STATE OF NEW HAMPSHIRE

SITE EVALUATION COMMITTEE

March 26, 2015 - 7:00 p.m.
Antrim Town Hall
66 Main Street
Antrim, New Hampshire

IN RE: **SEC DOCKET NO. 2015-02**
ANTRIM WIND ENERGY, LLC:
Public Information Session held pursuant to RSA 162-H:10 regarding a proposed nine (9) turbine wind energy facility to be located in Antrim and for which AWE intends to submit an Application for a Certificate of Site and Facility pursuant to RSA 162-H:7.
(Presentation provided by AWE and public comments received)

PRESIDING: Harry Stewart, Moderator

COURT REPORTER: Steven E. Patnaude, LCR No. 52

ORIGINAL

NOTED AS PRESENT:

Counsel for the Applicant:	Barry Needleman, Esq. (McLane Graf Raulerson & Middleton)
	Jack Kenworthy (Eolian/AWE) Drew Kenworthy (Eolian/AWE) Travis Bullard (Eolian/AWE)
Counsel for the Public:	Mary Maloney, Esq. Senior Asst. Atty. General N.H. Attorney General's Office

I N D E X

P R O C E E D I N G

(Meeting commenced at 7:10 p.m.)

MR. STEWART: Good evening. If everybody could take your seats, we'll get going. It looks like this is about what we have, so, we'll begin the public information session.

So, I have a prepared statement that I will make. And, then, the way this is going to work is I will make a prepared statement as the moderator; Jack Kenworthy will make a technical presentation; and then we will receive comments from the public for the record. This is all being done with a stenographer. So, as I will in my prepared statement, talk slowly and be as concise as you can when you have the opportunity to comment.

So, thank you for coming to this public information session. My name is Harry Stewart. And, I am former Director of the Water Division at the New Hampshire Department of Environmental Services. I was a member of the New Hampshire Site Evaluation Committee for many proceedings. And, I'm now retired from state service. Antrim Wind Energy requested that I can come and moderate tonight's public information session, which will address a wind energy project that AWE proposes to construct here in Antrim. Many here in this room are already familiar with

AWE's previous proposal to construct a wind energy facility in Antrim. I sat on the SEC when it reviewed Antrim's previous application. And, as moderator, I have all the equipment I need: I have my throat lozenges, my water, and my stopwatch.

Antrim Wind Energy is holding this public information session in accordance with New Hampshire Statute RSA 162-H:10. Under RSA 162-H:10, an applicant that intends to submit an application for a certificate to the Site Evaluation Committee must hold a public information session at least 30 days prior to filing the application. As you will hear during Mr. Kenworthy's presentation, AWE has made a variety of changes to its previous proposal, and now intends to submit a new application for a wind energy facility in Antrim. He will present information regarding the revised proposal tonight. AWE's presentation will last approximately 30 minutes.

RSA 162-H:10 requires that AWE then receive comments from the public. To that end, we have a sign-up sheet, so that folks can present their comments in order of signing up. If you've not signed up yet, but wish to provide comment, please see Travis in the back -- raise your hand, Travis -- and he will see that you get

signed up. AWE also welcomes your written comments this evening, and you can provide those to Drew Kenworthy -- Drew, stand up -- who's also in the back.

Following AWE's presentation, public comments, in the order on the sign-up sheet, will be presented by you all. I will call the name of each person who has signed up, and then, in turn, you will be given the opportunity to speak. It's important that we have an orderly process, because this public information session is being recorded by a stenographer. This, too, is required by the statute. So, we can't have multiple people talking at once, because the stenographer will not be able to record what you are saying. The stenographer will make a written record of this public information session, and AWE will provide that record with its application to the Site Evaluation Committee.

So, when your name is called, please speak clearly into the microphone, so that Steve can hear and understand what you are saying. We also ask that you limit your initial comments to three minutes, so that everyone has a chance to speak, hence, the stopwatch. If you need to go beyond three minutes, you're welcome to come back after everyone has had an opportunity to speak. I will -- I would ask, though, that everyone be respectful

for everyone else's time.

Please note that the primary purpose of the public information session is for AWE to receive comments from the public. There will not be a question-and-answer session. And, I would ask that you refrain from asking questions during the comment period. There will be opportunities to ask questions of AWE regarding the Project after it submits its application. Also, I should note that Jack Kenworthy and his team are available to answer any questions that you have. And, he has cards in the back, and you can call him with questions outside of this public information session.

Under state law, specifically, RSA 162-H:10, if the SEC accepts jurisdiction and accepts the application, there will be at least two more opportunities for comment. Within 45 days after application submission, AWE will hold a second public information session in Antrim, much like this one, except the presiding officer for this information session will be either the presiding officer of the SEC for this Project, or a designee.

Then, within 90 days after application acceptance, the Site Evaluation Committee itself will hold a formal public hearing, where the public can ask questions of the applicant, as well as provide comments.

So, while your comments are welcome tonight, please note that this will not be your only opportunity to comment on the record on this Project, if the SEC takes jurisdiction.

Please also note that AWE has also petitioned the SEC to take jurisdiction over the facility that will be presented tonight. The Board of Selectmen and a group of voters have also petitioned the SEC to take jurisdiction. The ongoing jurisdictional proceeding is not the subject of tonight's public information session. This is a separate proceeding that must occur before AWE can file its application. AWE will only be able to file its application if the SEC agrees to take jurisdiction of the Project in that jurisdictional proceeding.

So, again, thank you for being here tonight. And, with that, I now invite Jack Kenworthy up to provide an overview of the Project, before we accept oral comments.

MR. KENWORTHY: Thank you, Harry. And, thank you, everybody, for your time tonight. As Harry said, my name is Jack Kenworthy. I'm here representing Antrim Wind Energy. And, I'm just going to dive right in and do my best to do as Harry said and keep the presentation to about 30 minutes.

So, a quick background on Antrim Wind Energy as an entity. Antrim Wind Energy is a company that was formed in 2009. The company was formed for the purpose of developing, owning, and operating the Antrim Wind Energy Project. Antrim Wind Energy, LLC, is owned and managed by Walden Green Energy and Eolian Renewable Energy, LLC.

Walden is a global renewable energy firm that's based in New York. Their founding principals have over 50 years of experience in energy related businesses, primarily in roles at Barclays, Goldman, and J.P. Morgan, on the banking side of energy development and finance. Walden is, in turn, majority owned by RWE Supply & Trading, which is a subsidiary of RWE. RWE is a German company, which is one of Europe's top five electric and gas utilities that operates globally, and they have about 2,900 megawatts of renewables in operation across the globe.

Eolian is a Portsmouth-based company. We're based in New Hampshire. And, we're owned and managed by four partners who have a combined experience of over 40 years of energy, real estate, consulting, and construction experience.

The Project that AWE is proposing is a

28.8 megawatt project in the northwest corner of Antrim. And, let me just pause for one quick second and say that we will make this entire presentation available to anybody who wants it. We're going to stick it up on our website. You can e-mail me and I'll send you a copy. So, it's available to anyone who would like a copy. Don't feel like you need to scribble down every word that's up here or try and snap photographs of the slides. We're happy to provide it.

MR. WARD: Your website is?

MR. KENWORTHY: *Antrim-wind.com*. So, this is still a 28.8 megawatt facility. It's in the northwest corner of the Town of Antrim. We do have some -- some photos and a map over here that shows some of the facility's elements. We'll leave those up, obviously, throughout the presentation, and afterwards, for folks who want to take a look at those. The proposal calls for the installation of nine turbines. Each turbine is 3.2 megawatts in rated capacity.

It also consists of a collector and a interconnection substation; one operations and maintenance building; and one permanent meteorological tower. And, this facility will be located entirely on private property, and it will be accessed by a new gravel surface

road that will enter the Project site off of New Hampshire Route 9.

The Project leases land, about 1,870 acres, from six landowners. Primary adjacent development consists of rural residential dwellings and some seasonal camps. The closest residence to any turbine for the Project is a participating landowner, which is about a half a mile from the closest turbine, and all others are greater than a half a mile to any turbine associated with the Project.

As many of you know, being -- some of you being Antrim residents, the general setting here is largely undeveloped. A large portion of the Town of Antrim is undeveloped and is heavily wooded. Historically, this area has been used for logging, or, even further back, or cleared for sheep farming. Currently, the land in and around this area is primarily undeveloped forest in various states of maturity, ranging from recent clear-cuts, to early successional stands, and some mature forest stands.

Project design. I mentioned a couple of these things a moment ago. There's nine turbines associated with the Project. The turbines that we've selected are Siemens turbines at 3.2 megawatts. These are

direct drive machines. There's a 100-meter meteorological tower that will be associated with the Project, a collector and interconnection substation, the operations and maintenance building. The Project requires about three and a half miles of new gravel surface roads to be constructed. The collector system will be roadside for really the entire Project, and it will be buried underground along the ridge, and then will come above ground where the access road meets the ridgeline road, and will travel roadside above ground on poles down to the collector substation.

In total, these new facilities will require the clearing of only 55.3 acres. And, the Project does include as a key element, and I'll talk more about this later, 908 acres of new conservation land.

The Siemens turbines, as I mentioned, are rated at 3.2 megawatts. Now, that's the nameplate rating of the turbine. They have a rotor diameter of 113 meters. There are two different hub heights associated with this Project. Turbines 1 through 8 will be installed on 92.5 meter hubs, and Turbine 9 will be installed with a 79 and a half meter hub. And, that gives you a total tip height, from the foundation to the tip of the tallest blade, when it's in the upright position, of

446 feet for Turbine 9 and 488 feet for Turbines 1 through 8. They, as I mentioned, have a direct drive, which means there is no gearbox in these machines, which enhances reliability and lowers maintenance costs. And, the turbine's certified design life is for 20 years.

Antrim Wind has performed a lot of studies of this site over the years. We have performed extensive studies to try and address potential impacts associated with the Project. Those study protocols were developed in close consultation with a number of state and federal agencies, a number of which are listed here, which are acronyms: New Hampshire Fish & Game, U.S. Fish & Wildlife Service, the New Hampshire Natural Heritage Bureau, New Hampshire Division of Historical Resources, the U.S. Army Corps of Engineers, and the New Hampshire Department of Environmental Services.

And, I've got a list here that I won't read all the way through that highlight the key areas that have been studied for the Project to assess those impacts. And, all of the reports, the detailed reports that are associated with these studies, will obviously be included with Antrim Wind's application.

I'll just touch on some of these with a little bit more detail: Wetlands, surface waters, vernal

pools throughout the Project area have been delineated by a New Hampshire certified wetland scientist. Again, those reports will be part of the application. Importantly here, very few wetlands will be impacted because of this Project. We've designed it in such a way as to have only two-tenths of an acre of permanent wetland impacts, which is quite low.

Natural communities. As I mentioned, the site classification for natural communities was done in accordance with the Natural Communities of New Hampshire, Second Edition. As I mentioned, in general, the Project is undeveloped, forested, and has been subject to timber harvesting. And, no -- during our natural communities surveys, no significant natural communities were found. We visited the site on a couple of different occasions with the New Hampshire Natural Heritage Bureau, who issued us a letter of concurrence indicating that it was unlikely the Project would impact any rare plants or exemplary natural communities.

Visual assessment is something that we spent a lot of time over the last year focused on. We have worked with LandWorks to conduct a comprehensive visual assessment for the Project. The study area for this visual assessment extends to ten miles from any

turbine. And, so, it encompasses about 353 square miles, including part or all of some twenty different towns.

Viewshed maps are created to determine from which locations the Project may be visible. And, then, LandWorks uses their methodology to identify scenic resources within that ten-mile study area, the sensitivity of those scenic resources, the visual change that the Project may have to that scenic resource, the effect that that visibility may have on the reasonable person, and ultimately renders an overall conclusion on whether the Project will have an unreasonable adverse effect on aesthetics given that visual change. And, LandWorks has concluded that the Project will not have an unreasonable adverse effect on aesthetics.

And, shadow flicker is another study that's performed. We hired Epsilon Associates to perform the study for us. Shadow flicker is a particular phenomenon that can only occur when certain conditions all arise at once. It needs to be during the daylight, when the turbine blades are spinning. The Sun needs to be low in the sky, so, generally, kind of before -- right after sunrise or a little bit before sunset. It does not occur on foggy or overcast days when there's not strong enough daylight to cast shadows. And, it needs to be -- there

needs to be a receptor within ten rotor diameters to kind of have that shadow flicker effect occur.

The studies that we've performed have shown, again, very low levels of shadow flicker associated with the Project. Within that ten-rotor diameter area, we've identified 155 receptors to model. Of those, almost, well, 87 percent have zero expected flicker; 18, or 11 and half percent, have expected shadow flicker of less than 10 hours per year; and only one has an expected shadow duration of greater than ten hours per year, but just over, at 10 hours and 10 minutes. And, very importantly, none of the locations are expected to have shadow flicker in excess of 30 hours per year, which is the industry standard limit. We're about at a third of that limit.

FAA lighting. Current FAA guidance will require that six of the turbines have a single medium-intensity red light installed on the nacelle. This is based on FAA guidelines requiring the lighting of structures above 200 feet in height. Obviously, Antrim Wind will need to comply with all FAA requirements for marking and/or lighting of tall structures. And, generally, that means that the turbines are going to need to be painted white, and that some of them will need to

have these aircraft marking lights installed on them.

We have, however, committed to using radar-activated lighting control systems on this Project, which is a system that will use a radar to determine when there are aircraft in the area, and only when it does so will it activate the lights. The intention being that there's not that much time when there's actually low-flying aircraft in close proximity to the facility at night. And, so, effectively, this technology can virtually eliminate nighttime lighting impact associated with the Project.

The FAA has been working on approval of this technology for a number of years. As soon as they produce their new what's called an "Advisory Circular", then we have committed to, if it occurs before we operate the Project, to build that technology in with the Project from day one. If it occurs after the Project has been built, we've agreed to have it installed and operating within one year.

We also worked with Epsilon Associates to study sound associated with the Project. This began with studying baseline sound levels to kind of characterize the existing background sound in the area. Then, turbine-only sound levels were modeled to predict

what the future sound levels would be that were attributable to the Project. All of this modeling was based on the Siemens 3.2/113 wind turbine. And, this study demonstrates that the Project will not exceed 40 decibels at the outside façade of any residence, which is well below the noise restrictions that Antrim Wind has agreed to with the Town of Antrim, and also below the SEC's proposed condition in Docket 2012-01.

Cultural resources are another area that we've studied extensively. Archeological resources have been studied in consultation with the Division of Historical Resources. Phase 1A & B studies were submitted in December 2011, and, in 2012, the DHR confirmed that no further study was required due to a lack of impacts on archeological resources.

For historic architecture, the process is governed through Section 106, which is a federally-led process. And, Antrim Wind followed the New Hampshire Division of Historical Resources' Guidelines for wind farm development in conjunction with the Army Corps Guidelines. That process will be reinitiated upon the filing of our application, and concluded in consultation with both those agencies after the application is submitted.

With respect to orderly development of

the region, you know, successful wind projects require a number of very key elements to be good projects. They clearly need adequate wind speeds; they need proximity to adequate transportation and transmission resources; they require, you know, specific setbacks to ensure public safety; and they require an appropriate environmental site. And, the Antrim Wind site has all of these characteristics, and is consistent with the orderly development of the region because it maximizes the use of existing infrastructure and coincides with local and regional land use patterns and goals.

This Project is expected to provide the equivalent amount of electricity as used by 12,750 New Hampshire homes. So, we're able to generate that 12,750 New Hampshire homes' worth of clean electricity on that initial 55 acres of impact, while also providing jobs, tax benefits, conservation benefits to the Town and the region.

As I mentioned a couple times, the conservation easements that the Project has put into place provide significant open space benefits. And, both open space preservation and renewable energy are clearly articulated and strongly supported goals in the Antrim Master Plan. Also, importantly, kind of historic

activity, such as logging, hunting and recreational activities will not be substantially encumbered by this Project.

The economic impact of the Project is an important feature. Seacoast Economics was retained to perform an economic impact evaluation for the Project. Their study concluded that the Project would generate approximately $53.4 million in local economic benefit during the first 20 years of its operation, and that includes about 11.6 million occurring during the construction period, and then about 2.2 million a year for those first 20 years.

This will also create or support 84 full-time equivalent jobs during construction, and 12 full-time equivalent jobs thereafter. And, we have been talking with a great number of New Hampshire contractors who we're looking forward to working with as this Project moves forward. Just a quick definition, when we say "local area" here, we're talking about the five-county area in New Hampshire that's listed.

Public safety. I mentioned that the entire facility is located on private lands, with substantial setbacks to neighboring property owners and residences of over a half mile from any wind turbine.

And, these setbacks protect the public from any potential safety hazards at the Project, whether during normal operations or in the event of any type of equipment failure.

AWE has also committed, in an agreement with the Town of Antrim, to additional public safety measures, which includes gating and locking all access roads to the site. So, as I mentioned, there's one access road to the site. There's not multiple access points by a road. That road will be gated and locked. Emergency response personnel will have access to that gate, whether it's a code or key or both. The towers themselves are not climbable. So, there's no way to kind of get in them or up them. Any high voltage electrical equipment will be enclosed and marked with signs, and the substations themselves will be in a fenced yard. And, from a property line setback perspective, no turbine is closer than 1.1 times that turbine height to an adjacent property line, and out here we're really talking about forest lots.

We've also agreed to put signs on all roads and informal trails in the area. Signs being 750 feet from each turbine on the roads and 500 feet on the trails. As I mentioned, above ground electrical equipment being appropriately marked in a highly visible way. All

of the wind farm equipment will have the appropriate design safety certifications. And, blasting will adhere to New Hampshire Department of Environmental Services' Best Practices, including cooperation with the Town and notification prior to any blasting occurring.

Each turbine will contain Siemens' kind of native fire prevention technology and detection technology, which includes a condition monitoring system in these turbines, it includes smoke detection systems, it includes numerous failsafe systems to shut the turbine down, in the event that the conditions that might lead to a fire are detected. And, all of this leads to a greatly decreased risk of potential fires in nacelles.

We have also agreed to employ an additional safety system on top of this, which is an active fire suppression system. So that, in the event that a fire actually does emerge in the nacelle, there is a system that will detect that fire and release an agent that would suppress that fire, and also trigger the same types of safety shutdowns that are included in the onboard Siemens equipment.

Obviously, AWE will adhere to all applicable fire and safety codes. And, we have committed to complete a comprehensive Emergency Response Plan, in

consultation with the Antrim Fire Department and the State Fire Marshal's Office prior -- excuse me -- prior to commencing construction.

Construction process. Antrim Wind is going to be using Reed & Reed as its general contractor for this site. All of the construction will, obviously, start after final permits are received. And, right now, our commercial operations are planned to start in December of 2017. The first thing to occur is tree clearing. And, we've agreed to restrict the tree clearing period to between October 1 and March 31, for environmental reasons, to avoid potential impacts to nesting birds. And, then, after that clearing and grubbing has occurred, road construction will commence, followed by turbine pads and foundation construction, electrical line construction, and turbine erection and commissioning.

The turbines will be delivered directly to the turbine pads. And, those will be coming by highway. We do not expect to have to use any local roads for the delivery of these turbine components. It's one of the things I mentioned before about one of the favorable aspects of this site is it's very kind of easy access along New Hampshire Route 9.

After construction is complete, the

Project roadways will be reduced down to 16 feet by adding topsoil and re-vegetating the shoulders of those roads, as well as the cut-and-fill slopes, using native seed mixes. And, AWE will brief the Town on those construction plans and provide notice, as I mentioned, before any blasting occurs.

With respect to decommissioning, as I mentioned, the Project has an initial design life of 20 to 25 years. The turbines, the certified design life is 20 years. They do often operate for longer than that. And, after that period, the Project may be repowered, which would include the kind of replacement of any equipment that is no longer suitable for use, including potentially turbines, and other towers and other equipment.

Once those turbines are no longer operational, they will be decommissioned. Whether it's after the first phase or after a repowered phase. And, that includes the removal of all facilities above ground, including foundations down to 18 inches below grade.

Antrim Wind has agreed to fund a decommissioning plan that will be prepared by a third party engineer that the Town would have the opportunity to approve, and that would cover 125 percent of the expected cost to decommissioning according to that plan, and all of

that would occur prior to commencing construction.

Emissions benefits are another benefit of wind for New Hampshire. Recent studies in New England and New Hampshire have all consistently demonstrated that installing additional wind generation into the New England power system creates significant emissions benefits, including carbon dioxide. It also results in substantial annual fresh water savings, because wind turbines do not use any water in the generation of electricity unlike thermal plants do.

Environment New Hampshire released a report in 2013 that showed that right now New Hampshire's existing wind energy is already avoiding more than 157,000 metric tons of carbon pollution -- carbon dioxide pollution, the equivalent of taking 32,764 cars off the road. And, it's saving 70 million gallons of fresh water a year, which is roughly -- enough for about 2,500 people or about the Town of Antrim every year. So, clear emissions -- emissions benefits and water saving benefits associated with wind that this Project would contribute to.

Conservation lands, as I mentioned a coupled times, we recognized early that conservation was valuable to residents in this region. And, it's something

that we have always also valued and made a priority to include this as a key benefit of the Project. Over the past several years, we have met with many conservation groups to help build an understanding of the Project, to include the Nature Conservancy, New Hampshire Audubon, the Harris Center, Monadnock Conservancy, Antrim Conservation Commission, New England Forestry Foundation and the Society for the Protection of New Hampshire Forests. And, the conversations we've had with those groups have helped us to develop what is a very robust and significant conservation plan.

Specifically, we have worked with local landowners and the Harris Center, and additionally with the Town of Antrim, to enter into letters of intent to permanently conserve 908 acres of land in and around the Project area once the Project is built. And, these conservation easements would include 100 percent of the Project ridgeline.

Additionally, AWE has entered into a Land Conservation Funding Agreement with the New England Forestry Foundation, whereby we will fund $100,000 towards the preservation of additional forest lands in the region to protect and enhance the region's aesthetic character, wildlife habitat and public recreational opportunities.

So, this is another off-site conservation initiative that we've just recently completed.

This is just a map that shows, highlighted in green, the areas that are subject to the conservation easements that Antrim Wind has negotiated with the private landowners, together with the Harris Center and the Town of Antrim. So, that constitutes 908 acres of continuous lands, and all of the ridgeline. And, as you can see, it also abuts other conservation lands, including some New Hampshire Audubon lands that are, the ones in the bottom left there, are highlighted in yellow.

We have developed and gotten support of various agencies on a Bird and Bat Conservation Strategy. This was previously called an "Avian and Bat Protection Plan", but now they're called "Bird and Bat Conservation Strategy", that takes innovative and proactive steps to try and mitigate potential impacts to bird and bats. It includes, obviously, performing comprehensive pre-construction surveys, performing post-construction monitoring and incident response protocols that include structured consultation with Fish & Wildlife Service and New Hampshire Fish & Game to address potential future impacts through an adaptive management scheme.

We've also agreed to test curtailment of

turbines under certain conditions that have been shown to reduce risk to bat species, specifically to apply a higher cut-in speed to five out of the nine turbines for the first year of operations during monitoring to detect whether that creates any difference in bat mortality at those sites. And, if it does, then we will apply that condition to all nine turbines for the life of the Project. If it does not, then we can scale that condition back.

Community benefits. There's a number. Antrim would become the largest tax -- Antrim Wind, sorry, would become the largest taxpayer in Antrim, which will bring steady revenue to the Town over the Project's life, with little or no direct costs to the Town. We have entered into a Payment-in-Lieu-of-Taxes Agreement with the Town of Antrim, which provides for that kind of stability and predictability for both the Town and Antrim Wind. And, that PILOT Agreement provides the highest per megawatt payment of any wind energy PILOT agreement in New Hampshire, starting off at $11,250 per megawatt, and increasing two and a half percent per year for the life of the Project.

There are also substantial direct and indirect economic benefits to the Town and the region

brought by investment in wind energy, including employing local contractors for construction and other trades, as well as the kind of ancillary benefits of the food, fuel, housing, materials, *etcetera*, that occur due to the work that's going on the site.

Permanent conservation benefits are also a community benefit, including the 908 acres of forest lands that I mentioned, in addition to the $100,000 land conservation fund that we've entered into with New England Forestry Foundation. We have also entered into an agreement with the Town of Antrim concerning the potential for aesthetic impacts to Gregg Lake, whereby Antrim Wind has agreed to make a payment of $40,000 to enhance the recreational and aesthetic experience at Gregg Lake.

Touching again on some of these agreements that I've mentioned. Having worked closely with the Town over the past six years to share information about wind generally and about our Project specifically, we signed an agreement in 2012, in March 2012, that governs various construction and operating period requirements associated with the Project, touching on subjects like noise, public safety, construction, decommissioning, complaint response, emergency response and other key issues. That document is obviously

available for everybody. It's a public document.

In 2000 -- in June 2013, we entered into a PILOT Agreement that I just mentioned. That was recently amended to extend the commercial operations date for the Project into 2018. And, finally, I mentioned the Gregg Lake Agreement.

In summary, this proposed Project is the result of very careful site selection and a lot of work over the past six years. It's focused on high performance and low impacts. The studies that we have performed indicate that this Project can be built without undue adverse impacts to the community or the environment, while bringing significant economic and energy benefits to the area.

We will cause direct impacts to only 55.3 acres of land, produce enough energy for 12,750 average New Hampshire homes, bring substantial new revenue to the Town, and result in significant and ongoing emissions benefits.

The Project has been significantly revised since the 2012 docket to address concerns about potential aesthetic impacts. And, we believe the Project is consistent with the goals of the State of New Hampshire for increasing clean energy and meets the criteria under

RSA 162-H to receive a Certificate of Site and Facility.

Thank you very much for your time.

MR. STEWART: Thank you, Jack. We will now receive public comment. I have two sheets here. So, when your name is called, please speak clearly into the microphone, so that the stenographer can hear and understand what you're saying. And, if you could start with your name and where you live.

So, with that, I will move on. And, again, we're trying to limit comments at the front end to three minutes each, in order to get through the list. And, then, subsequent to that, if you have more to offer, we will stay as long as we need to. So, thank you.

With that, I'm going to be name-challenged already. Karen Weisswange.

MS. WEISSWANGE: Okay. That's --

MR. STEWART: How did I do?

MS. WEISSWANGE: Karen Weisswange. Is it on?

FROM THE FLOOR: It is, if you lean in.

MS. WEISSWANGE: I live at 91 Old Hancock Road. And, I wanted to come and speak tonight, because I truly believe in this Project. And, I am hoping and praying that it will come to fruition before I die. I

hope the SEC will accept this application. And, I think it will benefit everybody in town, not only moneywise, which is not going to do much, but just for cleaner air. And, we need to do this, we need to do this for the future generation, for our grandkids, that are facing global warming, which we all know about.

Everywhere in the country, all around the world, there are turbines. We went to Aruba last year. And, you know, in Aruba, they use turbines for the whole island, using turbines. And, that's all they need for their fuel.

So, I think this is a win/win situation. I think Antrim Wind has gone above and beyond what is expected of them. And, I hope this will come to be. Thank you.

MR. STEWART: Thank you. Al Weisswange.

MR. WEISSWANGE: Al Weisswange, 91 Old Hancock Road, in Antrim. I just want to say that we all here know that slowly but surely we are killing the planet with pollution. And, the major cause of this pollution, or one of the major causes, is coal-fired generating plants. We've tried other solutions. We've tried nuclear, which came with its problems. And, I think that renewable energy is the only clean, reliable way we can

remedy this situation. Thank you.

MR. STEWART: Thank you. Peter Beblowski.

MR. BEBLOWSKI: Peter Beblowski, Smith Road, 318 Smith Road. I'd like to thank Mr. Stewart and AWE for coming tonight and making this presentation. And, I do not have anything to say at this time. Thank you.

MR. STEWART: Thank you. Wes Enman, I am guessing at the handwriting.

MR. ENMAN: That's okay.

MR. STEWART: I'm handwriting challenged, too.

MR. ENMAN: My name is Wes Enman, 16 Pierce Lake Road. Been a supporter of the Project literally from the first day I heard about it. We're at a stage where we need to stop generating power with nuclear and coal-fired generation. This is renewable. Once it's in, there's zero emissions. This is important for the future. It's important for the Town. As Jack said, this is the right location. It has all of the elements that are needed, with minimal impact. I don't believe that we should be putting power wind turbines on every hilltop in New Hampshire, but this is the right hilltop to do.

I think, with the new solar garden that

we're dealing with that Antrim has approved, and Antrim Wind, I think this town could, like Peterborough, kind of put themselves out there as an "energy alternative" town. I think it's positive. And, any economic impact that the Town gets would be a benefit.

But, ultimately, I believe that this is the right project at the right time. And, I'm really hoping that the SEC, even at this point, will take jurisdiction. Thank you.

MR. STEWART: Thank you. Robert Cleland.

MR. CLELAND: Yes. My name is Robert Cleland, 43 Farmstead Road. There's a couple of concerns I have about Mr. Kenworthy's presentation. One, is he didn't mention anything about how it would affect local real estate values in the area. Especially since he told me, in September of 2009, that it would have a direct impact on my property value. I'd like to have some answers about that. It's going to affect a lot of people in the area, and how are people going to be compensated? If you want a wind tower, nobody should -- if you wanted wind, nobody should suffer. Nobody should lose their property value or suffer out of this. He needs to think about that and be concerned about it. Thank you.

MR. STEWART: Thank you. Tim Perry.

MR. PERRY: Tim Perry, 152 Clinton Road, Antrim. Unlike my neighbors, I did not want to come up here and speak tonight, mostly because I don't like speaking in front of people. I'd like to kind of pick on several items here. I am passionate about spending as much of my summers outdoors as possible, much of that is spent in my kayak. I live just down the street from Gregg Lake and spend a lot of time kayaking up there. Willard Pond is one of my favorite places on the planet to go paddling. Likewise, I noticed, while kayaking up at Pillsbury -- I think it's Pillsbury State Park, up in the north side of Washington, that, as you paddle across the lake up there, you can actually see the turbines at the Lempster facility. Can't hear them at all, but you can see them. I don't find that to be a detriment. I would not find it to be a detriment at Gregg Lake, I would not find it to be a detriment at Willard Pond either. I would know that we are doing good for those locations over the long time.

I know that one of the primary reasons this proposal was rejected its first round through the SEC was because the Audubon raised concerns about the aesthetic impacts on Willard Pond. I would like people to

think about what those impacts will be over the long term if we don't do this. If we continue the CO2 emissions that we are creating, what's that going to do to the Willard Pond habitat for my grandkids, your grandkids, *etcetera*.

My wife is a professional research -- climate research scientist at UNH. A good portion of that is actually probably my fault. I joined her at the American Geophysicists Union Annual Meeting in San Francisco in December. There were 25,000 climate scientists gathered there. I felt as dumb as I ever have in my life with all those smart people around. Not one of them was discussing the basic idea of CO2 emissions causing climate change. That is accepted science amongst the professionals in the industry. They were talking about the accelerated effects that CO2 emissions are having on all of the sensitive areas, such as a place like Willard Pond, or boreal forest or permafrost at the edge of the Artic that is no longer permafrost.

This is a great project, at a great location, by a company that is doing what we would want a company in town to do. They're making the adjustments that we need to have this a good project, a better project. The SEC shouldn't have turned this down the

first time. They need to take this and approve it.

MR. STEWART: Thank you. David Ayer. I think it's "Ayer".

MR. AYER: Yes. I'm David Ayer. My business is located in Barrington, New Hampshire. It's Ayer Electric. And, I just want to say that we've worked at the Lempster facility, and we hope to do electrical work at this facility. And, this Project is good for my workers, and it's good for the State of New Hampshire. Thank you.

MR. STEWART: Thank you. Huck Montgomery.

MR. MONTGOMERY: Hey, I'm Huck Montgomery. I represent the International Brotherhood of Electrical Workers. And, we're actually based in Concord, New Hampshire. Represent more than 300 licensed electricians in the State of New Hampshire. Again, folks who hope to do the work at this facility, hope to continue to work with Eolian and Antrim -- and AWE, to ensure that the work that's done on this Project is done by local workers.

We generally believe that constructing more wind energy facilities in New Hampshire is a good thing for the economy, it's a good thing for job creation,

and when we're just starting to emerge out of the greatest economic downturn since The Great Depression. The construction industry in New Hampshire is still severely depressed, maybe 25 percent below where it was before 2007. And, this kind of construction project is what's going to put New Hampshire's economy and construction sector back where it needs to be. The jobs impact should not be underestimated. And, my job and our job at the IBEW would be to ensure that the people that would do this work will be local workers, they will be well paid, and they will have great benefits. And, that is the best thing that we can do for the State of New Hampshire. Thanks.

MR. STEWART: Thank you. Fred Ward.

MR. WARD: I live in Stoddard, within about two miles of this place. First thing, there aren't 25,000 climate scientists in the International Geophysical Union. There aren't 25,000 climate scientists in the American Meteorological Society. And, there aren't 25,000 climate scientists in the entire world. So, any claim about climate scientists being all in favor of this just is total baloney.

The situation is, I would like to see somebody be able to generate totally clean energy. If

somebody could generate totally clean energy that didn't impact anything, I'd be in favor of it. I'm a conservationist by trade, I've been a conservationist for 50 or 60 years.

The question here is, "is this the right thing?" And, since I can't ask questions, I just want to make a couple of comments asking to get information from Jack eventually. I understand that these turbines generate most of their energy at night. You don't have to answer it. You have one met tower, which means that whatever you're doing applies -- that information applies to nine turbines. So that the nine turbines, we can assume, operate pretty much simultaneously. They're either on, half on, or all off.

Secondly, as far as the FAA and the red light, the flashing red light is concerned, on my observatory, there are planes flying over almost constantly. Now, I admit, they may be five or ten miles out, but what is the radius of this radar that's supposed to shut the thing off? I don't know what that is. But, if it's five or ten miles, that means the flashing light will be on all night, every night.

I'd like to get an idea, because I hear a number for the efficiency, the overall efficiency. It's

not 3 megawatts, it's like 28 percent of that. I would like to have that number. Okay?

As the question of the shadow flicker is concerned, when I was at these hearings, what was it, two years ago, three years ago, there was a model for shadow flicker, which I believe was a model of a tower on flat land to viewers who were also on flat land. If that's the model you're using, you can't use it. Period.

That's all I have to say. I have a lot of other questions. But, if I get those data, Jack, I'd be delighted.

MR. STEWART: Thank you. Elsa, Elsa Voelcker.

MS. VOELCKER: Yes. My name is Elsa Voelcker. I live at 97 Old Pound Road, in Antrim, about a mile from the proposed site.

Tell me if this is true, Jack. That last summer, when we had a hot spell, and some more electricity was needed, I heard they took Lempster off line and they fired up a coal plant, because the wind towers are not reliable enough. They're not giving enough constant energy.

I also would like to know, I know that you have to put in new lines to carry the energy you're

going to be making, from here to wherever it's going, Rhode Island or whatever, and guess who gets to pay for those new lines? All of us. I don't know about you guys, but I'm paying 50 percent more for electricity this year than I was last year. And, I know that those lines we're going to be paying for.

And, I know that I've heard the Lempster Mountain wind towers, and it sounds like a jet plane that doesn't go away. I'm a very auditory person. I hear every jet that flies over my house. And, I know that I'm going to have to move if this Project goes in, because it will drive me nuts. Forty megacycles is a lot of noise. I heard on NPR, 45 can cause hearing damage in people.

MR. STEWART: Thank you. Steve Autenreith.

MR. AUTENREITH: Pretty close. My name is Steve Autenreith. I'm a resident of Dover, New Hampshire. And, I support this Project for a variety of reasons, but tonight I'll limit it to just a couple.

I work for a company called "3 Phase Line Construction". We build energy infrastructure. So, we build the lines that were mentioned earlier. All of our employees are IBEW members, proud union members, highly qualified, well-trained residents of this region,

of the New England region. We've worked on projects like this. We've worked with Reed & Reed in the past. I can tell you that, while the work is being performed, our men are very safe, they're very conscious about the environment. Our people are local. They raise their families in placing like this in New England. They're concerned about the environment, they recreate. And, they take a lot of consideration when the work is being done.

I can also tell you that they -- one of the slides that Jack put up was about 84 jobs supported by this. That's mainly from companies like mine. Our employees are well compensated. These are real jobs that people support their families with. They include pensions, full healthcare benefits, well-paying jobs.

Also, when a company like mine comes in to build the power lines associated with something like this, we hire locals to support our office staff, for a variety of other reasons. Also, our men, when they're here doing construction, they typically live in this area. So, they will be filling hotels and things in the region, they will be eating regionally. Typically, they stay five nights a week or so in the area, and then go home on the weekends.

And, I think that's it. Thank you.

MR. STEWART: Thank you. That concludes the list of folks that have signed up to speak. But would anybody else like to speak who hasn't spoken yet?

UNIDENTIFIED SPEAKER: We've got one more.

MR. STEWART: Oh, one more. Well, go ahead while I'm getting this.

MS. GARD: Hi. My name is Barbara Gard, and I live on 243 Pleasant Street, in Antrim. And, I guess I'm a little more -- I guess a little more than two miles away. And, I'm in the same zoning district that the proposed Project would be constructed in.

What would help me, and which I haven't heard addressed, is a point-by-point comparison between the Project that you folks proposed on reconsideration before the SEC. Now, as everybody knows, I guess, the Motion to Reconsider was declined. And, you included, if I remember correctly, certain changes in that Motion for Reconsideration. I'd like to know what's different now, point-by-point, no spin, no, you know, sort of PR. What's different between what was proposed on reconsideration and what you're proposing to do now? Because that's where I think we are now.

This Project has a history. I moved to

this town in 2002. I believe you folks turned up 2009, correct me if I'm wrong. So, from 2009 to 2014, a lot of people have, you know, both the townspeople, officials of the Town, you people, as private developers, have put a heck of a lot of energy into this whole thing. So, we have to take account of where we've been, as well as where we want to go. And, it seems to me that, without that kind of point-by-point comparison, especially as you have a -- you voluntarily went before the SEC, you got a decision from them. They had, you know, hours and hours and hours of testimony. You know, lots of people came to those hearings. I couldn't stand to come to all of them, you know, I didn't have time to come to all of them. But there's a whole history here. That, unless we proceed from where we are in relation to the past, we'll never get to the end of this.

So, please tell me what the differences are. And, just, you know, I would love to have a copy of this presentation you've made, but I'd like to have something which supplements it that says "okay, on reconsideration, we proposed all these things. Now, we're proposing something different." If you're not going to restudy things, tell me why you're not going to restudy things. You know, intuitively, it seems to me there are

some things that ought to be restudied, if you're proposing changes in the Project.

You have an SEC decision, not only that was against you the first time around, but there was a Reconsideration Motion, which was declined, and you didn't appeal it. So, you have an unappealed decision against you. Now, I'm willing to go forward, but I want to know what's new.

So, you know, please help me out, and I think it would help a lot of people out. If this is a great project, then tell me why it's a great project, because you have a precedent against you, and you did not appeal it. So, that's where we are now.

You know, I sat on the committee that tried to write a ordinance for the Town. I put a lot of hours in. I showed up at 6:00 a.m. to help write that proposal. Okay, the townspeople voted this down. Another one was put up; the townspeople voted against that. A private person put up one, which was endorsed by a lot of people in town, --

MR. STEWART: Barbara, one more minute.

MS. GARD: Okay. And that was voted down. So, you can't just come in and say "okay, you know, here we have this new project." You have to take account

of what's happened before. And, at least for me, personally, that's where I start. Tell me why I should support something which has an SEC decision against it, which was not appealed. Thank you.

MR. STEWART: Thank you. Brian Beihl, I believe.

MR. BEIHL: Thank you, Mr. Moderator. My name is Brian Beihl. I am a 30-year resident of Antrim.

MR. STEWART: I had a 50-50 chance.

MR. BEIHL: That's all right. I have some serious doubts about Antrim Wind Energy, Eolian, and the new pairing with the company in New York, of the ability to execute this Project. The company did not have any experience in building the Project when they came in to Antrim in 2009. As of now, they still have not built a project. Their Frankfort, Maine has been denied twice. The Peaked Wind Project in Orland is still in suspense. The Seneca Mountain Wind Project, they pulled out of Vermont. And, now I understand there is another project out in Potter County, in central Pennsylvania, which I don't really know the status of.

But we're talking about a very large industrial wind facility. There's no evidence that this

organization is well organized or well financed enough to be able to execute this Project. And, I have some serious concerns, if it were to be attempted, whether it would succeed. Thank you very much.

MR. STEWART: Thank you. I'm again at the end of my list. Would anybody else like to speak? Come on up.

MR. BLOCK: My name is Richard Block. I live on Loveren Mill Road, on 242 acres of south-sloping land, all of which faces Tuttle Hill. Simply, I'm troubled that this presentation just fails to address the potential impact of this Project on property values on each specific parcel and residence within the immediate impact zone. Neighboring residents should be informed of how their equity and their specific homes and their land may be affected if this goes up. Thank you.

MR. STEWART: Thank you, Mr. Block. Would anybody else like to speak? Seeing as there are none, we will close the meeting. And, I have -- whoops. Oh, one more.

MR. PERRY: Yes. If we're cycling back around?

MR. STEWART: Yes. Yes, please.

MR. PERRY: Because I love standing up

here so much. Thank you. Tim Perry, 152 Clinton Road still. Rebuttal time. In my nervousness of being up here previously, I forgot to mention, I also did one day of work up at the Lempster facility while it was being initially constructed. I do technology installations. I was hooking up an internet connection. It was a thrill to actually be up there. And, I've made a point of visiting it again several times, because I find it a pleasant environment to be in.

The concept that there's any significant noise from these is just beyond my ability to comprehend. I've stood at the base of those turbines when they're spinning, and at the most you hear a slight whistle. If you're standing back at what would be a reasonable setback, they're inaudible above the sound of wind through the trees.

I've had this same discussion on our previous go-arounds. But I think it needs to be in the record as a rebuttal for what's been said here. On a decibel scale, 30 decibels is considered to be equivalent to a quiet library; 40 decibels is a quiet residential area or a park; 50 dB is a quiet office, or a quiet street, in Antrim, say, when there's no car driving by; and 60 decibels is normal conversation at three feet. So,

if we're talking about "no residences are going to hear higher than 40 dB", that's basically the same as going for a walk in the woods.

Now, I also, by the way, had actually the pleasure of being in Aruba and see the same thing down there. They have one corner of their island, which is 6 by 20 miles, that has about 10 or 12 turbines, powers the entire island. They have no emissions whatsoever. Jealousy. Envy.

AGU, for the record, by the way, does not have 25,000 members. It has 62,000 members. There were 25,000 in San Francisco --

MR. WARD: Not climate scientists.

MR. PERRY: That is generally what they specialize in --

MR. WARD: No, it is not.

MR. STEWART: Okay. One at a time please.

MR. PERRY: Okay. I think the issues that had been commonly brought up over and over again on our first go-around of this, shadow flicker, noise, property values, have been pretty well addressed, although I have not heard any direct statements on property values this time around. Initial property values on abutters and

nearby neighbors usually decreases by small single digit amounts in the first couple of years, and increases by those same amounts over the long term. Because people like myself, people who are like-minded to myself, want to live near a green facility like that. Thank you.

MR. STEWART: Thank you. Any further comments?

MS. LONGGOOD: Yes.

MR. STEWART: I don't believe you've spoken. Yes.

MS. LONGGOOD: Hi. My name is Janice Longgood. I missed most of the presentation, but I am well aware of this Project or the prior Project, I'm an abutter. I am probably one of the closest residence to that, and I am very concerned about this Project on my property value, on the shadow flicker, on the impact it would have. I purchased 50 acres of land that was covered with covenants, and it was protected, and then the rural conservation. And, now to have an industrial wind facility abutting my property, when I live in the middle of nowhere, is very troubling to me. And, I want to get on the record please that I'm very much apposed to this.

MR. STEWART: Thank you. Further comments?

MR. WARD: Just so the facts are clear.

MR. STEWART: Could you restate your name.

MR. WARD: There's no question but that carbon --

MR. STEWART: Sir, could you restate your name for the stenographer.

MR. WARD: Fred Ward, from Stoddard. I'm sorry. There's no question but that CO2 is a greenhouse gas. There is no question that it has increased. Nobody denies that. Everybody agrees on that. There is no way, however, to calculate how much of a temperature change it ought to make for whatever given increase in greenhouse gases has been measured. No way.

Now, we would expect the temperature to increase. And, if you asked me, I would say "I would expect a temperature increase." I'd give you maybe 3-to-1 that it would increase. But the fact that I don't give you 100 percent says that "maybe not". And, if we look at the data, because we can't calculate what it ought to be, if we look at the data, for the last 15 years, nothing much has happened, despite all of the forecasts that things should happen. Any meteorologist, any climate scientist would say "I wonder what's the matter here"?

And, let me just leave you with one last fact, which you may or may not know. For greenhouse gases, now, these are all gases that can warm, nobody disagrees that greenhouse gases will tend to warm. The earth as it stands is 60 degrees Fahrenheit warmer than what it would be if there were no greenhouse effect. Sixty degrees warmer than it would be without it. So, you say to yourself, "where did it all come from?" And, does anybody here care to guess where 97 percent of that 60 degrees comes?

FROM THE FLOOR: Water vapor.

MR. WARD: Water vapor. The problem you see is that water vapor, in the form of clouds or as a gas, can make an enormous difference. And, the models that have been put out can't account -- can't account for that very well.

Now, if I were asked, I would say "yes, we should be doing something about greenhouse gases." But it's not a big priority, and probably could be handled slowly over a period of time. And, the number of climate scientists there are, there aren't 25,000 in the entire world, let alone in the IGU, to which for many years I belonged. Thank you.

MR. PERRY: AGU.

MR. WARD: Thank you.

MR. STEWART: Mr. Brock -- I mean, Mr. Block.

MR. BLOCK: Richard Block. I'd just like to address something that Mr. Perry said. I envy your ability to block out background noise. But we live in a very, very quiet rural area. I have had the sound tested at my house at 19 decibels at night. The increase from 19 to 40, if you know anything about the mathematic logarithm, it's a significant, many, many times increase in sound.

I don't get, since I've lived rurally and quiet, I was born, I don't admit this to many people, I was born in Manhattan. So, I grew up as a young child with constant background noise. Since I moved to the country, which was decades ago, I've gotten more and more away from it. It's why we chose to move in the country. I am sensitive to sound. I do not have headaches, I do not have problems. When I visited Lempster, after about a half an hour standing outside the gate to Lempster, I started developing a significant headache in the back of my head, which did not -- eventually, it got so bad I literally ran from the site. And, it took a couple of hours before it subsided. And, the only thing I can

attribute that to was the very low frequency "whomp-whomp" sound that I kept hearing from the turbines there.

So, maybe there are days when turbines are quiet, but there are days when it's really noisy. Having to have that against my will subjected to me and my house is not something I'm happy about. And, I worry about what that will do. I would probably have to leave. I cannot live with that kind of background noise. My wife is even more sensitive than I am. I know she will not survive. Thank you.

MR. STEWART: Thank you. Any further comments?

(No verbal response)

MR. STEWART: Seeing none, I will close the meeting. Oh. What --

MS. VOELCKER: I just wanted to say that the SEC turned them down the first time, and what I heard was "too small a mountain, too high towers". These towers are almost the same height as the first proposition. I do hope the SEC turns them down again.

MR. STEWART: Thank you. Any final comments?

(No verbal response)

MR. STEWART: Seeing none, I will close

the meeting. And, I thank you for your efficiency. Everybody stayed within three minutes. And, that's just a remarkable track record for the number of people at this. Thank you very much for coming out.

(Whereupon the public information meeting was adjourned at 8:21 p.m.)

CERTIFICATE

I, ***Steven E. Patnaude***, a Licensed Court Reporter within the State of New Hampshire, do hereby certify that the foregoing is a true and accurate transcript of my stenographic notes of the Antrim Wind Public Informational meeting, taken at the place and on the date hereinbefore set forth.

I further certify that I am neither attorney nor counsel for, nor related to or employed by any of the parties to the action in which this meeting was held, and further that I am not a relative or employee of any attorney or counsel employed in this case, nor am I financially interested in this action.

Steven E. Patnaude, LCR No. 52