuclear power plant that would obviate the need for all this brain damage that's going on here to have these compromises deliberated over that are painful to almost everybody in some sense because we know that there's almost no pure win in it for anyone.

The rule of unintended consequences is -- it seems so obvious to me that when the wind stops blowing, you have to -if there is a real demand for electricity and a perceived demand growth over time, that whether it's perceived or whether it's real I think is one of the important elements that we need to come to grips with collectively, because when the wind stops blowing, you've got to flick the switch on some back-up power plant and there's 100 percent of the demand load requirement to be fulfilled by regular fossil fuel and nuclear powers when the wind stops blowing.

So those -- the windmill is almost like priming the pump for further energy demand by supplying the supply side, making people believe that there is a reason why I should waste a little more electricity if \(I\) want to and how this is all accounted for in my bill and in my behavior, and that with the psychological presence of mind of feeling good about continuing
business as usual off of the grid, perpetuates the escalation of fossil fuel consumption because it has to back up the wind power when wind goes down.

If you're going to build another mall or another hospital or another school in another community that are all relying upon this energy during their peak requirement times, you cannot fail them and you can't have the wind power people say, in a vacuum, well, I've done my share to try to abate global warming issues and now it's really not in my scope to answer the question of how does escalating the supply and demand equation of electrical consumption ever reduce greenhouse gases. Thank you very much. I appreciate the opportunity.

THE CHAIR: Thank you, Peter. I hope it's your planning board and not ours that has to renew the nuclear power plant.

Marcia White, is she still here? Oh, yes, there she is.

MS. WHITE: My name is Marcia White, and I, too, am beginning to feel like a LURC groupie. Most of the points I made in my testimony in favor of the Black Nubble project are applicable in this case, as well, from my viewpoint and the viewpoint of my family.

I have lived in Wyman Township for over 30 years. Our 20 acres of unorganized territory fits our family and
lifestyle very well. Though the Kibby project location is not in our backyard, as the Black Nubble project is, the proposed site does sit in the middle of my fitness center.

I've been an avid road cyclist for ten years since my first year riding the trek across Maine and working for all of their causes that are promoted by the American Lung Association.

Now that Route 27 from Stratton to the Canadian border is newly redone with paved shoulders, it is Heaven for cyclists. There are cyclist groups from Canada that ride back and forth on a regular basis, as well as dozens of us from this area.

I've ridden a section of road from Stratton through Chain of Ponds up to Coburn Gore and back several times a week since the middle of last April. It's a glorious 50-plus-mile bike ride, particularly on Sunday mornings when one can often ride for miles without having a vehicle pass in either direction. My record for this year is 17 miles without seeing a car.

Yesterday on my ride, the animal count -- which is always interesting to keep -- was three moose, one pileated woodpecker, a young coyote, and an inevitable dead skunk in the middle of the road.

Would I like to actually see the wind turbines I tried to visualize yesterday on the Kibby Ridgeline, yes, yes,
yes.
I'm sure that you've all heard the saying by Margaret Mead, never doubt that a small group of thoughtful committed citizens change the world, indeed it's the only thing that ever has.

My family is a small group of thoughtful, committed citizens. We have many friends that fit that description as well. We're worried about the direction our planet is headed in because of our global addiction to fossil fuel that is literally eating away at our world as we know it. As committed citizens, we change light bulbs, we turn down the thermostat, we drive our cars less, we put solar panels on our roof, we write our congressmen and congresswomen on a regular basis and sign every environmental defense petition that there is, but \(I\) feel like our efforts are having only a small impact on a colossal problem. It's a feeling of futility.

You, as LURC commissioners, are also a small group of thoughtful, committed citizens, and your decisions can potentially have a big impact on the colossal problem.

I urge you to approve both the Black Nubble and the Kibby wind project and hope that together a large group of thoughtful, committed citizens can change the world. Thank you.

THE CHAIR: Thank you, Marcia. Jan Collins. I don't
have anybody else after Jan. I don't know if I'm missing anybody, but Jan's the last speaker.

MS. COLLINS: My name is Jan Collins, and I live in Wilton. I have a picture of a wind turbine that I would like to give to the commissioners. Can I do that right now so you can -- the picture speaks.

THE CHAIR: You can certainly bring it over. I would tell you we've all seen wind turbines, we visited them and everything else. You're welcome to show us. We've seen a lot of them in the last two days, so.

MS. COLLINS: I'm passing out this picture because I've been struck when I have seen pictures showing what the wind turbines will look on top of mountains, because I think that the scale is purposefully misleading, and I wanted you to see what it looked like up close.

I had to use a telephoto lens to take this and get in both the tower and the 18-wheeler that's down in the corner there.

What struck me about this was that the 18 -wheeler clearly looks like a Matchbox truck, and I need to assure you that this photo has not been touched up in any way. There is also a huge, huge backhoe there that also looks like a tiny, tiny Matchbox figure.

The reason why I bring this up is because I want to make note of the huge impact that this is going to make on what

I consider a fragile mountaintop. I confess, I have been a member of the Appalachian Mountain Club, I have been a member of Audubon, the Natural Resources Council of Maine. I've contributed to the Lung Association, the Appalachian Trail Conference, and just recently I joined the Boundary Mountains. I am not a board member, and most of these I do little other than contribute a small amount of money each year.

I have actually worked for the Appalachian Mountain Club, also, as a naturalist, which meant my job was to stand on top of mountaintops and tell people how fragile the alpine environment is, and that they're footsteps were important because if they walked off the trail, they could easily destroy growth that had taken of hundreds of years to grow just a few inches.

It is then beyond my imagination that we could propose that blasting and clearing the tops of mountains is not going to damage this fragile ecosystem.

In the last 20 years I've been a school teacher. I teach high school biology, I teach high school chemistry, and I teach, recently, high school civics. In that time period I have spent a lot of effort educating my students on environmental issues, and in fact, when \(I\) did my master's program, I took a special program offered called global earth systems science and did a paper on global warming in Maine using data from the Portland Weather Station.

Global warming is real. I understand that and I have researched in that time period lots of alternative energy sources. Never once did I imagine that those alternative energy sources would mean leveling my precious mountaintops, and probably like most people here, I consider them mine because they have been a part of my life having been born in Rumford and grown up in this area and living here now.

I live here not because it offers great economic opportunities but because this is where my heart is and it is in my opinion the most beautiful part of the eastern United States.

I've also hiked the Appalachian Trail from end to end twice -- Georgia to Maine -- and in that I expected, not being a world traveler, to see other parts of the Appalachian Trail that would somehow rival what we have here in Maine. I shouldn't have been shocked but was shocked to find that the place that \(I\) grew up in and loved was the most beautiful part of the eastern United States and found there are no rivals.

I would find it a sad situation to offer those mountains up as a sacrifice.

Mountains are a nonrenewable resource. There are much fewer of them than there are coal mines. Mountains cannot be replaced.

I intended to talk more about the size of the wind towers and the impact they'll have, but I'll just submit that
as testimony.
I thank you very much for your patience and your time. I honor all the work that you have done and your commitment to the resources of Maine. Thank you very much.

THE CHAIR: Thank you, Jan. All right. I think that brings us to the conclusion of this two-day hearing.

I want to remind everybody that the record for the hearing will remain open for ten days until October 15th to receive written statements from interested parties.

If any of you here tonight want to submit additional material, you have until then to do it. And then it is open for additional seven days. If you want to read all that stuff that comes in on the 15 th and rebut any of it, you can do that as well, but you have to do that by October 22 nd.

My understanding is the parties at this proceeding, which are the intervenors and the applicant, are going to make one filing on October 22 nd to submit their comments. That's their choice.

Do I need to say anything else about this? You
have - I think I said earlier that we have until November 21st to -- for your findings of fact and conclusions.

With that, \(I\) think \(I\) will close this hearing.
(The hearing was concluded at 9:09 p.m.)

I, Lisa Fitzgerald, a Notary Public in and for the State of Maine, hereby certify that on October 2 and October 3, 2007, a hearing was held regarding Zoning Petition \(Z P\) 702; and that this hearing was stenographically reported by me and later reduced to typewritten form with the aid of computer-aided transcription; and the foregoing is a full and true record of the testimony given by the witness.

I further certify that \(I\) am a disinterested person in the event or outcome of the above-named cause of action. IN WITNESS WHEREOF, I subscribe my hand and affix my seal this October 19, 2007.

\author{
LISA FITZGERALD, NOTARY PUBLIC Court Reporter
}
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& \text { 227:1, 234:4, }
\end{aligned}
\] & \begin{tabular}{l}
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\hline \[
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& 260: 21,281: 16, \\
& 283: 25,593: 21
\end{aligned}
\] & \[
\begin{aligned}
& \text { Flipping [2] - 130:21, } \\
& 360: 11
\end{aligned}
\] & \[
\begin{aligned}
& 546: 18,554: 25, \\
& 565: 13,582: 3,
\end{aligned}
\] & \[
\begin{aligned}
& \text { footnotes [2] - 656:22, } \\
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\end{aligned}
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\hline \[
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& \text { fits [2] - 617:17, } \\
& 660: 25
\end{aligned}
\] & 74:14, 82:18, & \[
\begin{aligned}
& 57: 16,64: 15,76: 25, \\
& 94: 18,105: 24,
\end{aligned}
\] & 213:23, 262:13,
\[
371: 11,389: 21,
\] & \[
\begin{aligned}
& \text { 223:25, 224:6, } \\
& \text { 224:18, 248:1, }
\end{aligned}
\] \\
\hline fitting \({ }_{[1]}\) - 230:23 & 535:23, 657:22, & 148:1, 266:2, & 395:14, 400:10, & 257:13, 260:11, \\
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\hline \[
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573: 23,586: 13
\end{array}
\] & flows [1] - 222:13 & \[
\begin{aligned}
& 363: 21,363: 22, \\
& 379: 8,385: 23,
\end{aligned}
\] & \begin{tabular}{l}
footsteps [1]-664:11 \\
fora \({ }^{[1]}\) - 352:22
\end{tabular} & \[
\begin{aligned}
& 305: 11,355: 18, \\
& 360: 1,378: 13,
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& \text { FITZGERALD }[1] \text { - } \\
& 667: 17
\end{aligned}
\] & fluctuation [1] - 654:4 fluctuations [2] - & \[
\begin{aligned}
& \text { 484:13, 491:7, } \\
& \text { 493:11, 493:15, }
\end{aligned}
\] & \[
\begin{aligned}
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& 307: 2,316: 6,
\end{aligned}
\] & \[
\begin{aligned}
& 447: 8,460: 12, \\
& 468: 4,468: 6,
\end{aligned}
\] \\
\hline Fitzgerald \([3]\) - 2:7, 208:23, 667:2 & \[
414: 8,653: 23
\] & \[
\begin{aligned}
& \text { 587:1, 639:12, } \\
& 645: 16
\end{aligned}
\] & \[
\begin{aligned}
& 316: 23,320: 16, \\
& 362: 7,362: 8,
\end{aligned}
\] & \[
\begin{aligned}
& 515: 22,555: 10, \\
& \text { 567:11, 585:11, }
\end{aligned}
\] \\
\hline \[
\begin{gathered}
\text { five }[21]-12: 8,14: 21, \\
31: 9,45: 9,76: 20,
\end{gathered}
\] & 281:16, 283:25, & \begin{tabular}{l}
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\begin{aligned}
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\end{aligned}
\] \\
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\begin{aligned}
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\end{aligned}
\] & 397:6, 454:20, & \begin{tabular}{l}
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\end{tabular} \\
\hline \[
\begin{aligned}
& 235: 24,303: 16, \\
& 314: 12,356: 14,
\end{aligned}
\] & \(55: 23,56: 17,57: 22\),
\(193: 13,292 \cdot 14\) & \[
\begin{aligned}
& 363: 21,363: 22, \\
& 385: 23
\end{aligned}
\] & \[
\begin{aligned}
& 460: 21,462: 4, \\
& 545: 1,545: 2
\end{aligned}
\] & forested [4] - 42:9,
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\hline \[
\begin{aligned}
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& 605: 23,609: 22,
\end{aligned}
\] & flyway [2] - 58:11, & \[
\begin{aligned}
& \text { 296:16, 317:13 } \\
& 388: 2,615: 9
\end{aligned}
\] & \[
\begin{aligned}
& 217: 17,257: 24, \\
& 450: 15,505: 17,
\end{aligned}
\] & \[
\begin{gathered}
\text { 597:24, 597:25 } \\
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\] \\
\hline 630:3, 630:12 & focal [5] - 46:24, & Following [9] - 3:19, & 506:10, 571:5, & forestland [1] - 133:4 \\
\hline \[
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& 519: 15,519: 23
\end{aligned}
\] & 48:20, 50:7, 115:20, & \[
\begin{aligned}
& 35: 11,227: 7, \\
& 259: 18,279: 4,
\end{aligned}
\] & \[
\begin{aligned}
& 585: 20,601: 23, \\
& 607: 17,638: 3
\end{aligned}
\] & \[
\begin{gathered}
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133: 24,352: 2,
\end{gathered}
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& \text { 142:13, 148:23, }
\end{aligned}
\] & following [27] - 94:8,
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\begin{gathered}
591: 6,644: 13 \\
\text { forced }[5]-218: 9,
\end{gathered}
\] & \[
\begin{aligned}
& \text { 436:23, 447:18, } \\
& 615: 12,658: 21
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& \text { flags }[2]-363: 10, \\
& 547: 18
\end{aligned}
\] & 163:1, 164:8, 164:9, 184:12, 234:20 & \[
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& 223: 21,232: 18,
\end{aligned}
\] & \[
\begin{aligned}
& \text { 218:11, 481:23, } \\
& 578: 15,625: 4
\end{aligned}
\] & \[
\begin{aligned}
& \text { forests [23] - } 36: 6, \\
& 36: 8,36: 17,36: 19,
\end{aligned}
\] \\
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\end{aligned}
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\end{tabular} & 393:17, 425:1, & 266:4, 278:13, & \[
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& 653: 14
\end{aligned}
\] & \[
\begin{aligned}
& 37: 11,37: 22,38: 21, \\
& 38: 25,39: 24,40: 1,
\end{aligned}
\] \\
\hline 225:5, 265:1, & \[
\begin{aligned}
& \text { 465:20, } \\
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\end{aligned}
\] & 336:25, 440:6, & forecasts [1] - 77:8 & :11, 60:4, 260:12, \\
\hline \[
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\end{gathered}
\] & follows [2]-230:9, & foregone [1]-25:17 foreground [7] - & \[
\begin{aligned}
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\end{aligned}
\] \\
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\hline \[
\begin{gathered}
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\end{gathered}
\] & \begin{tabular}{l}
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foundation [8]-70:7,
\end{tabular} & \[
\begin{aligned}
& \text { fragmented }[1] \text { - } \\
& 392: 24
\end{aligned}
\] & Freedom \({ }_{[1]}-373: 18\)
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\begin{aligned}
& 499: 16,503: 5, \\
& 503: 12,565: 19
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& \text { former }[6]-54: 16, \\
& 54: 25,57: 7,57: 11, \\
& 100: 11,547: 9
\end{aligned}
\] & \[
\begin{aligned}
& 71: 2,146: 11, \\
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& \text { 203:18, 281:22, }
\end{aligned}
\] & \begin{tabular}{l}
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\end{aligned}
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\hline 573:10, 622:11, & 17:1, 17:2, 25:14, & 116:25, 209:8, & 9:25, 510:2, & 289:3, 488:20, \\
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\hline \[
\begin{gathered}
\text { forum }[3]-251: 5 \text {, } \\
498: 4,501: 8
\end{gathered}
\] & \[
\begin{aligned}
& \text { 205:20, 235:24, } \\
& \text { 247:21, 276:22, }
\end{aligned}
\] & \[
\begin{aligned}
& \text { 254:13, 254:15, } \\
& \text { 254:23, 255:10, }
\end{aligned}
\] & 264:22, 603:14 & \[
\begin{aligned}
& 569: 11,573: 1, \\
& 575: 1,578: 14,
\end{aligned}
\] \\
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\] \\
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\] & \[
\begin{aligned}
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