BROWN & BURKE

Attorneys at Law 85 Exchange Street - P. O. Box 7530 Portland, Maine 04112

www.brownburkelaw.com

TELEPHONE (207) 775-0265 FACSIMILE (207) 775-0266

RUFUS E. BROWN M. THOMASINE BURKE

May 23, 2011

VIA Email and U.S. Mail

Maine Public Utilities Commission Consumer Assistance Division 18 State House Station Augusta, ME 04333-0018

Re:

Complaint Against Fox Island Wind Electric Cooperative

Pursuant to 35-A M.R.S.A. § 1302

Dear Sir/Madam:

On behalf of the signatories to the Complaint attached hereto, I am filing this Complaint against Fox Island Wind Electric Cooperative pursuant to 35-A M.R.S.A. § 1302 together with exhibits thereto.

Sincerely yours,

Lufus E .Brown

Attorney for Complainants

REB/encl.

cc. Mitchell Tannenbaum, Esq. (via e-mail)

FIWN

MAINE PUBLIC UTILITIES COMMISSION IN RE: FOX ISLANDS ELECTRIC COOPERATIVE

COMPLAINT TO THE MAINE PUBLIC UTILITIES PURSUANT TO 35-A M.R.S.A. §1302

The following ratepayers and members of the Fox Islands Electric Cooperative ("FIEC") are aggrieved by unreasonable practices engaged in and unreasonable rates being charged by FIEC.

BACKGROUND:

The Aggrieved Parties include ratepayers and members of FIEC who reside near the wind turbine facility (the "Project") licensed to and operated on Vinalhaven by Fox Islands Wind, LLC ("FIW"), an entity owned by FIEC, affected by excessive noise from the Project, and also ratepayers and members who do not live near the Project and are not affected by noise but join in this complaint on principle, believing that FIEC has not treated those affected by excessive noise fairly. The Project is required to comply with Maine Department of Environmental Protection ("DEP") Rule 06 CMR Ch. 375, Section 10 (the "DEP Noise Rule"), including sound level limitations specified in this Rule and its license from DEP, both prohibiting noise propagated from the Project exceeding 45 dBA at protected locations during the nighttime. Since operations of the Project began at the end of October 2009, the Project has generated excessive noise in violation of the FIW license and the DEP Noise Rule on a consistent basis. The Aggrieved Parties affected by the excessive noise complained to the DEP and, in response, the DEP eventually determined that the Project was out of compliance and would be required to change its nighttime operations. FIW has refused to cooperate with the DEP on these regulatory issues over the last year and a half since the Project began operating, contesting the findings of the DEP concerning non-compliance, contesting the DEP's effort to require modifications in the operation

data to aid the DEP in determining what steps should be taken to bring FIW into compliance, and in the process has taken unreasonable legal and technical positions. The substantial resistance and uncooperative conduct and the unreasonable positions taken by FIW in relation to the DEP have resulted in substantial expenses by FIW for legal and acoustical experts that it now proposes to recover from ratepayers. The Aggrieved Parties affected by the excessive noise have incurred substantial expenses out of their own personal resources in an effort to persuade the DEP to take action to force FIW to comply with the Noise Rule and the FIW license and to protect their health and welfare and the value of their properties. It would add insult to injury for the Aggrieved Parties to also contribute towards the payment of expenses incurred by FIW and FIEC to resist compliance with the Noise Rule and the FIW license.

FIRST COMPLAINT

On October 7, 2010, FIEC included an insert ("Update on the Fox Islands Wind Project") in electricity bills sent to FIEC members, including the Aggrieved Parties, for the month of October 2010 set forth in *Exhibit A* to this complaint. The Update asserts that complaints by the Aggrieved Parties about excessive noise from the Project had caused FIW to incur expenses for legal and acoustical work in excess of \$100,000 which has the potential of increasing electricity rates. The effect, if not the purpose, of these statements have caused the Aggrieved Parties to suffer retribution, harassment and hostility by residents of Vinalhaven not affected by noise and resentful of those residents who are making the complaints about noise from the Project. The Aggrieved Parties affected by noise made complaints to the DEP, in addition to those made to FIEC and FIW, because the Project has consistently operated in excess of noise limits established by its license and by the DEP Noise Rule and because the excess noise has seriously

impacted the health and welfare of the Aggrieved Parties affected by excessive noise and the value of their property. A utility has no right to intimidate and incite ill-will against its members who are seeking to protect their health and property values.

Following the distribution of the Update, the attorney for the Aggrieved Parties affected by excessive noise wrote the attorney for FIEC complaining about the Update. See *Exhibit B* attached hereto. The attorney for FIEC never responded to the complaint or even acknowledged it. In fact, FIEC sent another Update with the April 2011 electricity bills, attached hereto as *Exhibit C*, asserting that the cost of FIW's responses to regulatory issues has now exceeded \$365,000 and this cost will be passed through by FIEC to ratepayers by a 1¢/KWh, or 5% increase in rates. These two Updates, together with other conduct by FIEC and its subsidiary FIW of a similar nature, constitute a pattern of behavior that amounts to intimidation and an abuse of the powers of a utility.

The Aggrieved Parties ask the Maine Public Utilities Commission to sanction responsible officials of FIEC and FIW for this abuse and issue an order preventing any future "Updates" or similar communications having the purpose or effect of intimidating efforts by the Aggrieved Parties to protect their health and welfare and their property values.

SECOND COMPLAINT:

As a regulated utility, FIEC is prohibited from charging unjust or unreasonable rates. 35-A M.R.S.A. §301.3. The electrical rate increase announced by FIEC in the April 2011 Update constitutes an unjust and unreasonable increase of rates because the \$365,000 in alleged costs for FIW's challenges to the DEP and resistance to accountability and reasonable solutions to prevent excessive noise generated by the Project is an unreasonable expenditure of funds that should never have been incurred by FIW or FIEC as evidenced by the History Of Fox Island Wind

Compliance Issues attached hereto as *Exhibit C*. FIW should have cooperated with the DEP in addressing serious and validated complaints of the Aggrieved Parties about excessive noise from the Project. By not doing so, and by not being required to do so by FIEC, the officers and directors of both entities have breached fiduciary duties owed to members of FIEC who are Aggrieved Parties affected by excessive noise. No rate increase would have been necessary if FIW and FIEC had acted properly in relation to noise complaints.

The Aggrieved Parties ask the Maine Public Utilities Commission to prohibit FIEC from increasing its electricity rates to cover expenses that are the product of mismanagement and reckless conduct and to refund the sums collected from the rate increase.

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Compliance Issues attached hereto as Exhibit P. FIW should have cooperated with the DEP in addressing serious and validated complaints of the Aggrieved Parties about excessive noise from the Project. By not doing so, and by not being required to do so by FIEC, the officers and directors of both entities have breached fiduciary duties owed to members of FIEC who are Aggrieved Parties affected by excessive noise. No rate increase would have been necessary if FIW and FIEC had acted properly in relation to noise complaints.

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Name	Address	FIEC Account No	Telephone #	Email
WILLIAM	W. HAIBLE	# 040Hans		
1712 BLA	KE ST			e@earth/ii
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Signatory: FIWN Complaint to Maine PUC. May 15,2011

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Update on the Fox Islands Wind Project October 7, 2010



Production

The wind project's output experienced an unexpected boost from stronger than anticipated winds during September. The turbines produced approximately 910 MWh over the past month, exceeding projections by 22%. Combined with the fact that the turbines have been operating very reliably recently, year-to-date production remains above pre-construction estimates, in spite of the nighttime sound curtailment (see graph at end of update).

Economic Impact

Just as calmer winds during the summer months resulted in increases in the energy portion of your bills, the windier fall and winter months will lead to rate decreases. The average cost of electricity to the Coop over the course of the year is expected to be in the 6-6.5 cent/kWh range. This has already resulted in a 34% reduction in the energy portion of your bill over the first ten months of the turbines' operation, as compared with the three previous years.

The energy portion of your electric rates is directly connected to two factors: 1) the amount of power produced by the turbines and 2) the expenses incurred by the wind project. Those expenses include operations and maintenance costs, as well as principle and interest payments. Increasingly, they are also including unanticipated legal and sound consultant fees.

In order to deal with the sound complaints and legal issues that have been raised to date, the project has incurred costs over \$100,000 in legal and consultant fees above and beyond the cost of establishing compliance. This is because the project must pay thousands of dollars not only for the work of our own sound consultant, but also for the DEP's sound consultant, to process and analyze each complaint that is made. Such costs have the potential to impact electric rates, as every \$110,000 of expenses equals approximately 1 cent/kWh of your bill. To the extent that the turbines produce more than originally anticipated, such costs have the potential to be offset.

Sound Issues

In a meeting on September 16, 2010, representatives of Fox Islands Wind and its sound consultant met with representatives of the Maine Department Environmental Protection (MDEP) to discuss the project's ongoing efforts to maintain and demonstrate compliance with state sound regulations. MDEP's sound consultant participated in the meeting by phone.

During the two hour meeting, different data analysis methodologies were discussed extensively by the two experts. Fox Islands Wind presented extensive data about the levels of non-project related ambient sound in the vicinity of the site as well as evidence that the project is in compliance at all times, including during a 70-minute interval during the late evening of July 17, 2010, which has become the focus of recent attention.

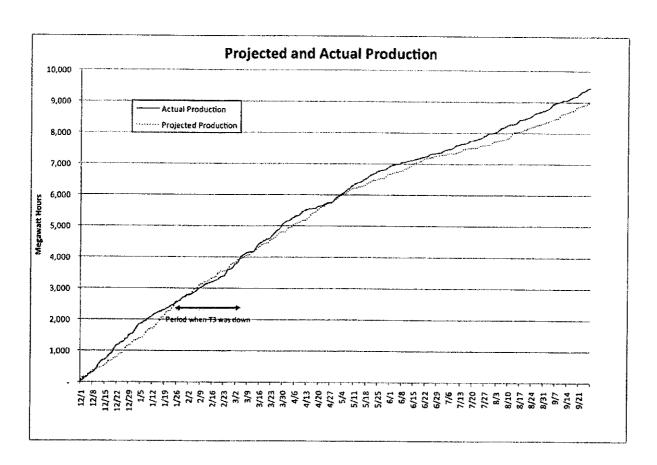
At the conclusion of this meeting, MDEP representatives <u>made no determination regarding</u> the project's compliance or <u>non-compliance</u> but instead agreed to continue to review the

data that has been submitted for the 70-minute interval at issue. Fox Islands Wind remains committed to operating in compliance with state standards and looks forward to continuing this discussion with the MDEP. Given the technical complexity of this issue, we do not expect it to be resolved quickly.

In the meantime, work to identify potential mitigation strategies continues. Promising early results from the work on Active Noise Cancellation, funded by the Maine Technology Institute, is giving hope that this technology may mitigate the sound impacts experience by some of our neighbors. In addition, we are looking into the possibility that passive noise cancellation in homes (improved insulation and sound baffling) may also help.

A group of residents currently living within a one-mile radius of the wind site have recently agreed to keep logs of their subjective responses to the sounds emitted by the turbines for a period of 30-45 days. This logging effort is part of a Cooperative-sponsored study, the data from which will be analyzed by a team of researchers from the National Renewable Energy Laboratory (NREL) that visited Vinalhaven in May and August. The NREL team has developed an action plan through which they hope to identify potential sound mitigation strategies for the Coop Board and its members to evaluate.

Karol Kucinski is assisting the Cooperative in administering this survey. If you wish to participate in the logging effort and are not already doing so, or if you have any questions about the data collection or analysis process, please contact Karol directly at 863-2053. Questions and answers, along with the NREL action plan, will be posted for the public to review on www.foxislandswind.com.



Rufus Brown



Rufus Brown [rbrown@brownburkelaw.com]

Sent:

Tuesday, October 19, 2010 9:45 AM

To: Subject: 'LoGiudice, Susan E.' RE: FIEC Update

Attachments:

2010-10-05 Electric Bill w-Mailer disputing DEP Finding.pdf

Susan:

You should know that the attached update saying my clients are responsible for potential increases in utility rates has been taken as a gratuitous cheap shot that does not help relations with the Coop.

I look forward to hearing from you next week.

Rufus E. Brown, Esq. Brown & Burke 85 Exchange Street, Suite 201 P.O. Box 7530

Portland, ME 04101 tele: 207-775-0265 fax: 207-775-0266

e-mail: rbrown@brownburkelaw.com

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From: LoGiudice, Susan E. [mailto;sel@preti.com]

Sent: Monday, October 18, 2010 7:14 PM

To: Rufus Brown

Cc: cfarrington@foxislands.net

Subject: RE:

I spoke with Chip. He will discuss your requests with the Board at its meeting next week and I will circle back with you.

Susan E. LoGiudice, Esq.

PretiFlaherty

One City Center | P.O. Box 9546 | Portland, ME 04112-9546 T 207.791.3218 | F 207.791.3111 sel@preti.com | www.preti.com

From: Rufus Brown [mailto:rbrown@brownburkelaw.com]

Sent: Monday, October 18, 2010 2:04 PM

To: LoGiudice, Susan E.

Subject:

Susan:

It has been over a week since I sent you a letter clarifying my client's document request to FIEC. My impression from you in our last conversation was that I would be getting a prompt response. Can you give me an estimate of when we will be hearing from you?

Rufus E. Brown, Esq. Brown & Burke 85 Exchange Street, Suite 201 P.O. Box 7530

Portland, ME 04101 tele: 207-775-0265 fax: 207-775-0266

e-mail: rbrown@brownburkelaw.com

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Update on the Fox Islands Wind Project April 7, 2011

Fox Islands Wind, LLC ("FIW") finalized its \$9.5 million financing with the Rural Utilities Service in early January. The twenty year rate was locked in at 3.55%. As the interest rate is a significant driver in the average cost per kWh, the low rate will help keep costs down over the life of the wind project.

The wind project has operated pretty much as anticipated by the initial feasibility studies. In 2010, the Fox Islands Wind Project generated 12.1 million kWh which is slightly above the 11.6 million kWh projected prior to construction. The average cost of the wind generation to the Fox Islands Electric Cooperative (the "Coop") was 6.15 cents per kWh. The generation from the project exceeded expectations despite some mechanical problems in early 2010 and operation curtailments mandated by the Maine Department of Environmental Protection ("MDEP"). The mechanical problems were not uncommon for new wind installations and were addressed early on in the year.

The curtailments mandated by the MDEP have continued into 2011 as part of an ongoing regulatory compliance process that includes sound monitoring. FIW has been monitoring the sound from the turbines since November of 2009 and is now seventeen months into the compliance process that initially was supposed to last up to one year. This process continues in part because of the newness of the regulations for small scale community projects and in part due to the intervention and complaints made by the group called Fox Islands Wind Neighbors.

After nearly a year involved in the sound monitoring, regulatory review, and responding to the neighbors' complaints, the MDEP issued a preliminary finding last November that the project was out of compliance by two decibels for a 70-minute period last July. The nighttime sound limit is 45 decibels and the MDEP's sound consultant concluded that the sound levels were in the 46-47 decibel range. Although FIW's sound consultant did not agree with MDEP's methodology used in reaching its findings, in an effort to bring this compliance review to a conclusion, FIW filed a revised compliance protocol in December that would address the specific meteorological conditions that the MDEP's consultant said led to the complaint. After several months of working with the MDEP, this protocol still has not been approved and the regulatory discussions and reviews continue.

The wind project was built with the idea of keeping the price of electricity as low as possible. The extended regulatory process in which we are now engaged was not anticipated in the initial budgets and feasibility studies and has created some financial consequences. FIW has to generate the cash flow to pay lawyers and sound consultants—both its own as well as the one retained by the MDEP. After seventeen months of this regulatory review process, the total costs since November of 2009 have added up to \$365,000. When considering that FIW's total operating budget for 2011 is \$753,000 with \$50,000 included for legal and consultant expenses, it is difficult to absorb these additional costs and continue to keep the price of generation around the anticipated 6 cents per kWh level.

In order to fund this process, FIW has provided notice to the Coop that it will be necessary to implement a 1 cent per kWh adder to the costs of power generated from the wind project. This increase will generate an additional \$118,000 in annual cash flow for FIW. On average, this increase in power costs will add another \$5.59 per month to the average residential bill or an estimated increase of 5% to the overall electric rates. While initial projections see this adder existing for approximately two years, the period of time for which it will be applied depends on the level and timing of the regulatory review going forward.

FIW and the Coop hope that the regulatory compliance process can be brought to conclusion in the near future, but at this time the timeline is uncertain. In the meantime, we look forward to continuing to update ratepayers on relevant decisions and general turbine operation.



HISTORY OF FOX ISLAND WIND COMPLIANCE ISSUES

- 1. The license for the Fox Islands Wind Project was issued to Fox Islands Wind ("FIW"), a subsidiary of Fox Islands Electric Cooperative ("FIEC"), by the Maine Department of Environmental Protection (the "DEP") on June 5, 2009.
 - 2. The Project began operations on October 30, 2009.
- 3. Immediately upon the commencement of operations, many of those living close to the Project, loosely organized as Fox Islands Wind Neighbors ("FIWN"), were subjected to excessive noise from the Project, notwithstanding the pre-operational assurances given by George Baker, CEO of FIW, that the nearby residents would not hear noise from the Project during normal operations because of masking from ambient background noise.
- 4. FIWN initially made complaints to FIW and FIEC about excessive noise from the Project.
- 5. When FIW and FIEC failed to take action to quiet the turbines of the Project, FIWN hired an attorney and an acoustical to engineer to assist it in bringing the Project into compliance with the DEP Noise Rule and the license of FIW.
- 6. Upon learning of the engagement of an attorney, FIW stated that it would thereafter refuse to cooperate with FIWN on the issue of compliance. On March 24, 2010, the Chairman of FIEC stated in a letter to a member of FIWN that it would support the decision of FIW not to allow access to sound operations and meteorological data related to the Project because FIWN had hired an attorney.
- 7. With the assistance of its acoustical engineer, FIW N took sound measurements of noise from the Project on its own and at its expense on Mar in 15-19, 2010. On April 2, 2010, FIWN submitted preliminary findings to the DEP on measurements for the evening of March 18-19, 2010, where readings showed noise exceeding the DEP Noise Rule limits. In connection with this filing, FIWN asked the DEP for assistance in getting meteorological and power output information from FIW. The requested information was never received.
- 8. On April 30, 2010, FIWN submitted formal complaints to the DEP about excessive noise from the Project for the evenings of March 18 (complaint # 1), April 23 (complaint # 2) and April 29, 2010 (complaint # 3) together with a request that the DEP require FIW to submit compliance assessment data for the proxy compliance site to ML-A (at the Webster property) as required by paragraph f of the Project's Operational Sound Measurement Compliance Protocol, revised 11/25/09.
- 9. On May 4, 2010 FIWN submitted complaints for the evenings of April 30 (complaint # 4) and May 2, 2010 (complaint # 5), again requesting compliance assessment data from FIW.
 - 10. On May 4, FIWN submitted additional complaints for April 23 (complaint # 6),

April 29 (complaint # 7), April 30 (complaint # 8), May 1 (complaint # 9), May 3 at 5.00 AM (complaint #10), May 3 at 6:00 AM (complaint # 11), May 4 at 8:00 PM (complaint # 12) and another for May 4 at midnight (complaint # 13). On May 6, 2010, FIWN filed a complaint for May 5, 2010 (complaint # 14). At this point, the DEP asked FIWN to refrain from filing additional complaints pending resolution of those submitted and FIWN complied with this request.

- 11. In the meantime, FIW resisted requests from the DEP for compliance assessment data, claiming it had "no legal obligation to produce" such data. On May 3, 2010, the DEP made a formal demand for the requested data, threatening enforcement action if FIW remained noncompliant. A copy of the DEP's May 3, 2010 demand is attached hereto as *Exhibit A*.
- 12. On May 10, 2010, FIW's attorneys responded to the DEP demand for compliance data by formulating the position that FIW was not required to submit monitoring data outside of the compliance measurements required by its license for the period May 1 to August 31. FIW claimed that it was "confused" by the request which it understood to have been instigated by a complaint about noise and that it was "not familiar with any requirement" that it submit monitoring data except for the four months identified in its license. Nevertheless, FIW promised to comply to the request in the near future. A copy of FIW's May 10, 2010 letter is attached hereto as *Exhibit B*.
- 13. On May 13, 2010, FIW sent the DEP compliance assessment data that was so incomplete as to be useless except for one day, April 29, 2010, which confirmed noise in excess of regulatory limits. FIW claimed that the data sent in was contaminated by ambient noise. It also was disclosed that George Baker, a business school professor, was overseeing the data collection, rather than an acoustical expert, in order to "save money."
- 14. On May 25, 2010, FIWN submitted two additional complaints, concerning noise levels on May 17, 2010 (complaint # 18) and May 24, 2010 (complaint # 19), which were different from previous complaints because they were taken from different locations and had audio to support them.
- 15. FIWN learned on May 28, 2010 from the DEP that FIW had submitted additional compliance assessment data that was still not in a format that could be analyzed and that the DEP's noise consultant, Warren Brown, was formulating protocols for both citizen complaints as well as for licensee responses to complaints requiring data to be submitted through acoustical engineers.
- 16. The proposed Complaint Protocols were issued June 23, 2010 and revised on July 8, 2010 after a meeting on July 1, 2010 with the DEP attended to by representatives of FIWN and FIW and Warren Brown.
- 17. FIWN submitted its first complaint under the new Complaint Protocol on July 27, 2010 for the evening of July 17-18, 2010.
 - 18. Under the new Complaint Protocol, FIW was required to submit monitoring data

to the DEP within 1 week of the filing of this complaint, but FIW completely ignored the complaint and the newly formulated Protocols involving complaints and then it disputed the requirements in the Protocols for when FIW was supposed to respond to a complaint under the Protocols, requiring still another clarification of the Protocols of August 11, 2010. It took 3 weeks for FIW to submit *partial* data to the DEP in response to the July 17-18 complaint, instead of 1 week which was the clear requirement of the original Protocols.

19. On August 19, 2010, FIWN wrote to the DEP expressing concern and frustration that, after filing 21 complaints over a five month period, FIW had still not given complete compliance assessment data on a *single complaint*, that the FIW turbines were operating as usual out of compliance with the license conditions and that no enforcement action had been taken by the DEP. FIWN wrote:

If there are to be unlimited delays while FIW refuses or cannot supply information that it is obligated to supply on a timely basis, FIWN asks that the turbines be shut off in the evenings until FIW fulfills its duties. As matters stand, my clients are being asked to suffer complaints, night after night, without any relief and FIW is being allowed to operate outside the law, month after month, with no adverse consequences whatsoever. This is clearly not right or fair to the affected citizens of Vinalhaven.

See Exhibit C

- 20. Finally, on September 8, 2010, six months after FIWN began filing complaints and ten months after FIW began operations with excessive noise, DEP consultant Warren Brown determined that the data from the July 17-18, 2010 complaint demonstrated "a significant body of consistent meteorological and sound data indicating sound levels greater than applicable limits." He concluded that "[s]ubstantial changes are recommended for FIW nighttime operations, limiting WTG sound levels at ML-A to 45 dBA." See Exhibit D.
- 21. Thereafter, for the rest of September, 2010, and all of October 2010 and most of November, 2010, the DEP worked to bring FIW into compliance with it permit without success.
- 22. During this period, on October 21, 2010 and November 15, 2010, FIW made submissions to the DEP purporting to demonstrate compliance with its license conditions by submitting twelve 10-minute measurement intervals between May 1 and August 31 during the inversion period at the approved monitoring site on Vinalhaven for the Project during operating/test conditions identified in the Operational Sound Measurement Compliance Protocol dated November 25, 2009. Since making these submissions, FIW has claimed that it should be deemed in compliance with its license regardless of the validity of complaints about compliance. FIW's position is that if it can show compliance under the conditions specified in its license, it does not have to respond to any complaints that it is not in compliance during other times or conditions. The DEP has never accepted this argument, taking the position that a license must always be in compliance with the Sound Level Limits of the DEP Noise Rule regardless of what the license says about the mechanism for the licensee making submissions to show compliance.

- 23. Because of the inability of the DEP to obtain the information requested from FIW informally, the Department sent a letter to FIW on November 23, 2010, attached hereto as *Exhibit E*, containing a determination that FIW was not in compliance for the period of July 17-18, 2010 and making a demand on FIW to submit a revised operating protocol that would demonstrate the ability of FIW to operate in compliance with it license conditions at all times.
- 24. On December 3, 2010, FIW responded to the DEP's demand letter by contesting the DEP's conclusion that there had been a showing on non-compliance during the night of July 17-18. However, to demonstrate "good faith," FIW submitted a proposal to address the claimed non-compliance by modifying its nighttime operating protocol to reduce sound levels by 2 dBA at the protected location nearest the Project, but only under the precise meteorological conditions that existed during the night when the July 17-18 complaint was made and no others. Also, this proposal was linked to another proposal by FIW to *increase* the sound levels for the Project when wind speeds are above 10 mph. See *Exhibit F*.
- 25. On December 22, 2010, the DEP requested additional data from FIW on the December 3 proposal of FIW for compliance. See *Exhibit G*.
- 26. On January 10, 2011, FIW objected that the information requested by the DEP was not properly limited to data specific to the compliance conditions specified in its license, as to which it maintained it had already demonstrated compliance.
- 27. Then on January 21, 2011, FIW asked for a 60 day extension, until March 24, 2011, of the deadline for submission of a revised operating protocol to bring the Project into compliance with its license. See *Exhibit H*.
- 28. On January 26, 2011, the DEP agreed to the requested extension under conditions, including the requirement that FIW submit to the DEP by February 11, 2011 all of the data that the DEP had been requesting. See *Exhibit I*.
- 29. On February 10, 2011, FIW did not submit the DEP the data that had been requested by the DEP, but rather complained that the DEP had not given enough detail on how it was going to analyze the requested data and complained that it needed more information on the cost of the DEP analysis. See *Exhibit J*.
- 30. The DEP responded to FIW's objections by email dated February 14, 2011, attached hereto as *Exhibit K*, to which FIW responded with a letter dated February 16, 2011 attached as *Exhibit L*, again objecting to the scope and manner of the DEP's proposed analysis and the cost thereof, demanding that these issues be resolved before it would give the data requested.
- 31. On February 18, 2011, FIWN's attorney requested a meeting with FIEC and FIW to discuss an interim agreement to turn down the wind turbines of the Project pending resolution of compliance issues between FIW and the DEP in view of the high annoyance and health problems that FIWN members have been experiencing from excessive noise from the Project.

Both entities stated that they had no interest in discussing such relief.

- 32. On March 7, 2011, in an internal email attached hereto as *Exhibit M*, DEP regulators concluded it was "fruitless to continue discussions with [FIW] about submitting data to us for further analysis."
- 33. On March 9, 2011, the DEP wrote FIW expressing regret about the refusal of FIW to cooperate in supplying data that would allow the DEP to work with FIW to formulate an appropriate revised protocol to address vertical and directional wind shear to bring the Project in compliance with its license. The letter stated that the DEP would allow FIW to submit its proposed revised protocol without the benefit of the DEP input, but warned that the DEP had determined that the reason FIW was out of compliance on July 17-18, 2010 was the presence of vertical and directional wind shear and that data must be produced by FIW to assess how FIW should respond to such conditions to assure compliance. The DEP letter also clearly staked out the position of the DEP that FIW was required to be in compliance at all times, not just for certain conditions specified in its license as those which the licensee was required to address in a compliance report. See *Exhibit N*.
- 34. On March 21, 2011, FIWN representatives and their attorney travelled to Augusta for a scheduled meeting with then DEP Commissioner Darryl Brown. Commissioner Brown did not appear for the meeting, but later met with FIW and their attorneys on March 24, 2011. At that meeting, then Commissioner Brown overrode the position of the DEP's professional staff and expert consultant and stated that the DEP would accept a revised protocol that was limited to the specific conditions giving rise to the July 2010 complaint without addressing non-compliance caused by wind shear in other conditions. This position was set forth in a letter from the DEP to FIW dated March 25, 2011, attached hereto as *Exhibit O*. In this letter the DEP stated that FIW must submit a revised protocol by April 11, 2011.
- 35. On April 11, 2011 FIW submitted the same revised protocol that had been rejected by the DEP in December 2010. See *Exhibit P*.
- 36. In response, the DEP sent a Draft Order dated April 28, 2011 setting forth revised protocols that the DEP considered necessary to address non-compliance by FIW. See *Exhibit Q*.
- 37. FIW has informed the DEP that the DEP Draft Order is "unworkable' and it does not intend to agree to it.
- 38. Throughout this period of over 9 months since FIWN submitted the complaint for the night of July 18-19, 2010 and the 7 months from the time that the DEP determined that this complaint did in fact show non-compliance, and during the last 4 months when FIW has refused data requested by the DEP to analyze the conditions under which non-compliance is likely to occur, FIW has done nothing to reduce the excess noise.





STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

DAVID P. LITTELL

COMMERCIONER

JOHN ELIAS BALDACCI CONTRACA

May 3, 2010

Mr. Thomas Doyle, Esq. Pierce Atwood, LLP One Monument Square 7th Floor Portland, ME 04101

RE: Fox Islands Wind, LLC;

Demand for post-construction monitoring data

Dear Mr. Doyle:

I am writing as a follow-up to our telephone conversation of April 13, 2010, during which you indicated that Fox Islands Wind, LLC (FIW) has no legal obligation to produce existing postconstruction sound monitoring data for its wind energy development located in Vinalhaven, Maine. This letter explains both the Department's legal entitlement to the data and formally requests that FIW produce the data within ten (10) days.

Department Order #L-24564- ES-A-N, requires that FIW operate in compliance with the noise standards set forth in the Site Location of Development Rules, Chapter 375 §10. To that end, the Order-in reliance on technical analysis provided by EnRad Consulting and Acentech Incorporated—anticipates the development operating at reduced generator electrical power output and turbine sound output as necessary to satisfy the applicable sound standards. This Order requires FIW to implement a compliance assessment plan to ensure the sound standards are satisfied. If compliance data indicates that the development is not complying with the noise standards, the Order requires FIW to develop and submit to the Department, for review and approval, a revised operation protocol within sixty (60) days of the Department's determination of non-compliance. The revised operation protocol must demonstrate how the development will operate in compliance with the sound standards.

The compliance assessment plan requires, among other items, that FIW submit to the Department, collected compliance assessment data "following any noise related complaints." As you know, the Department has received complaints from Vinalhaven residents regarding the sound generated by the development. Therefore, on this basis alone, the compliance assessment plan now requires FIW to submit its compliance assessment data to the Department. Additionally, 38 M.R.S. § 347-C provides the Department with authority to inspect records relevant to any regulated activity to determine compliance with state law and conditions attached to an order. I note this only for context, since your anticipated cooperation will make it

unnecessary for the Department to rely upon statutory inspection and entry authority, or to pursue other more intrusive remedies that are available under these circumstances.

For these reasons, FIW is required to submit to the Department, compliance assessment data with respect to wind turbine sound, generator electrical power output, and meteorological measurements. Please submit this data collected March 18 through 19, 2010, and April 23 and 29, 2010, to my attention within 10 days of receipt of this letter. I look forward to your cooperation in this matter so that both the Department and FIW can use their respective resources to address the noise complaint quickly and responsibly.

Thank you for your attention to this matter. Please contact me at 446-2564 if you have any questions.

Sincerely,

Bedy Blais

Becky Blais, Project Manager

Jerry Reid, AAG, Chief of Natural Resources Division cc:

Amy B. Mills, AAG

Jim Cassida, Division Director, DLRR

George Baker, CEO, FIW





Thomas R. Dovle

One Monument Square Portland, ME 04101

207-791-1214 voice 207-791-1350 fax tdoyle@pierceatwood.com pierceatwood.com

MAY 1 7 2010

May 10, 2010

Becky Blais
Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017

RE:

Fox Islands Wind, LLC

Demand for Post-construction Monitoring Data

Dear Becky:

I write in response to your letter of May 3, 2010. In that letter you request for the days of March 18 and 19, and April 23 and 29 "compliance assessment data with respect to wind turbine sound, generator electrical power output, and meteorological measurements."

Previously, in an April 12, 2010 telephone conversation, we discussed the Department's March 30 email request for post-construction monitoring data collected by Fox Islands Wind, LLC ("FIW") up until that time. You explained that the Department had received a request from a third party for FIW monitoring data the Department had in its possession. Since the Department did not have any such monitoring data, you explained that the Department was requesting that FIW provide any data it had collected so that the Department could, in turn, provide those data to the requesting person.

In light of this explanation as to why the Department was requesting data collected by FIW, I expressed my confusion. Since the Operational Sound Measurement Compliance Protocol, dated 11/25/09, developed by the Department's expert, approved by the Department and incorporated into FIW's permit, calls for compliance measurements to be taken between May 1 and August 31 during the inversion period, FIW, understandably, had not yet submitted any monitoring data to the Department. I explained FIW's commitment to following the Protocol, but that I was not familiar with any requirement in the Protocol that FIW submit all monitoring data to the Department, even if outside the specified compliance monitoring period. That this request was prompted by a third party, not by the Department, certainly didn't change the analysis.

In your May 3, 2010 letter, the Department requests data collected on four specific days in March and April. For the first time the Department offers, as the basis for its request, the fact that the Department received specific complaints about the sound generated by the turbines on

Becky Blais, DEP May 10, 2010 Page 2

those dates. Subsequently, in two separate emails you have sent me on May 5, 2010, the Department has requested monitoring data for the additional dates of April 30, May 1, May 3, and May 4. Our understanding is the Department received complaints about sound levels on these dates as well.

FIW will be providing the Department with the requested compliance assessment sound data, turbine power output data, and wind speed and direction data for the following days: March 18, March 19, April 23, April 29, April 30, May 1, May 3, and May 4. Currently, FIW is compiling this information. The Department should understand that most of this data does not represent data collected during the specified time period or during the specified weather conditions set forth in the Operational Sound Measurement Compliance Protocol, dated 11/25/09.

I hope you will find this information helpful.

Sincerely,

Thomas R. Doyle

cc:

George Baker, FIW Jerry Reid, AAG Amy Mills, AAG Jim Cassida, DEP



BROWN & BURKE

Attorneys at Law 85 EXCHANGE STREET - P. O. BOX 7530 PORTLAND, MAINE 04112

www.brownburkelaw.com

TELEPHONE (207) 775-0265 FACSIMILE (207) 775-0266

RUFUS E. BROWN M. THOMASINE BURKE

August 19, 2010

VIA email and U.S. Mail

Becky Blais, Project Manager
Division of Land Resource Regulation
Bureau of Land & Water Quality
Department of Environmental Protection
312 Canco Road
Portland, ME 04103

Re: Complaint and Compliance Protocols for Vinalhaven

Dear Becky:

I am writing on behalf of FIWN to express continuing concern about the Complaint/Compliance Protocols for the FIW Project on Vinalhaven.

The bottom line is this: there have been serious complaints from residents of Vinalhaven about the FIW Project since it began operating at the end of October 2009. Since my involvement representing FIWN, complaints were forwarded to the Department beginning in March, 2010, showing sound measurements in excess of the regulatory limits and now, five months later, no action has been taken by the Department to require that the turbines be quieter, no action has been taken by FIW to make the turbines quieter, and FIW has not even given complete met, operational and noise data for a single complaint. FIW has alternatively refused to cooperate, given incomplete or no data or delayed and delayed. In the meantime my clients continue to suffer from excessive noise.

Let me review what has happened to date.

This Spring, FIWN submitted 19 complaints with accompanying noise measurements showing that FIW was exceeding the Department's noise limits of 45 dBA. At one point in the process, the Department asked FIW for met and operational and noise data for periods when there were complaints. FIW refused, claiming it had no legal obligation to provide such data. You made it clear in a letter, dated May 3, 2010, to Mr. Thomas Doyle, FIW's attorney, that there was such an obligation and gave FIW 10 days to supply data for complaints for March 18, and March 19 and April 23. On May 13, 2010, FIW CEO George Baker submitted partial data and no data at all except for one of the 3 complaints. He explained that he was doing the work himself, rather than using Acentech, in order to save money.

Becky Blais, Project Manager August 19, 2010 Pg. 2

Then, on June 24, George Baker informed the Department that he could not provide data on any of the other of the 19 complaints because of technical problems with the data collection process.

Then the Department asked FIWN to stop sending complaints until the Department could determine the Protocols for complaints and compliance. A protocol was drafted dated June 23, 2010, a meeting was held with the Department and Warren Brown on July 1, 2010 and the Protocols were revised on July 8. FIWN believes these Protocols set unfair technical and financial burdens on them, for reasons set forth in my letter of July 16, but still FIWN has endeavored to comply with the Protocols to the best of its abilities.

That has not been the case for FIW, which failed to comply, indeed completely disregard of the very first complaint (July 17-18) sent to the Department by FIWN under the new Protocols. Amazingly, FIW's attorney claimed that noise data did not have to be submitted to the Department within 1 week on the receipt of a complaint under the Protocols, notwithstanding the clear statement in the July 8 version of the Protocols that such data was to be supplied in 1 week. FIWN submitted the July 17-18 complaint to the Department on July 27th and the Department forwarded it to FIW on July 28 and FIW simply ignored the procedure, not having given any data at all as of August 11.

On August 11, 2010, you instructed FIW's attorney that the Protocol meant what it said and what it said was that FIW is required to respond with all data (met, operational and noise) with 1 week of the receipt of the complaint. The Protocol was amended on August 11 to make this point even more clear. Your August 11 email gave FIW until August 13 to submit all such data by August 13.

Consistent with its prior patterns, FIW still has not complied. On August 13, 2010, FIW gave partial data to the Department, consisting of met and operational data, but no noise data. Our expert, Rick James, has examined the operational and met data and determined that it is incomplete for purposes of professional analysis and you have passed this on to FIW, giving FIW another full week to supply the missing data. So, notwithstanding the demand that all data be given by August 13, we can expect just the operational and met data to be complete, at the earliest, on August 26. It strikes us that giving FIW another full week to do what it should have done by August 13 sends the wrong message.

On the noise data, Mr. Baker wrote the Department on August 13 saying "[w]e will be forwarding our sound files once we have had a chance to process them." You explained to our expert, Rick James, that "I spoke with George last week and he said that the processing of the noise data is quite involved and will therefore, take longer to process." No date was specified by Mr. Baker as to when he would furnish the noise data and you have not placed any deadline on FIW for doing so. So what was originally a demand for all the data to be sent by August 13 has morphed into an open ended delay without any objection by the Department.

Becky Blais, Project Manager August 19, 2010 Pg. 3

Rick James has informed me that it is a simple matter to take noise data from a thumb drive, download it to a program to receive such data and then upload it to an excel spread sheet and then email it to the Department. He knows of no reason why this cannot be done promptly and could not have been done by August 13, unless FIW is attempting to find ways to massage the data that otherwise shows a violation of sound limits. If the delay is because of the need to provide audios files, there is no reason why the dBA data cannot be promptly submitted in the meantime. Rick also questions how FIW is submitting information. FIWN sent complaints for specific hours on one night for July 17-18, but the met and operational data submitted by FIW was for 3 full days, which is useless and time consuming for everyone involved. We ask that the Department demand from FIW that the dBA readings for the hours of the complaint on July 17-18 be sent to the Department immediately.

There is one more step to describe. It appears that the Department received a verbal complaint from a resident of Vinalhaven concerning the evening of August 16. In response to this complaint, I have learned that you wrote Mr. Baker to send "the noise data, met and operational data for this complaint to the Department within the following 2-3 weeks, as per your 8-13-10 e-mail." [Emphasis added.]. (I received this email from a third party and I will remind you of my request, made several times, that you copy me on all communications with FIW relating to noise complaints.) I am confused by this response. I am not aware of any email from Mr. Baker on August 13 stating a time frame of 2-3 weeks. The only one I have seen was his email on August 13 that it would take a while to respond with data with no date specified. Is there another email from George Baker? Are you now amending the Protocol again to say that met, operational and noise data from FIW does not need to be given in response to a complaint for "2 - 3 weeks" or is time frame different because it is a verbal complaint? Can you clarify this?

I will close where I began. It has been 5 months since FIWN began submitting noise complaints. And FIW has still not, to this date, submitted complete data as to any one of the complaints and it is of this date unclear when it will. The credibility of the Protocols is thrown into serious question by this history. If there are to be unlimited delays while FIW refuses or cannot supply information that it is obligated to supply on a timely basis, FIWN asks that the turbines be shut off in the evenings until FIW fulfills its duties. As matters stand, my clients are being asked to suffer complaints. night after night, without any relief and FIW is being allowed to operate outside the law, month after month, with no adverse consequences whatsoever. This is clearly not right or fair to the affected citizens of Vinalhaven.

Rufus E. Brown

Jim Cassida (via email and U.S. Mail)
Peggy Bensinger, Esq. (via email)
Amy Mills, Esq. (via email)
Alan Farago (via email)
Art Lindgren (via email)
Rick James (via email)





From: Sent:

Blais Becky [Becky.Blais@Maine.gov] Thursday, September 09, 2010 2:40 PM

To:

Baker, George; Richard James; Thomas Doyle; Rufus Brown; Wood, Eric W.

Cc: Subject:

Cassida, James

Attachments:

FW: July 17-18, 2010 Complaint Review EnRad Estimated Sound Levels for July 17-18, 2010 at ML-A.pdf; REVIEW data submission

July 17-18, 2010 for FIW.pdf

Becky Blais Project Manager

Maine Department of Environmental Protection Division of Land Resource Regulation

----Original Message----

From: Warren Brown [mailto:Warren Brown@umit.maine.edu]

Sent: Wednesday, September 08, 2010 11:04 AM

To: Blais Becky

Subject: July 17-18, 2010 Complaint Review

Becky,

I have reviewed the July 17 & 18 FIWN noise complaint measured in Arthur Farnham's dooryard as submitted by Rick James in "2010-7-17 2233 MLC-RJ". I have reviewed FIW data (meteorological, sound, wav. files and turbine output) for compliance proxy point ML-C on the Webster property and predictions for compliance point ML-A on the Farnham property.

10 m average wind speeds ranged from 3.5 to 5.6 mph with maximums 5.9 to 10.2 mph, which are within the compliance measurement criteria. The Farnham property ML-A location was crosswind from the turbine array center during the entire complaint period. The Webster property ML-C location was downwind for the first 30 minutes and then crosswind for the remainder of the complaint period.

Wind turbines were operating in NRO mode which limits sound power output, as follows T1 -102 dBA; T2 - 100 dBA; T3 - 102 dBA.

I do not find significant wind interference with sound data during the complaint period based on the L10 - L90 values or time stamped audio files. L10 - L90 values were predominantly 3 dBA (5-10 minute

intervals) and 4 dBA (3-10 minute

intervals). The wind sound correlation employed by Accentech to estimate wind sound was based on measurements recorded at the Farnham property during ambient measurements (fall 2008) where the anemometer was at 14ft 2in elevation above the ground and partially obstructed by the residence and a nearby tree. The ML-C anemometer is 10 m above grade in an unobstructed location (Webster property). There is insufficient information to calculate a useful wind speed/noise level correlation at ML-C based on results derived in the fall of 2008.

SDRS and tonal penalty calculations were not included in the FIW data analysis. SDRS during the complaint period occurred infrequently and applied penalties did not result in a significant change in findings. WTG 6.3kHz tonal sounds occurred

during 2300-2350hrs. (5-10 minute intervals), but applied penalties did not result in a significant change in findings.

Conclusions/Recommendations.

I find no 10 m meteorological, audible or L10-L90 basis for applying a wind speed/noise level adjustment to ML-C measurements or ML-A calculated sound levels.

I have attached measured sound levels at the Webster property (ML-C) and EnRad estimated sound levels at the property line of the Farnham property ML-A, which indicates that FIW exceeded the nighttime noise limit of 45 dBA for 7-10 minute intervals during the complaint period.

The July 17 & 18 complaint conditions were very similar with regards to surface wind speeds and WTG output or 80m wind speeds (May data) as FIWN complaints previously submitted for May 1, 4, 5, & 6 all of which reported sound levels between 46-48 dBA. Although these complaints were prior to the "FIW compliance protocol" in timing, nonetheless there exists a significant body of consistent meteorological and sound data indicating sound levels greater than applicable limits.

Substantial changes are recommended for FIW nighttime operations, limiting WTG sound levels at ML-A to 45 dBA.

A review of the Compliance-Complaint data submission requirements for Fox Islands Wind, LLC is attached. Consultants for FIW and FIWN please note items requiring your attention and submission.

Warren

Warren L. Brown Radiation Safety Officer University of Maine 5784 York Village Building 7 Orono, Maine 04469

Phone: (207) 827-6920

E-mail: warren.brown@maine.edu

STATE OF MAINE



Department of Environmental Protection



JOHN ELIAS BALDACCI GOVERNOR MON 58 JUN

Beth A, Nagusky
ACTING COMMISSIONER

Certified Mail #: 7007 0710 0003 3085 8458

November 23, 2010

Fox Islands Wind, LLC c/o Mr. George Baker 66 Main Street Vinalhaven, ME 04863

Re: DLRR Request for a Revised Operation Protocol, Fox Islands Wind, LLC, Department Order # L-24564-ES-A-N;

Dear Mr. Baker:

On July 23, 2010 the Department received a complaint alleging that the Fox Islands Wind, LLC wind power facility in Vinalhaven, Maine had failed to comply with the terms and conditions of the small-scale wind energy facility certification issued in Department Order #L-24564-ES-A-N on June 5, 2009. The complaint alleged that the facility was operating out of compliance with the 45 dBA nighttime noise standard set forth in department regulations and permit conditions during a nighttime period on both July 17, 2010 and July 18, 2010.

The Department has reviewed the complaint in accordance with the noise complaint protocol, which was agreed to by the permit holder, and Department regulations governing noise Chapter (375 § 10). Based on this review, the Department has determined that during the time period between 11 p.m. and 12:10 a.m. on July 17, 2010 and July 18, 2010, at a minimum, the Fox Island Wind facility was operating with a sound power output of 47 dBA. The Department's analysis confirms that, as required by the terms and conditions of the permit, the conditions that existed during this time period were most favorable for sound propagation and maximum amplitude modulation, and therefore were optimal for determining wind turbine sound. Further analysis of the operational, sound, and meteorological data collected during the complaint period, as well as other data collected during the period of May 1, 2010 to August 31, 2010, indicate that, at current operation levels, the facility is likely to exceed the required sound compliance level of 45 dBA when there is significant vertical and directional wind shear.

In order to resolve this matter in a manner that ensures that the project can operate in compliance with existing noise regulations and in accordance with the terms and conditions of Department Order #L-24564-ES-A-N, the Department requests that Fox Island Wind, LLC submit, within 60 days of this notice, a revised operation protocol that demonstrates that the development will be in compliance at all protected locations surrounding the development at all times, including under the specific condition identified above. This revised operation protocol must include a time frame for implementation. As discussed at our meeting on November 18, 2010, Fox Island Wind, LLC will submit a preliminary outline of a revised operation protocol by December 3, 2010. The Department will review your December 3rd submission and offer feedback by December 15, 2010 in order to facilitate your further preparation of the revised operation protocol for submission by January 23, 2011. The revised operation protocol must be submitted as a condition compliance application pursuant to special condition #8 of Department Order #L-25664-ES-A-N.

The Department views the compliance issues identified at this facility as a serious matter. Provided that Fox Island Wind, LLC submits a revised operation protocol to the Department for review and approval no later than January 23, 2011, and further provided that the revised operation protocol approved by the Department is fully implemented by Fox Island Wind LLC in a manner that ensures compliance with Department noise standards and permit conditions, the Department can resolve this matter without further action.

If you have any questions regarding this matter please contact me at 592-1864.

Thank you for your prompt attention to this matter.

Sincerely,

James Cassida, Director

James Casada

Division of Land Resource Regulation

Bureau of Land & Water Quality

cc:

Thomas Doyle, Pierce Atwood Amy Mills, OAG Rufus Brown, Brown & Burke

file



FOX ISLANDS WIND LLC 66 Main Street Vinalhaven, ME 04863

George Baker CEO (617) 320-7950

December 3, 2010

Mr. James D. Cassida, Director Division of Land Resource Regulation Bureau of Land & Water Quality Dept. of Environmental Protection 17 State House Station Augusta, ME 04333-0017

RE:

Revised Operating Protocol for Fox Islands Wind, LLC Department Order #L-24564-ES-A-N

Dear lim:

This follows up on your November 23, 2010 letter and on our November 18 meeting with you, Commissioner Nagusky and Assistant Attorney General Amy Mills,

Although, as you know, Fox Islands Wind ("FIW") and its noise consultant, Acentech, do not agree that the FIW project has exceeded the nighttime hourly sound level in its permit or in the DEP noise rules during the 70-minute July 17-18 complaint period or at any other time, to demonstrate its good faith and continued efforts to be a good neighbor, we hereby submit the enclosed outline of a Revised Operating Protocol to address the conditions identified on the first page of your November 23 letter (i.e., meteorological conditions with "significant vertical and directional wind shear") and the similar conditions discussed during our November 18th meeting – nighttime, winds out of the southwest, winds are higher at the turbine level than at the surface, and turbines operate at nearly full output.

As suggested by Commissioner Nagusky, the enclosed Revised Operating Protocol is intended to achieve the "win-win" solution discussed during the November 18 meeting in which FIW would go into further Noise Reduced Operation ("NRO") during the meteorological conditions described above (Part A in the proposed protocol), but allow FIW to remove NRO during meteorological conditions when the wind is blowing hard at the surface level (Part B of the proposed protocol), resulting

in increased non-project wind-related sounds that effectively mask project-related sounds. As promised at the meeting, we are providing this outline of a revised protocol by December 3.

We look forward to any comments you might have on this Revised Operating Protocol, which we understand we will receive by December 15 in order to facilitate final preparation of a Revised Operating Protocol for submission by January 23.

Thank you for your consideration of this revised protocol.

Very truly yours,

SPAL

George P. Baker

Enclosure

cc: Commissioner Beth A. Nagusky

Thomas R. Doyle, Esq. Eric Wood, Acentech

Revised Operating Protocol

Fox Islands Wind

Condition A: In order to address certain nighttime meteorological conditions (inversions) which led to the complaint for which this revised protocol was developed, FIW will modify its nighttime operating protocol, upon DEP approval, so as to reduce sound levels at the Farnham property line protected location by an additional 2 dBA when the following conditions exist:

- 1. Hub wind direction is between 200° and 250°, and
- 2. Ten-minute average 10-meter wind speeds are below 6 mph.

These are the conditions that applied during the 7 ten-minute periods in which the Department found total sound levels above 45 dBA during the late evening of July 17-18, 2010. During all of these periods, the wind was out of the southwest and the ten-minute average surface-level wind speeds were below 6 mph.

Condition B: Since high surface level wind speeds effectively mask the sound from the turbines, FIW will revise its nighttime operating protocol to eliminate the Noise Reduced Operation setting whenever the ten-minute average surface level wind speeds are above 10.0 mph. Analysis presented in Appendix A shows that when ten-minute average surface level wind speeds are above 10.0 mph, ambient sound levels are above 51.6 dBA at the Webster location. The sound propagation model (see appendix B) shows that the maximum sound from the turbines at this location is 44 dBA, implying that the sound of the wind alone is a minimum of 50.8 dBA at these surface-level wind speeds.

At the nearest residence, an ambient sound level of 50.8 dBA combined with the modeled turbine sound raises the total sound level by less than 1 decibel, which is below the threshold of human hearing.

Procedure: In order to comply with this revised protocol, a new 10-meter anemometer will be installed, at a location approved by the DEP, on the permit holder's site near turbine 2. Data from this anemometer will be transmitted to the turbine's SCADA system, and used as part of the program that determines when NRO is activated. General Electric has provided assurance that their system is capable of implementing this procedure.

In addition, we will be working with GE over the next month to refine the NRO settings to achieve the reductions in sound level called for by this protocol.

Compliance Assessment: In the event of a complaint about sound, the DEP may require from the permit holder evidence that this protocol was followed. Such evidence shall include operational data from the turbines, including hub-height wind speed and direction, as well as power output. Evidence that the turbines are in Noise Reduced Operation shall also be provided. In addition, data from the surface-level anemometer will be provided by the permit holder.

Appendix A

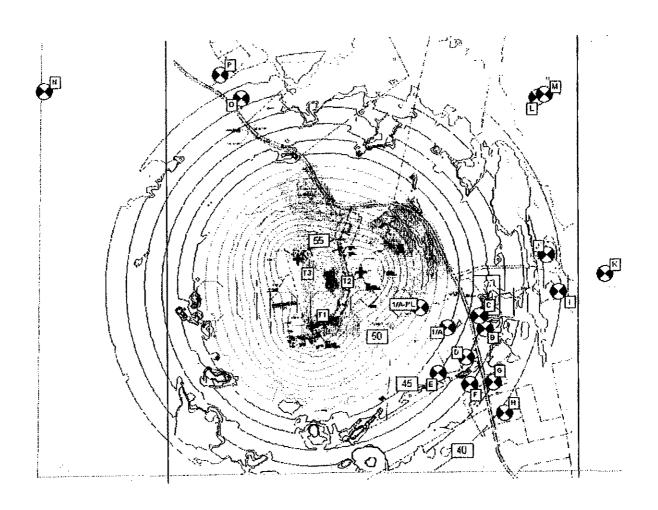
Data are ten-minute average surface-level wind speeds and ambient sound levels, taken at the Webster location between May 1, 2010 and October 31, 2010. Non-wind sounds are removed by eliminating all ten-minute periods with sound levels above 60 dBA. Data are binned by wind speed, and average Leq's are calculated.

	Ambient
	Sound
Wind	(all sources)
Speed	dBA
0	43.7
1	45.9
2	47.4
3	48.0
4	49.1
5	49.8
6	50.3
7	50.8
8	51.3
9	51.4
10	51.6
11	51.8
12	53.3
13	53.5

STOROGOGIA

Appendix B

Sound Level Contours (40 dBA to 55 dBA in 1 dBA steps) for Daytime Operation.



Notes:

- * Daytime all turbines at maximum sound output.
- * Terrain contours and foliage (5m high) over study area.
- * Ground attenuation, G = 0.0.



Cassida, James

From:

Cassida, James

Sent:

Wednesday, December 22, 2010 10:53 AM

To:

'Baker, George'

Cc:

Tom Doyle

Subject:

Wind shear info for Fox Islands

Attachments:

MDEP Recommendation for FIW Decreased Operations 12-22-2010.pdf

George:

As we discussed on the phone on Monday the Department requires additional information from Fox Islands Wind in order to establish a wind shear coefficient that can be used as the trigger mechanism by Fox Islands Wind in their revised operational protocol to be submitted to the Department for approval.

Attached is the technical recommendation from EnRad. The document is a little unclear so allow me to explain in lay terms:

The Department requests that Fox Island Wind look at all of the data collected between May 1st and October 31st and screen for 10 minute periods in which all of the following apply:

- 1. The T1 or T2 hub level average 10-minute wind speed is ≥ 7 m/s;
- 2. The wind shear exponent is ≥ 0.45 (as defined in the attachment); and
- 3. The average 10-minute wind velocity at the 10m surface anemometer is \leq 12 mph

Warren estimates that the screening will narrow down your data set to something in the range of 10 hours or so.

For all the 10 minute periods that meet the above criteria the Department requests that Fox Island place the following information in a simple excel spreadsheet and submit them for evaluation:

- 1. 10 m wind speed (10 minute average)
- 2. 80 m wind speed (10 minute average) by turbine
- 3. 80 m wind direction (10 minute average and SD) by turbine
- 4. WT power output by turbine; and
- 5. ML-C (Webster property) sound levels (50 ms, 1/3 octave)

The Department will review the spreadsheet information and determine a wind shear coefficient value that can be used as a trigger to inlitiate the Part A increased NRO operation that you have outlined to the Department.

As we further discussed on the phone on Monday, Part A of your proposal will satisfy the Department's requirement to demonstrate that the Fox Islands project can be operated in compliance with 375 (10). Once the details of the trigger, mechanism for measurement and application materials have been developed (due no later than January 23, 2011) they may be sent in to the Department as a condition compliance application. If Fox Islands wish to pursue permitting for Part B of the proposal a project amendment application must also be submitted. Rather than requiring Fox Islands to submit two application fees, condition compliance (\$135) and amendment (\$500), the department will accept both applications for a single fee of \$500. If both applications are submitted they will be reviewed concurrently and issued together.

If you would like to discuss the requirements outlined above further please give me a call at 692-1864.

Just a reminder that State Offices will be shut down tomorrow 12/23 and 12/24 is the observed Christmas Holiday so after today I will not be available until 12/27.

If I do not speak with you today have a joyous Holiday!

James Cassida, Director Division of Land Resource Regulation Bureau of Land & Water Quality James.cassida@maine.gov 592-1864



FOX ISLANDS WIND LLC 66 Main Street Vinalhaven, ME 04863

George Baker CEO (617) 320-7950

January 21, 2011

Mr. Dan Courtemanch
Project Manager
Dept. of Environmental Protection
17 State House Station
Augusta, ME 04333-0017

RE: Request for Extension, Fox Islands Wind, Department Order #L-24564-ES-A-N

Dear Dan:

Following up on our meeting with you, Jim Cassida and Warren Brown on Wednesday, Fox Islands Wind ("FIW") hereby requests a 60-day extension (i.e., to March 24) of the January 23, 2011 deadline for submission of a revised Operation Protocol during certain nighttime periods requested by the Department.

This additional period of time is necessary to: allow FIW to receive and review from Warren Brown, the Department's consultant, a detailed explanation of the process he will use to analyze and form conclusions from the additional data the Department has requested from FIW; receive and review Mr. Brown's cost estimate for this analysis; continue the good discussion we've had about wind shear and how it may affect the revised Operation Protocol, the outline for which we submitted to the Department on December 3; and refine and submit a revised Operations Protocol.

Additionally, we understand that during this extension period, the Department will also be reviewing the data that FIW submitted on October 21, 2010 and November 15, 2010 demonstrating compliance per the existing operating protocol and getting back to us with your conclusions on same.

I also wanted to inform you in writing about several other activities, and some possible changes, going on at the site during the coming weeks. As I mentioned yesterday, GE has developed new and enhanced Noise Reduced Operations settings for the turbines at FIW. GE believes that these settings will allow for increased power output at the same sound levels, or reduced sound level with the same power output. We have developed a protocol to test these new settings over the

next month. These tests will be conducted during daytime hours (when the sound level limit is 55 dBA), so there is no chance that the tests will lead to violations of the State's sound limits. These tests will also involve shutting the turbines down for some time periods. They will thus generate potentially useful data on the ambient sound levels on windy days when the turbines are not operating.

As we agreed yesterday, we will share the results of these tests with the Department before any decision is taken to change the NRO procedures in use at the site during nighttime hours.

Thank you for your consideration of this request.

Very truly yours,

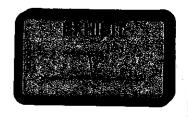
SPAL

George Baker

cc: James D. Cassida, DEP

Thomas R. Doyle, Esq., Pierce Atwood

Eric W. Wood, Acentech



STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE

January 26, 2011

JAMES P. BROOKS ACTING COMMISSIONER

Fox Islands Wind LLC c/o George Baker 66 Main Street Vinalhaven ME 04863

RE: Request for Extension to Submit Revised Operation Protocol

Dear Mr. Baker:

The Department acknowledges the receipt of your request for a 60 day extension to submit your revised Operation Protocol for the Fox Island Wind project on Vinalhaven. The purpose for the requested extension is to allow adequate time for the collection of the additional data requested by the Department and allow the Department to fully outline the methods that will be used to analyze the data and determine the range of wind shear coefficients acceptable for use in the revised operational protocol.

The Department has considered your request and grants the extension to submit the revised Operation Protocol until March 24, 2011. In order to make effective use of the extension period and ensure that a complete revised operational protocol is ready for review and approval by the Department by no later than the March 24, 2011 deadline the following timeline must be followed:

- February 4, 2011 The Department submits to Fox Islands Wind a detailed outline of the
 procedures that will be followed in the analysis of the requested data and an itemized
 estimate of the cost associated with the data analysis and review of the application
 materials.
- 2. February 11, 2011 Fox Islands Wind submits to the Department all requested information as outlined in the December 22, 2010 Email from James Cassida (attached).
- 3. February 25, 2011 The Department submits to Fox Islands Wind a report that summarizes the data analysis and which establishes a range of wind shear coefficient that will be used by Fox Islands Wind in the revised operational protocol application.
- 4. March 24, 2011 Fox Islands Wind submits a complete revised operational protocol application that utilizes the designated range of wind shear as a trigger to reduce the sound power output of the facility under this specific condition.

Note: The Department strongly recommends that between February 25, 2011 and March 24, 2011 that the Department and Fox Islands Wind meet several times to fine tune the application materials to ensure that the application submitted is acceptable to both the applicant and the Department.

In the meantime the Department will take a look at the compliance data submitted by Fox Islands Wind and provide the licensee with an analysis of the data.

The Department looks forward to working through this issue in a productive and cooperative fashion to ensure compliance of the Fox Islands Wind facility with the State's noise standards. Please feel free to contact me at (207) 446-1806 or via small at Daniel.courtemanch@maine.gov if you have any questions regarding your project.

Sincerely,

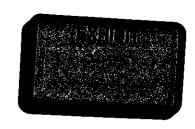
Dan Courtemanch Project Manager

Division of Land Resources Regulation

Bureau of Land & Water Quality

cc: James D. Cassida, DEP
Thomas R. Doyle, Esq., Pierce Atwood

Eric W. Wood, Acentech



FOX ISLANDS WIND LLC 66 Main Street Vinalhaven, ME 04863

George Baker CEO (617) 320-7950

February 10, 2011

Mr. Dan Courtemanch
Project Manager
Department of Environmental Protection
Bureau of Land & Water Quality
17 State House Station
Augusta, Maine 04333

RE: Detailed Outline of Procedures to be Followed in Analysis of Requested Data

Dear Dan:

This responds to your February 7 email forwarding EnRad's (Warren Brown's) "FIW compliance data evaluation proposal," which, according to your January 26 letter, was due to FIW on or before February 4.

As you know from our January 19 meeting, FIW is reluctant to submit the thousands of additional data points that have been requested without understanding both how they will be used and analyzed by the Department and its consultant, and the relationship of this analysis to the revised operational protocol that FIW (not the DEP) has been asked to submit for conditions during certain nighttime periods. FIW was supposed to receive a "detailed outline of the procedures that will be followed in the analysis of the requested data" and an "itemized estimate of the cost associated with the data analysis and review of the application materials." Since FIW is being asked to pay for the DEP's consultant's time, you agreed it was reasonable to understand what it is we would be paying for before we consented to pay for yet another analysis.

Unfortunately, after review of the half-page EnRad proposal, we do not believe the Department has provided FIW with the promised "detailed outline of the procedures that will be followed in the analysis of the requested data." From what little information has been provided, FIW is unable to judge whether the proposed procedures are appropriate or reasonable. The first two paragraphs of the proposal detail the screening procedure for the data, which we have already performed as part of our February 11 submission. The

first two sentences of the third paragraph call for the calculation of wind shear exponents, which we have also already done. The final sentence states that EnRad will "subsequently recommend conditions (10 m wind speed, hub level wind speed/direction and windshear exponent) indicating decreased operation to meet MDEP 45 dBA nighttime sound limits at ML-A." What will be the basis for this recommendation? What methods will be used to determine the need for decreased operations? What criteria will be used? None of these questions is answered. On the basis of this proposal, it is impossible that another party could follow or replicate the procedure that EnRad is using; nor would FIW (or anyone else) be able to check the reasonableness of the results of the Department's analysis. As submitted, the proposal provides no explanation, detailed procedures, or basis for how the DEP might develop recommended weather conditions and operating procedures for FIW's wind turbines.

The cost estimate provided is similarly conclusory—one sentence, with a lump sum of \$9540. This can hardly be considered "an itemized estimate of the cost associated with the data analysis and review of the application," as promised at our meeting and in your January 26 letter. In addition to not being an itemized cost estimate, it is not a complete estimate. There is no mention of the review of the FIW application materials, unless of course this is included in the lump sum amount. We have no way of knowing from the non-itemized estimate provided.

FIW is close to completing the compilation of the requested wind and sound data and it is significantly more data that the "range of 10 hours or so" estimated by EnRad per Jim Cassida's December 22 email to me. In fact, Acentech tells me the requested data encompasses thousands of 10 minute periods. Perhaps there is a way to narrow the requested data further before it is submitted. In any event, we first need to resolve the issues articulated above to understand how these data will be used and analyzed by the Department and its consultant and how EnRad's and the Department's analysis of the requested data will affect the revised operational protocol that FIW has been asked to submit.

Please call me so we can discuss next steps.

Very truly yours,

(-KU105-

George Baker Fox Islands Wind

rox islands willd

cc: James Cassida, DEP
Thomas Doyle, Esq., Pierce Atwood

Eric Wood, Acentech



Rufus Brown

From:

Courtemanch, Daniel [Daniel.Courtemanch@maine.gov]

Sent:

Wednesday, February 16, 2011 4:28 PM

To:

Rufus Brown

Subject:

FW: FIW data review

Rufus,

Here is the email you requested.

Thanks,

Dan Courtemanch

Project Manager

Maine Department of Environmental Protection Division of Land Resource Regulation (207) 446-1806

----Original Message----

From: Warren Brown [mailto:Warren Brown@umit.maine.edu]

Sent: Monday, February 14, 2011 12:30 PM

To: gbaker@hbs.edu

Cc: Cassida, James; Courtemanch, Daniel

Subject: FIW data review

George:

Please accept my apologies regarding the scant details given in my proposal for decreased wind turbine operation and process cost itemization. This preliminary review of FIW data was not intended To be an end-all, but rather a basis for a carefully informed discussion regarding decreased wind turbine operation.

- * Decreased wind turbine operation recommendations will be directed toward a demonstration of: one hour contiguous sound levels in excess of 42 dBA at ML-C (Webster property),
 - * during excessive windshear (exceeding 0.45 power law for preliminary evaluation)
- * during trends of negative correlation between windshear and/or sound level with surface wind speed for each of the 16 compass points
- * based on data filtered as in paragraphs 1 and 2, as referenced in "FIW compliance data evaluation proposal".

Regarding cost itemization:

Data filtering and SDRS and total penalty calculations - \$4770.00

- * Windshear exponent calculation per 16 compass points and recommendation formulation \$2544.00
 - * Results/recommendation demonstration preparation and MDEP/licensee meeting \$2226.00.

Please let me know if the methods outlined leave remaining questions or if the cost itemization is insufficiently detailed.

Warren

Warren L. Brown Radiation Safety Officer University of Maine 5784 York Village Building 7



FOX ISLANDS WIND LLC 66 Main Street Vinalhaven, ME 04863

George Baker CEO (617) 320-7950

February 16, 2011

Mr. Dan Courtemanch
Project Manager
Department of Environmental Protection
Bureau of Land & Water Quality
17 State House Station
Augusta, Maine 04333

RE: FIW Data Review

Dear Dan:

We received an email from Warren Brown on Monday providing a little more information about his proposal for data evaluation and future turbine operations. After reviewing this with Acentech, we still have significant concerns about how this process is proceeding.

Our primary concerns revolve around the fact that there is still no specificity about how EnRad proposes to proceed and make its recommendations: what criteria will be used to determine excessive project sound levels at ML-C; what procedures will be followed in processing the data; what specific criteria will be used to come up with a recommendation for curtailment; and what adjustments, if any, will be made for non-project sounds, in particular the sound of the wind in the foliage? We are concerned that honest disagreements could arise about each of these things, and we feel strongly that agreement about them should be reached *before* we agree to pay almost \$10,000 (of ratepayers' money) for EnRad to examine and analyze data. This small project has already spent \$60,000 on Department consultants: we cannot afford to continue to do so, especially when there is a significant likelihood that the results of this analysis will lead to more disputes and disagreement.

As was stated in my letter of February 10, what we are looking for is a proposed procedure that we, or a third party, could replicate and in so doing reproduce the results that EnRad gets from analyzing the data. On the basis of what we have been given, it

seems that EnRad is going to come up with new wind shear criteria for curtailing operations as they go along, during the process of analyzing the data. Such an undefined procedure is unacceptable to us, especially since the whole issue of wind shear was raised almost two years ago by EnRad, and dealt with in the original permit and protocol of November 2009. Why do we need to revisit and redefine the wind shear question when the project has already shown compliance under the original Operating Compliance Protocol which the Department approved? Warren stated clearly in our November 18 meeting that the problem was with periods when winds were out of the southwest. This is what our revised operations protocol submitted on December 3 addressed. It seems that this new proposal represents a giant step backward in our understanding with the Department.

We have other concerns as well. The Department's letter of November 23 requires that Fox Island Wind "submit, within 60 days of this notice, a revised operation protocol that demonstrates that the development will be in compliance at all protected locations." We did so, on December 3. Now, under the guise of comments on our December 3 submission, it seems that the Department intends to develop its own revised operational protocol, using its own consultant, paid for by FIW. This is something that was never discussed, is not contemplated in either the original permit nor in the law, and is not a process that we are at all comfortable with. We feel that this is an inappropriate process for a project of this type.

As we discussed on the phone yesterday, we understand and agree with the Department's desire to keep this process moving forward. However, we feel strongly that we should not put off discussion of potential areas of disagreement, but should engage these discussions now, before spending a great deal more money, and come to some agreement about how the huge amounts of data requested by EnRad will be used, what criteria will be applied, and how a new set of operational limits will be developed.

FIW looks forward to receiving a proposal with detailed procedures for the analysis and evaluation of the requested data and then together to reach mutually acceptable operating procedures for the WTGs.

Please feel free to call me to discuss next steps.

Very truly yours,

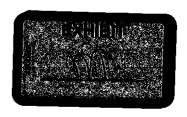
George Baker Fox Islands Wind

(Lews

cc: James Cassida, DEP

Thomas Doyle, Esq., Pierce Atwood

Eric Wood, Acentech



Courtemanch, Daniel

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Cassida, James

Sent:

Monday, March 07, 2011 9:35 AM

To:

Courtemanch, Daniel; 'Warren Brown'

Cc:

Mills, Amy; Mullen, Mike

Subject:

George:

RE: Our phone call with Warren Brown

Importance:

High

Follow Up Flag: Flag Status:

Follow up Completed

Dan, Mike, Amy & Warren:

Below is a draft Email to George Baker re: the Fox Islands Wind situation. At this point I think it is fruitless to continue discussions with them about submitting data to us for further analysis. They have clearly demonstrated a less than cooperative stance and I see nothing further to be gained at this point in trying to convince them to work with us to resolve their compliance issue. We have been as specific as we can about the analysis we intend to conduct and have made it very clear that any knowledge we glean through the analysis would simply generate further discussions with them about how best to target the right conditions and ensure operation compliance with the Chapter 375 (10) sound rules. Their continued resistance is frustrating to say the least.

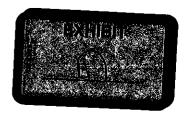
I would appreciate any comment you may have on the draft response below. I am simply putting the ball squarely in their court on this one from this point forward. The department has made a formal determination of non-compliance and based on that, per the terms of the certification, they have until March 23, 2011 (extension deadline) to submit a revised operation protocol application to the department for review and approval.

			een now and the 23rd

Jim	
<i>ŶĸŶŶĸĸŶŶŶĸŶŶĸĸŶĸĸŶĸŶĸŶŶŶŶŶŶŶŶŶŶŶŶŶŶŶŶ</i>	***************************************

It is unfortunate that we can not come to an agreement on the procedures for further analysis of the Fox Islands Wind sound compliance data. As I have stated on several occasions in the past, the Department feels that further analysis of your data would pave the way for an informed discussion about wind shear and its effects on the sound power output of the Fox Islands Wind facility. While we would have liked to be able to participate in the analysis as a partner to help solve the identified compliance issue, the Department is comfortable with Fox Islands Wind conducting the analysis on its own and submitting it in the revised operational protocol application.

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION





PAUL R. LEPAGE GOVERNOR

DARRYL N. BROWN COMMISSIONER

March 9, 2011

Fox Islands Wind LLC c/o George Baker 66 Main Street Vinalhaven ME 04863

RE: Revised Operation Protocol

Dear Mr. Baker:

It is unfortunate that Fox Islands Wind (FIW) will not submit the requested sound compliance assessment data, namely the data from May 1 to October 1, 2010. The Department understands that the basis for your refusal is that we have been unable to reach agreement on the procedures for further analysis of this data. Further, you have expressed concern about the cost associated with the Department's review of the data. As I have stated on several occasions, further analysis by the Department of your data would allow the Department to engage as a partner with FIW in an informed discussion about wind shear and its effects on the sound power output of the FIW facility, and about solving the identified compliance issue. Submission of the data is legally required, see Department Order #L-24564-ES-A-N (Order) & 38 M.R.S. § 347-C, but—to address your identified concerns-the Department is willing to allow FIW to undertake the initial analysis necessary to draft and submit, for Department review and approval, the revised operation protocol. Ultimately, however, the requested sound compliance assessment data will be required for the Department to determine compliance with the Order.

As set forth in the Department's November 23, 2010 letter to FIW, the Department has determined that the FIW facility was not in compliance with the Chapter 375 (10) noise standards during a complaint period on July 17th and 18th, 2010. The Department has determined that during this complaint period the presence of vertical and directional wind shear directly contributed to non-compliance with the noise standards. Vertical and directional wind shear, however, is present during other measurement periods in which compliance can clearly be documented, and therefore the Department believes there is a specific range of vertical and directional wind shear that contributes to the compliance issue. Further analysis of the May 1 to October 1 sound compliance assessment data is necessary in order to more precisely define the range of wind shear conditions that adversely affects sound power output.

The Department identified the potential for noise issues to arise out of vertical and directional wind shear conditions during the initial certification review, and the Order anticipates FIW operating at a reduced output as necessary to satisfy the applicable noise standards. To that end, the Order required that a compliance assessment plan be implemented, and notably, under the

terms of the Order, FIW agreed to pay the costs incurred by the Department in reviewing sound compliance assessment data associated with the compliance assessment plan.

There can be no dispute that the intent of the compliance assessment plan was to reasonably focus on the compliance measurement conditions with the greatest likelihood of containing vertical and directional wind shear. The Order's reference to those outlined conditions was never intended to narrow the conditions under which compliance with the noise standards would be required. Such an order, allowing a development to arbitrarily operate above the applicable noise standards, would be inconsistent with the Department's statutory and regulatory authority. The compliance assessment plan was simply an attempt to help focus FIW's attention on the potential worst case conditions to aid FIW's compliance efforts. While the Department appreciates the fact that FIW can demonstrate compliance under some conditions that include vertical and directional wind shear it is incumbent upon FIW to demonstrate compliance under all operational conditions, including those present on July 17th & 18th and similar periods.

The deadline for submittal of the revised operation protocol application is March 23, 2011. The Department is willing to assist FIW in any reasonable manner that would be helpful to FIW in the preparation of the application materials. I look forward to hearing from you.

Sincerely,

James Casuda

James Cassida, Director Division of Land Resource Regulation Bureau of Land & Water Quality

cc: Thomas Doyle, Pierce Atwood Eric Wood, Acentech Amy Mills, OAG file



PAUL R. LEPAGE GOVERNOR

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

DARRYL N. BROWN COMMISSIONER

March 25, 2011

Fox Islands Wind LLC c/o George Baker 66 Main Street Vinalhaven ME 04863

Re: Revised Operation and Compliance Protocol for the Fox Islands Wind Facility (FIW)-Vinalhaven, Maine

Dear Mr. Baker:

Thank you for meeting with the Department yesterday to discuss revisions to the operating protocol for the FIW facility in Vinalhaven, Maine. The Department appreciates your willingness to voluntarily address the compliance issues identified by the Department and looks forward to working with you to permit a revised operation and compliance protocol.

As we discussed yesterday, FIW is required to submit a condition compliance application (copy attached), application fee of \$135, and supporting details of a revised operation and compliance protocol by no later than Monday April 11, 2011. The supporting details submitted with the condition compliance application must include, at a minimum:

- A project description that outlines the precise conditions with which FIW intends to curtail operation of the facility. The project description must include a specific date for the completion of construction and full operation of the revised operation protocol;
- A detailed description of all equipment that will be installed to measure the identified conditions and a detailed description of their precise locations on or near the project site;
- Detailed sites plan(s) which support the revised operational protocol description and
 which identify the precise locations where equipment and associated infrastructure will
 be installed. The site plan(s) must include but are not limited to property boundaries,
 protected locations, turbine locations, anemometer locations, microphone locations,
 distances to protected locations etc;
- A detailed description of the mechanism that will be used by FIW to measure the conditions and communicate them to the physical plant of the facility. The mechanism identified must be accompanied by supporting information from the manufacturer or

Letter to Fox Islands Wind March 25, 1011 Page 2 of 2

- other qualified professional confirming that the mechanism is technically feasible and able to be implemented within the timeframe identified in the project description:
- A revised noise model that incorporates the revised operation protocol parameters and
 which clearly demonstrates that under the revised operation protocol the facility will be
 in compliance with the nighttime sound limit of 45 dBA as required in Chapter 375 (10)
 rules at all protected locations surrounding the facility. The noise model must include a
 site plan that illustrates the modeled sound power output from the facility for all areas
 surrounding the project site;
- A detailed description of the compliance measurement protocol that will be used to
 document that all facility operations do not exceed the nighttime limits of 45 dBA as
 required in Chapter 375 (10) rules; and
- A detailed description of the complaint response protocol that will be used by FIW to respond to citizen complaints regarding the sound power output of the FIW facility.

If you have any questions regarding the preparation of your application please contact Dan Courtemanch at 446-1806.

Thank you for your prompt attention to this matter.

Sincerely,

James Cassida, Director

James Cassida

Division of Land Resource Regulation
Bureau of Land & Water Quality

cc: Darryl Brown, Commissioner Thomas Doyle, Pierce Atwood Dan Courtemanch, DEP File





Thomas R. Doyle

One Monument Square Portland, ME 04101

207-791-1214 voice 207-791-1350 fax tdoyle@pierceatwood.com pierceatwood.com

April 11, 2011

James D. Cassida Dept. of Environmental Protection 17 State House Station Augusta, ME 04333-0017

RE:

Fox Islands Wind LLC – DEP License #L-24564-ES-A-N Condition Compliance Application

Dear Jim:

On behalf of Fox Islands Wind LLC (FIW), I enclose FiW's proposed Revised Operating Protocol. This Revised Operating Protocol is being submitted in accordance with Condition 8 of the above-referenced DEP License Order and with your March 25, 2011 letter. I am also enclosing a check in the amount of \$135 to cover the processing of this Condition Compliance Application.

Very truly yours,

Thomas R. Doyle

TRD/dcu Enclosures

Cc:

Commissioner Darryl Brown Patricia Aho, Esq. Teco Brown Dan Courtemanch George Baker

Eric Wood

PIERCE ATWOOD LLP

1 MONUMENT SQUARE PORTLAND, MAINE 04101-1110 207-791-1100 DISBURSEMENT ACCOUNT

64934

52-7445/2112

PAY:

One Hundred Thirty Five and 00/100 Dollars

NUMBER

000064934

DATE 04/08/2011

AMOUNT *****135.00

TO THE ORDER

Treasurer, State of Maine

PIERCE ATWOOD LLP

OF

SECURITY FEATURES INCLUDED. DETAILS ON BACK.

DEPARTMENT OF ENVIRONMENTAL PROTECTION Bureau of Land and Water Quality

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\TS#	MITTER, F
ees Paid	
Date Received	_

CONDITION COMPLIANCE APPLICATION

For Site Location, Natural Resources Protection Act & Stormwater Projects

This form shall be used to comply with a condition(s) on an Order that require approval from the Board or Department of Environmental Protection.

,Please contact the DEP for current fee schedule information. The fee schedule is updated every November 1. Fees are payable to "Treasurer, State of Maine", and MUST accompany the application.

Please type or print in black ink only

	black ink only		
1. Name of Applicant:	Fox Islands Wind LLC	5. Name of Attorney:	Thomas R. Doyle
2. Applicant's Mailing Address:	66 Main Street Vinalhaven, ME 04863	6. Attorney's Mailing Address:	Pierce Atwood LLP One Monument Square Portland, ME 04101
3. Applicant's Daytime Phone #:	617-320-7950	7. Attorney's Daytime Phone #:	207-791-1100
4 Applicant <i>e-mail</i> address (REQUIRED):	gbaker@hbs.edu	8. Attorney e-mail address (REQUIRED)	tdoyle@pierceatwood.co
9. Name of Project:	Fox Islands Wind		
9. Name of Project: 10. Name of Town when project is located:		11. County	Knox
10. Name of Town when project is located: 12. Existing DEP	re Vinalhaven	INICORIVENED IN 13. Permit condition	Knox #8
10. Name of Town when project is located:	re Vinalhaven #L-24564-ES-A-N ormation being Revise	INFORM M (ON) 13. Permit condition number(s):) sed Operating Protocol pursi 09 DEP Approval Order for I	#8

This completed application form, fee and all supporting documents summarized above shall be sent to the appropriate DEP Office in Augusta, Portland or Bangor.

Bureau of Land and Water Quality	Bureau of Land and Water Quality	Purpose of Landau 1994
17 State House Station	312 Canco Road	Bureau of Land and Water Quality
Augusta, ME 04333	Portland, ME 04103	106 Hogan Road
Tel: (207) 287-3901	· .	Bangor, ME 04401
	Tel: (207) 822-6300	(207) 941-4570

CERTIFICATIONS/SIGNATURES on PAGE 2

IMPORTANT: IF THE SIGNATURE BELOW IS NOT THE APPLICANT'S SIGNATURE, ATTACH LETTER OF AGENT AUTHORIZATION SIGNED BY THE APPLICANT.

By signing below the applicant (or authorized agent), certifies that he or she has read and understood the following:

obtaining the information, I significant penalties for subminuthorize the Department to neluding buildings, structuration provided herein.	no that, based on my inquiry of the believe the information is true, ac litting false information, including enter the property that is the subject or conveyances on the pro-	the information submitted in this document hose individuals immediately responsible for curate, and complete. I am aware there are the possibility of fine and imprisonment. I ject of this application, at reasonable hours, perty, to determine the accuracy of any
surmer, I nereby authorize applying for with this application (see #4	tuon by e-mailing the decision to	iically signed decision on the license I am the electronic address located on the front
1 株式の「一等的場合」と対象のである。 を	TitleCEO	

REVISED OPERATING PROTOCOL FOR FOX ISLANDS WIND LLC DEP License No. L-24564-ES-A-N

Fox Islands Wind LLC (FIW) hereby submits this Revised Operating Protocol pursuant to Condition No. 8 of the above-referenced DEP License Order and the March 25, 2011 letter from the Department's James Cassida.¹

Project Description:

In order to reduce the sound level from the turbines by an additional 2 dBA under the specified meteorological conditions, Fox Islands Wind will instruct General Electric to program the turbines to go into new Noise Reduced Operations configuration between 7:00 PM and 7:00 AM whenever the following conditions are met:

- 1) Wind Direction Condition. The wind direction, as measured by the wind vane operating on the nacelle of Turbine # 2, is between 200° and 250°;
- 2) Wind Shear Condition. The surface level (10-meter) wind speed, as measured by an anemometer located as shown in Attachment 2, measures a 10-minute average wind speed of 6 mph or lower.

Achieving the additional 2 dBA of noise reduction requires the use of a new NRO configuration only recently made available by GE. The new NRO settings were tested on April 3, 2011. The results of this testing confirms that these new settings reduce the sound levels from the turbines by an additional 2-3 dBA below the current nighttime NRO configuration. The attached report from Acentech (Attachment 1) documents these findings.

The present capabilities of the GE turbine control system include the ability to place the turbines into NRO settings based on time of day, hub-height wind speed, and hub-height wind direction. They do not include the ability to automatically place the turbines into NRO based on an external signal, such as that from a surface-level anemometer. At present, the only way that curtailment during high wind shear can be achieved is through manual adjustments done by GE at their Network Operations Center. This would involve significant expense for FIW.

GE has stated that the ability to automatically alter NRO settings based on an external signal will be available within a year. Until this capability is available, FIW will achieve the requested 2 dBA sound reduction by placing the turbines into the new NRO configuration during the nighttime whenever meteorological conditions satisfy the Wind Direction Condition regardless of the Wind Shear Conditions. This will result in more curtailment than is required to meet the standard.

As indicated in prior meetings and in previous correspondence, FIW and its noise consultant, Acentech, Inc., do not agree that the FIW project has exceeded the nighttime hourly sound level in its permit or in the DEP noise rules during the 70-minute July 17-18, 2010 complaint period, or at any other time. Nevertheless, to demonstrate its good faith and continuing efforts to be a good neighbor, FIW is submitting this Revised Operating Protocol.

The noise reduction will be achieved by notifying the General Electric Network Operations Center of the revised NRO configuration. The new conditions under which NRO is to be implemented will be programmed into the site-specific SCADA (Supervisory Control and Data Acquisition) system that controls the turbines. Confirmation that the correct settings are in place will achieved by monitoring of the operational logs produced automatically by the SCADA system.

The new NRO conditions and configuration will be put in place within one week of the Department's approval of this revised operating protocol.

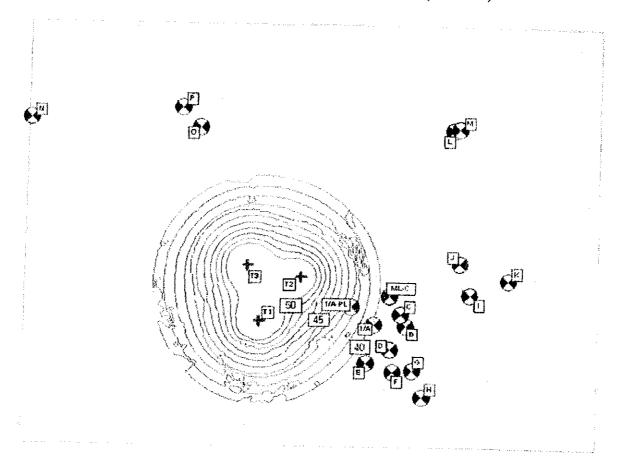
Once the capability to adjust NRO settings from an external signal is made available by GE, a MadgeTech Wind101A Wind Speed Data Logging system (or equivalent) will be installed at the location shown in Attachment 2. This system has integral serial communications that can be used as input into the SCADA system in the turbines. (See Specifications Sheet, Attachment 3.) General Electric will identify the detailed requirement for this data interface when it is available.

Site Plan:

A detailed site plan is included as Attachment 2.

Revised Noise Model:

Sound Level Contours (40 dBA to 50 dBA in 1 dBA steps) for Nighttime Operation with New Supplemental NRO Mode (4/6/2011) - 1



Notes:

- * Nighttime with WTGs in New Supplemental NRO Mode
- * Terrain contours and foliage (5m high) over study area
- * Ground attenuation, G = 0.0

Tabulated below for the nearest protected locations are modeled sound levels with the revised new Noise Reduced Operation modes. These tabulated results clearly demonstrate that under the revised operation protocol the facility will be in compliance with the nighttime sound limit of 45 dBA at all protected locations surrounding the facility.

Location	Revised NRO
1/A	40
В	38
C	38
D	38
Е	39
F	37
G	36
H	< 36
I	< 36
J	< 36
K	< 36
L	< 36
M	< 36
N	< 36
0	36
P	< 36
1/APLine	43
ML-C	40

Compliance Measurement Protocol:

The Operational Sound Measurement Compliance Protocol to be used is set forth in Attachment 4. FIW is utilizing the same Operational Sound Measurement Compliance Protocol approved by the Department, dated November 25, 2009, with only minor changes. The changes to this protocol are related to the selection of the compliance location: see Attachment 5 for a "redline" of the changes. This revised compliance protocol uses the Department's approved compliance location. The measurement location is the Webster property (ML-C), and measurements at that location are adjusted for distance to the Farnham property boundary, the nearest protected location to the FIW project. Per the original November 25, 2009 Operational Sound Measurement Compliance Protocol, sound measurements will be taken between May 1 and August 31. FIW intends to measure sound up to and including August 31, 2011, and not beyond that date.

Complaint Response Protocol:

FIW intends to use the same Complaint Response Protocol that was issued by the Department in 2010, last revised August 11, 2010, a copy of which is set forth in Attachment 6. Again, FIW intends to monitor sound on a continuous basis up to and including August 31, 2011.

Conclusion

This Revised Operating Protocol, which provides for additional Noise Reduced Operation (NRO) during the above defined meteorological conditions occurring during nighttime hours

thought by DEP to be of concern, will ensure that the FIW project will continue to be in compliance with the applicable nighttime and daytime standards during all hours of operation.

Attachment 1

Acentech Report April 8, 2011 Acentech Incorporated 33 Moulton Street Cambridge, MA 02138 Telephone: 617-499-8000 Facsimile: 617-499-8074 E-mail: ewood@acentech.com



8 April 2011

Fox Islands Wind, LLC 66 Main Street Vinalhaven, ME 04863

Subject:

New Supplemental NRO mode Sound Measurement Test Results Acentech Project No. 620120

Attention:

George Baker

This letter documents the results of the tests performed by Acentech and GE at Vinalhaven for FIW on 3 April 2011. Operation of the WTGs at Vinalhaven during nighttime periods currently includes noise reduced operation (NRO) mode (-2, -4, -2). The purpose of the recent testing was to demonstrate that an additional 2 dBA of sound attenuation could be achieved in the future by operating the WTGs at further-reduced electric-power generation.

Sound measurements were made with a calibrated professional-grade sound level meter during WTG operation at:

- The current -2 NRO mode.
- The current -4 NRO mode,
- A new supplemental NRO mode, and
- WTGs not operating (background).

The WTG equivalent Leq sound levels during operation with the new supplemental NRO mode were 2 and 3 dBA lower than during operation at the current nighttime NRO mode. Sound modeling performed for the WTGs during operation with this new supplemental NRO mode show nighttime sound levels of 43 dBA or less at protected locations surrounding the facility.

A chart showing sound level contours (isopleths) during operation with the new supplemental NRO mode is attached. These new sound modeling results and revised operation protocol parameters show that the FIW WTGs will be in compliance with the nighttime sound limit of 45 dBA at all protected locations surrounding the facility.

Tabulated below for the nearest protected locations are modeled sound levels with the new supplemental NRO mode. These tabulated results clearly demonstrate that the facility can operate in compliance with the nighttime sound limit of 45 dBA at all protected locations surrounding the facility.

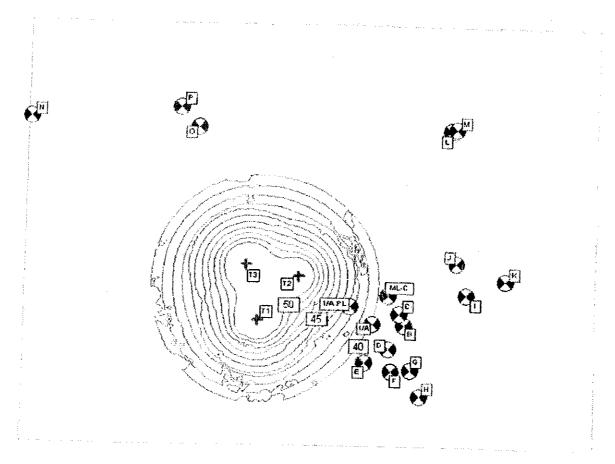
A-weighted Sound Levels (dBA) at Protected Locations during Operation with new Supplemental NRO Mode

¥	new
Location	supplemental
	NRO mode
1/A	40
В	38
C	38
D	38
Е	39
F	37
G	36
H	< 36
I	< 36
J	< 36
K	< 36
L	< 36
M	< 36
N	< 36
0	36
P	< 36
1/APLine	43
ML-C	39

Sincerely yours,

Eric W. Wood

Sound Level Contours (40 dBA to 50 dBA in 1 dBA steps) for Nighttime Operation with New Supplemental NRO Mode (4/6/2011) - 1



Notes:

- * Nighttime with WTGs in New Supplemental NRO Mode
- * Terrain contours and foliage (5m high) over study area
- * Ground attenuation, G = 0.0

Attachment 2

Site Plan

Current microphone and 30' anemometer located ML-C is also a protected location 1/A PL is the closest protected location at ML-C Notes: NORTH HAVEN RD. GRAPHIC SCALE THE WALL Cheriff, the PARTIE CONTROL Transport

Attachment 2: Site Plan

Attachment 3

Specifications Sheet
MADGETECH Wind Speed Data Logger

WIND 101A WIND SPEED DATA LOGGER



Features

- Durable Housing for Logger
- 3-cup Anemometer
- 0 to 100 MPH (0 to 160KPH) Range
- 0.085 MPH Resolution at a 10 Second Sampling Rate
- ±2.5% Calibrated Accuracy over 10 to 100 MPH (16 to 160 KPH) Range
- 10 Year Battery Life
- 1 Second Reading Rate
- Multiple Start/Stop Function
- Ultra High Speed Download
- 500,000 Reading Storage Capacity
- Battery Life Indicator
- Optional Password Protection
- Field Upgradeable

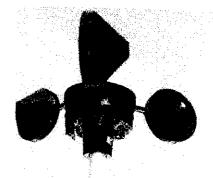
Benefits

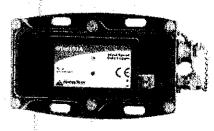
- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

Applications

- Alternative Energy Studies
- Meteorology/Climatology
- Wind Turbine Location Assessments

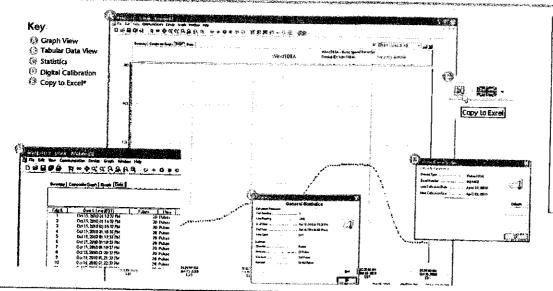
The Wind101A is a complete system to accurately measure and record wind speed. low cost wind speed recording system comes complete with a data logger, weatherproof enclosure, a three-cup anemometer and all the necessary cabling to quickly get up-and-running. The logger can record up to 500,000 readings and the storage medium non-volatile, solid state memory, providing maximum data security even if the battery becomes discharged.





The device can be started and stopped directly from a computer using our user-friendly software.

MADGETECH DATA LOGGER SOFTWARE



Software Features:

- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Data table view
- Automatic report generation
- Summary view
- Multilingual

WIND101A SPECIFICATIONS*

Measurement Range: 0 to 100 mph (0 to 45 m/s)

Resolution: 0.085 mph at 10 second reading

interval

Accuracy: ±2.0 mph from 0 to 10 mph

±2.5% of reading from >10 to 100

Starting Threshold: 1.75 mph

Reading Rate: 1 reading every second to 1 every 24

Memory: 500,000 readings; software configurable

memory wrap

250,000 readings in multiple start/stop

mode

Wrap Around: Yes

Start Modes: - immediate start

· Delay start up to 18 months

Multiple pushbutton start/stop

Multiple Start/Stop Mode: Start and stop the device multiple times

without having to download data or

communicate with a PC

Multiple Start/Stop Mode To start the device:

Activation: Press and hold the pushbutton for 5

seconds, the green LED will flash during this time. The device has started logging.

To stop the device:

Press and hold the pushbutton for 5 seconds, the red LED will flash during this time. The device has stopped logging.

Real Time Recording: The device may be used with PC to

monitor and record data in real-time

LED Functionality: Green LED blinks:

10 second rate to indicate logging 15 second rate to indicate delay start

mode

Red LED blinks:

10 second rate to Indicate low battery and/

or full memory

1 second rate to indicate an alarm condition

Password Protection: An optional password may be

programmed into the device to restrict access to configuration options. Data may be

read out without the password.

Engineering Units: See the Wind101A Quick Setup Guide for

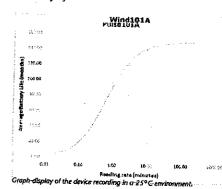
Instructions on how to program windspeed

engineering units.

Battery Type: 3.6V lithium battery included; user replaceable

Battery Life: 10 years typical, dependent upon frequency

and duty cycle



Time Accuracy: ±1 minute/month (at 20°C/68°F, stand alone

data logging)

Computer Interface: USB (interface cable included); 115,200 baud

Software: XP SP3/Vista/Windows 7

Anemometer Operating -55°C to +60°C (-67°F to +150°F);

Environment: 0%RH to 100%RH

Data Logger Operating -40°C to +80°C (-40°F to +176°F),

Environment: 0%RH to 95%RH non-condensing

Anemometer 2.1" height x 7.53" Diameter Dimensions: (54mm height x 192 mm dia.) (mount post not included)

Housing Dimensions: 2.9" x 5.8" x 1.5"

(74mm x 148mm x 39mm)

Weight: 18.1 oz (513 g)

Materials: ABS Plastic

BATTERY WARNING: WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE: BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 80°C (176°F).

*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE SPECIFIC WARRANTY AND REMEDY LIMITATIONS APPLY, CALL 1-603-458-2011 OR GO TO WWW.MADGETECH.COM FO

ORDERING INFORMATION

E E E E E E	TESCRIPTION		
		PRICE (U.S.)	Temperature Humidity
Wind101A	Wind speed recording system. Includes 3-cup anemometer with sensor connection cable (25'), data recorder, weatherproof enclosure and the IFC200 (USB) interface cable and software kit.	\$419.00	ASK ABOUT Pressure OUR OTHER pH DATA Level
Wind101A-50	Wind speed recording system. Includes 3-cup anemometer with sensor connection cable (50'), data recorder, weatherproof enclosure and the IFC200 (USB) interface cable and software kit.	\$469.00	LOGGERS Shock LCD Display Pulse/Event/Sta Current
Wind101A-100	Wind speed recording system. Includes 3-cup anemometer with sensor connection cable (100'), data recorder, weatherproof enclosure and the IFC200 (USB) interface cable and software kit.	\$519.00	Voltage Wireless Intrinsically Sa Spectral Vibrati
Wind101A-150	Wind speed recording system. Includes 3-cup anemometer with sensor connection cable (150'), data recorder, weatherproof enclosure and the IFC200 (USB) interface cable and software kit.	\$569.00	Motion
LTC-7PN	Replacement battery for Wind101A	\$10.00	

Attachment 4

Operational Sound Measurement Compliance Protocol
Revised 11/25/09
Further Revised 4/11/2011

Operational Sound Measurement Compliance Protocol

Revised 11/25/09 Further Revised 4/11/2011

Compliance should be demonstrated, based on following outlined conditions for 12, 10-minute measurement intervals per monitoring location meeting 06-096 CMR 375.10 requirements.

Extraneous sounds could potentially or do complicate routine operation compliance assessment. If the applicant must adjust for such sounds, background ambient monitoring may be necessary. If background ambient monitoring is proposed, locations, times and methodology should be determined with concurrence from the MDEP.

- a. Compliance will be demonstrated when the required operating/test conditions have been met for twelve 10-minute measurement intervals at each monitoring location.
- b. Measurements will be obtained during weather conditions when wind turbine sound is most clearly noticeable, i.e. when the measurement location is downwind of the development and maximum surface wind speeds ≤(6-12) mph with concurrent turbine hub-elevation wind speeds sufficient to generate the maximum continuous rated sound power from the wind turbines to the measurement location. Sound measurements must be taken between the timeframe of May 1st to August 31st, during the inversion period. Measurement intervals affected by increased biological activities, leaf rustling, traffic, high water flow or other extraneous ambient noise sources that affect the ability to demonstrate compliance will be excluded from reported data. The intent is to obtain 10-minute measurement intervals that entirely meet the specified criteria. A downwind location is defined as within 45° of the direction between a specific measurement location and the acoustic center of the wind turbines.
- c. Meteorological measurements of wind speed and direction should be collected using anemometers at a 10-meter height above ground at the center of large unobstructed areas and generally correlated with sound level measurement locations. Results should be reported, based on 1-second integration intervals, and be reported synchronously with hub level and sound level measurements at 10 minute intervals. The wind speed average and maximum should be reported from surface stations.
- d. Sound level parameters reported for each 10-minute measurement period, should include A-weighted equivalent sound level, 10/90% exceedance levels and ten 1-minute 1/3 octave band linear equivalent sound levels (dB). Amplitude modulation repetitive events (multiple repetitive pulses) should be characterized by event duration and amplitude. Event frequency is defined as the average event frequency +/- 1SD and amplitude is defined as the peak event amplitude minus the average minima sound levels immediately before and after the event, as measured at an interval of 50 ms or less, A-weighted and fast time response, i.e. 125 ms. For each 10-minute measurement period short duration repetitive sound events should be reported by percentage of 50 ms or less intervals for each observed amplitude integer above 4 dBA. Reported measurement

results should be confirmed to be free of extraneous noise in the respective measurement intervals to the extent possible and in accordance with (b.).

e. The measurement location is the Webster property, (ML-C), as approved by DEP in Small-Scale Wind Certification Order L-24564-ES-J-M (Corrected Order), dated March 30, 2010. Measurements collected at the Webster property are adjusted for distance to determine the sound level at ML-A (the Farnham property boundary), the nearest protected location.

Compliance data collected in accordance with the assessment methods outlined above for the compliance location must be submitted to the Department for review and approval prior to the end of 2011. Compliance testing for the authorized compliance location or alternate location in this assessment must be submitted to the Department following any noise related complaints after the commencement of operations submitted to the Department in accordance with the noise complaint protocol (revised August 11, 2010), with consideration for the required weather, operations and seasonal constraints.

Attachment 5

Redline of Operational Sound Measurement Compliance Protocol
Revised 11/25/09
Further Revised 4/11/2011

Operational Sound Measurement Compliance Protocol

Revised 11/25/09 Further Revised 4/11/2011

Compliance should be demonstrated, based on following outlined conditions for 12, 10-minute measurement intervals per monitoring location meeting 06-096 CMR 375.10 requirements.

Extraneous sounds could potentially or do complicate routine operation compliance assessment. If the applicant must adjust for such sounds, background ambient monitoring may be necessary. If background ambient monitoring is proposed, locations, times and methodology should be determined with concurrence from the MDEP.

- a. Compliance will be demonstrated when the required operating/test conditions have been met for twelve 10-minute measurement intervals at each monitoring location.
- b. Measurements will be obtained during weather conditions when wind turbine sound is most clearly noticeable, i.e. when the measurement location is downwind of the development and maximum surface wind speeds ≤(6-12) mph with concurrent turbine hub-elevation wind speeds sufficient to generate the maximum continuous rated sound power from the wind turbines to the measurement location. Sound measurements must to be taken between the timeframe of May 1st to August 31st, during the inversion period. Measurement intervals affected by increased biological activities, leaf rustling, traffic, high water flow or other extraneous ambient noise sources that affect the ability to demonstrate compliance will be excluded from reported data. The intent is to obtain 10-minute measurement intervals that entirely meet the specified criteria. A downwind location is defined as within 45° of the direction between a specific measurement location and the acoustic center of the wind turbines.
- c.—Sensitive receiver sound monitoring locations should be positioned to most closely reflect the representative protected locations for purposes of demonstrating compliance with applicable sound level limits, subject to permission from the respective property owner(s).—The sound monitoring locations are shown as Attachment A.
- ed. Meteorological measurements of wind speed and direction should be collected using anemometers at a 10-meter height above ground at the center of large unobstructed areas and generally correlated with sound level measurement locations. Results should be reported, based on 1-second integration intervals, and be reported synchronously with hub level and sound level measurements at 10 minute intervals. The wind speed average and maximum should be reported from surface stations. The meteorological site is shown as Attachment B.
- de. Sound level parameters reported for each 10-minute measurement period, should include A-weighted equivalent sound level, 10/90% exceedance levels and ten 1-minute 1/3 octave band linear equivalent sound levels (dB). Amplitude modulation repetitive

events (multiple repetitive pulses) should be characterized by event duration and amplitude. Event frequency is defined as the average event frequency +/- 1SD and amplitude is defined as the peak event amplitude minus the average minima sound levels immediately before and after the event, as measured at an interval of 50 ms or less, A-weighted and fast time response, i.e. 125 ms. For each 10-minute measurement period short duration repetitive sound events should be reported by percentage of 50 ms or less intervals for each observed amplitude integer above 4 dBA. Reported measurement results should be confirmed to be free of extraneous noise in the respective measurement intervals to the extent possible and in accordance with (b.).

ef. The measurement location is the Webster property, (ML-C), as approved by DEP in Small-Scale Wind Certification Order L-24564-ES-J-M (Corrected Order), dated March 30, 2010. Measurements collected at the Webster property are adjusted for distance to determine the sound level at ML-A (the Farnham property boundary), the nearest protected location. The compliance location should be determined in consultation with the Department, and may be adjusted as required by the Department. The compliance location shall be chosen from among the protected locations labeled A-E-on Attachment A-and shall give preference to the location that will represent the highest likelihood of noise impacts as determined by the Department. If the applicant is unable to secure landowner permission to construct a monitoring station at the required compliance location, the applicant must submit an alternative location that is in close proximity to the required compliance location and replicates the site conditions at the required compliance location to the maximum extent practicable as determined by the Department. The applicant must obtain Department approval of an alternate compliance site, if one is necessary, prior to May 1, 2010.

Compliance data collected in accordance with the assessment methods outlined above for the compliance location representative location or alternate location selected in accordance with this protocol must be submitted to the Department for review and approval prior to the end of 2011the first year of facility operations, at a minimum. Compliance testing for the authorized compliance location or alternate location in this assessment must be submitted to the Department following any noise related complaints after the commencement of operations submitted to the Department in accordance with the noise complaint protocol (revised August 11, 2010), with consideration for the required weather, operations and seasonal constraints.

[Note: Constraints at the required compliance location may make the selection of an alternative compliance location necessary. Available sites located in close proximity to the compliance location will make it difficult to replicate exactly the conditions at the original compliance location. The applicant agrees to work with the Department to make adjustments, either to the environment around the sound measurement and meteorological locations, or to the locations themselves, in order to make these locations as comparable as possible to that at the protected location. The acceptability of these adjustments will be the decision of the Department.]

Attachment 6

Complaint Response Protocol

Peer Review of data for Fox Islands Wind, LLC June 23, 2010

Revised August 11, 2010

Warren Brown of EnRAD has reviewed the Fox Island Wind project noise data collected and submitted to the department by both FIW and the public and determined that the noise data as currently submitted is not in compliance with the requirements of Chapter 375.10 (H) and as such is insufficient to demonstrate compliance or noncompliance of the Fox Island Wind project.

<u>Project compliance protocol</u>: In order to determine project compliance ALL FIW noise compliance data must be collected in accordance with the Chapter 375.10 (H) standards outlined below (emphasis added) and the following requirements:

- 1. All noise and associated data collected must be submitted to the department by an individual "qualified professional" whose scope of services includes environmental (community) acoustic measurements in accordance with 375 H (2.1). The qualified professional may use on-site assistants to collect noise and associated data provided that all on-site assistants are pre-approved by the department prior to collecting any data. Pre-approval shall include the submittal of the names of the on-site assistants, a training outline supplied by the qualified professional providing over site, and a description of the qualified professional's oversight arrangement.
- 2. All compliance data submitted by the permit holder must include an analysis prepared by the qualified professional for department review in addition to the raw data and associated specifications.
- 3. All data submittals must be accompanied by all instrument (meteorological and acoustical) specifications, limitations and certifications;
- 4. All data submittals must be accompanied by all instrument calibrations as specified in H (2.3)(a & b);
- 5. All data submittals must be accompanied by all manufacturer's windscreen performance specifications;
- 6. All data submittals must be collected at a measurement location (meteorological and acoustical), configuration and environment approved by the department;
- 7. All data submittals must be accompanied by observer field notes or in lieu of field notes, a characterization of the field conditions at the time of measurement prepared by the qualified professional based on best available data. Specifically, the department is looking for a characterization of background conditions that may otherwise affect the sound measurement such as increased biological activities, leaf rustling, traffic, high water flow or other extraneous ambient noise sources.;
- 8. All data submittals must be accompanied by concurrent time stamped audio recordings; and

- 9. All data submittals must be submitted in accordance with the reporting criteria as outlined in the document entitled "Fox Islands Wind Power Project Noise Impact Assessment-Peer Review" dated November 25, 2009.
- 10. All data submittals must be accompanied by concurrent, time stamped turbine data (meteorological/operational) + 10m surface METS. This data must include appropriate NRO setting when applicable.

Noise complaint protocol: All noise complaint data submitted by interested parties must to the extent practicable be collected in accordance with the Chapter 375.10 (H) standards and the following requirements. The department recognizes that the interested parties are not bound to the compliance protocol approved as part of the license for Fox Island Wind, LLC.; however, data collected in a manner contrary to the protocol outlined below will be difficult to effectively analyze and may be discounted by the department.

- 1. All noise complaints must be submitted to the department by an individual "qualified professional" whose scope of services includes environmental (community) acoustic measurements in accordance with 375 H (2.1). The qualified professional may use on-site assistants to collect noise and associated data provided that all on-site assistants are pre-approved by the department prior to collecting any data. Pre-approval shall include the submittal of the names of the on-site assistants, a training outline supplied by the qualified professional providing over site, and a description of the qualified professional's oversight arrangement.
- 2. All noise data collected by qualified assistants must be sent to the qualified professional for initial analysis. If the qualified professional determines that a particular data collection warrants analysis as a complaint "data of interest" the qualified professional will notify the department project manager and the permit holder to request all data, including noise data, time stamped turbine data, and 10m meteorological data for the specific period being considered. The permit holder will respond by sending the requested information to the qualified professional and the department within 7 days of receiving the request. Upon receipt of the permit holder data the qualified professional will analyze the data and determine if a formal complaint is warranted.
- 3. If a data of interest is determined to warrant a formal noise complaint, the qualified professional will file the complaint with the department along with all corroborating data and send a copy of the complaint and associated data directly to the permit holder.
- 4. Upon receipt of a formal complaint the department will forward the complaint data to its outside noise peer review agent for analysis. The outside noise peer review agent shall review the complaint data and report back to the department project manager within 14 days of receiving the complaint.
- 5. All data submittals must be accompanied by all instrument (meteorological and acoustical) specifications, limitations and certifications;
- 6. All data submittals must be accompanied by all instrument calibrations as specified in H (2.3)(a & b);

- 7. All data submittals must be accompanied by all manufacturer's windscreen performance specifications;
- 8. All data submittals must be collected at a measurement location (meteorological and acoustical), configuration and environment approved by the department;
- 9. All data submittals must be accompanied by observer field notes or in lieu of field notes, a characterization of the field conditions at the time of measurement prepared by the qualified professional based on best available data. Specifically, the department is looking for a characterization of background conditions that may otherwise affect the sound measurement such as increased biological activities, leaf rustling, traffic, high water flow or other extraneous ambient noise sources;
- 11. All data submittals must be accompanied by concurrent time stamped audio recordings; [The department would prefer that the time stamp correspond directly to the actual noise data collection. If it is not clear that the sound recording directly corresponds to the noise data collection interval the department will likely discount the complaint data.] and

H. Measurement Procedures

(1) Scope. These procedures specify measurement criteria and methodology for use, with applications, compliance testing and enforcement. They provide methods for measuring the ambient sound and the sound from routine operation of the development, and define the information to be reported. The same methods shall be used for measuring the sound of construction, maintenance and production blasting activities. For measurement of the sound of production blasting activities for comparison with the limits of subsection C(4)(c), these same methods shall be used with the substitution of the linear sound level for the A-weighted sound level.

(2) Measurement Criteria

2.1 Measurement Personnel

Measurements shall be supervised by personnel who are well qualified by training and experience in measurement and evaluation of environmental sound, or by personnel trained to operate under a specific measurement plan approved by the Board or Commissioner.

2.2 Measurement Instrumentation

(a) A sound level meter or alternative sound level measurement system used shall meet all of the Type 1 or 2 performance requirements of American National Standard Specifications for Sound Level Meters, ANSI S1.4-1983.

- (b) An integrating sound level meter (or measurement system) shall also meet the Type 1 or 2 performance requirements for integrating/averaging in the International Electrotechnical Commission Standard on Integrating-Averaging Sound Level Meters, IEC Publication 804 (1985).
- (c) A filter for determining the existence of tonal sounds shall meet all the requirements of-American National Standard Specification for Octave-Band and Fractional Octave-Band Analog and Digital Filters, ANSI S1.11-1986 for Order 3, Type 3-D performance.
- (d) An acoustical calibrator shall be used of a type recommended by the manufacturer of the sound level meter and that meets the requirements of American National Standard Specification for Acoustical Calibrators, ANSI S1.40-1984.
- (e) A microphone windscreen shall be used of a type recommended by the manufacturer of the sound level meter.

2.3 Calibration

- (a) The sound level meter shall have been calibrated by a laboratory within 12 months of the measurement, and the microphone's response shall be traceable to the National Bureau of Standards.
- (b) Field calibrations shall be recorded before and after each measurement period and at shorter intervals if recommended by the manufacturer.
- (c) The microphone shall be positioned at a height of approximately 4 to 5 feet above the ground, and oriented in accordance with the manufacturer's recommendations.

All provisions in the Department Order must be followed, with emphasis on several portions of the Small Wind Citing Certification Department Order #L-24564-ES-A-N as follows:

- 1. Extraneous sounds could potentially or do complicate routine operation compliance assessment. If the applicant must adjust for such sounds, background ambient monitoring may be necessary. If background ambient monitoring is proposed, locations, times and methodology should be determined with concurrence from the MDEP.
 - a. Measurements will be obtained during weather conditions when wind turbine sound is most clearly noticeable, i.e. when the measurement location is downwind of the development and maximum surface wind speeds \leq (6-12) mph with

concurrent turbine hub-elevation wind speeds sufficient to generate the maximum continuous rated sound power from the wind turbines to the measurement location. Measurement intervals affected by increased biological activities, leaf rustling, traffic, high water flow or other extraneous ambient noise sources that affect the ability to demonstrate compliance will be excluded from reported data. The intent is to obtain 10-minute measurement intervals that entirely meet the specified criteria. A downwind location is defined as within 45° of the direction between a specific measurement location and the acoustic center of the wind turbines.

- b. Sensitive receiver sound monitoring locations should be positioned to most closely reflect the representative protected locations for purposes of demonstrating compliance with applicable sound level limits, subject to permission from the respective property owner(s). Selection of monitoring locations should require concurrence from MDEP.
- c. Meteorological measurements of wind speed and direction should be collected using anemometers at a 10-meter height above ground at the center of large unobstructed areas and generally correlated with sound level measurement locations. Results should be reported, based on 1-second integration intervals, and be reported synchronously with hub level and sound level measurements at 10 minute intervals. The wind speed average and maximum should be reported from surface stations. MDEP concurrence on meteorological site selection is required.
- d. <u>Compliance locations should be determined in consultation with the Department.</u> Compliance data collected in accordance with the assessment methods outlined above for representative locations selected in accordance with this protocol should be submitted to the Department for review and approval prior to the end of the first year of facility operation. Compliance testing for each or any location indicated A-E in this assessment should be required following significant noise related complaints (locations A-E) after the commencement of operation, with consideration for the required weather, operations, and seasonal constraints.





STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

JAMES P. BROOKS ACTING COMMISSIONER

MEMORANDUM

TO: Interested Parties

FROM: DEP, Bureau of Land & Water Quality, Dan Courtemanch

DATE: April 28, 2011

SUBJ: Revised Draft Order, Application of Fox Islands Wind LLC, L-24564-ES-L-C

Attached is a revised draft Departmental order for the above application. The Department inadvertently sent the wrong version. All the changes are in section 4, paragraph 2 and are underlined.

Any comments on the draft order should be sent to:

Maine Department of Environmental Protection Bureau of Land & Water Quality Division of Land Resource Regulation

ATTN: Dan Courtemanch

17 State House Station

28 Tyson Drive

Augusta, ME 04333-0017

daniel.courtemanch@maine.gov

Phone 1-(207)-446-1806 Fax 1-(207)-287-7283

Comments are still due on Monday, May 2, 2011 at 5:00 P.M.



STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, ME 04333

DEPARTMENT ORDER

IN THE MATTER OF

FOX ISLANDS WIND LLC) CERTIFICATION SMALL-SCALE WIND
Vinalhaven, Knox County	
REVISED OPERATING PROTOCOL	
L-24564-ES-L-C (approval)) CONDITION COMPLIANCE

Pursuant to the provisions of Title 35-A M.R.S.A Section 3456, the Department of Environmental Protection (Department) has considered the application of FOX ISLANDS WIND LLC (licensee) with the supportive data, agency expert review comments, and other related materials on file and finds the following facts:

- 1. In Department Certification #L-24564-ES-A-N and Department Order #L-24564-NI-B-N/L-24564-VP-C-N dated June 5, 2009, the Department approved the construction of a small-scale wind energy development consisting of three 1.5 megawatt (MW) wind turbines and associated gravel pads; 2,050 linear feet of access roads; construction staging areas; and stormwater management system. The Department also approved 77,126 square feet of clearing within the 250-foot critical terrestrial habitat associated with a vernal pool for the construction of Turbine 1. The project is located on a 75.4-acre parcel off North Haven Road in the Town of Vinalhaven.
- 2. In issuing the certification, the Department concluded that certain conditions at the project site, could result in sound levels in excess of those predicted by modeling. Therefore, the Department approved the certification subject to special conditions. Specifically, special condition #8 of Department certification # L-24564-ES-A-N reads as follows: "If the compliance data indicates that, under most favorable conditions for sound propagation and maximum amplitude modulation, the proposed project is not in compliance with Department standards as described in Finding 3, within 60 days of a determination of non-compliance by the Department, the applicant shall submit, for review and approval, a "Revised Operation Protocol" that demonstrates that the project will be in compliance at all the protected locations surrounding the development."
- 3. In July 2010, the Department received a complaint alleging that the licensee was not operating the facility in compliance with the Department's nighttime noise standard of 45 dBA. The Department reviewed noise data from a nighttime period on July 17 & 18, 2010, (July 2010 complaint period), and on November 23, 2010 the Department made a determination that the licensee's operation resulted in a sound output of 47 dBA during the nighttime period. The Department's determination of non-compliance for this July 2010 complaint period identified wind direction and wind shear conditions as being the likely cause of the non-compliance, and therefore the licensee was required to submit a "Revised Operating Protocol," which would modify the way in which the facility is authorized to operate under the certification. The

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licensee is required to affirmatively demonstrate that operation of the facility can be further modified to account for the conditions present during the July 2010 complaint period.

4. In accordance with Special Condition #8, the licensee submitted a proposed "Revised Operating Protocol" for the Fox Islands Wind facility on April 11, 2011 for incorporation into the certification. The "Revised Operating Protocol" submitted by the licensee modifies the way the facility will be operated by putting in place an additional noise reduction operations (NRO) setting that will be engaged during nighttime operating conditions (7.P.M. to 7 A.M.) when the wind is blowing in the south southwesterly direction (200-250°), which is the direction the wind was blowing during the July 2010 complaint period.

Wind direction shall be measured from the wind vane operating on the nacelle of <u>Turbine #1</u>. The wind vane records wind direction every second and conveys the data to a hysteresis control module located within the site specific Supervisory Control and Data Acquisition (SCADA) system. When the recorded wind direction reaches 200° or 250° the SCADA system automatically places the turbines into NRO mode. The NRO mode will be maintained until the recorded wind direction reaches 190° or 260°.

The present capabilities of the facility's GE turbine control system include the ability to place turbines into NRO settings based on the time of day, hub-height wind speed, and hub-height wind direction. They do not include the ability to automatically place turbines into NRO based on an external signal, such as from a surface-level anemometer, which would be necessary in order to accurately calculate wind shear at the FIW facility location. Thus, at present, the only way that curtailment during wind shear conditions can be achieved is through manual adjustments done by GE at their Networks Operations Center, and the licensee stated that this service is cost prohibitive. GE has stated that the ability to automatically alter NRO settings based on an external signal will be available by the end of the 2011 calendar year. As a result, the licensee proposes that, until the remote capability to incorporate a wind shear calculation into the curtailment protocol is available, the licensee will achieve the required 2 dBA sound reduction by placing the turbines into the new NRO settings during the nighttime (7 P.M. to 7 A.M.) whenever meteorological conditions satisfy the wind direction criteria regardless of the wind shear condition.

The new conditions under which NRO will be implemented will be programmed by the licensee into the SCADA system that controls the turbines. Confirmation that the correct settings are in place will be achieved by the licensee monitoring the operational logs produced automatically by the SCADA system. Once the capability to adjust NRO settings from an external source is made available, the licensee will further incorporate a wind shear determination into the communications with the SCADA system by incorporating integral serial communications input from an R.M. Young 3101-L Wind Sentry Anemometer and a Campbell Scientific CR200X data logger or equivalent into the SCADA system of the turbines.

The licensee is proposing to install an R.M. Young 3101-L Wind Sentry Anemometer to measure the wind speed. This device has an accuracy of \pm 1.1 miles per hour (mph) and is capable of measuring wind speed up to 112 mph. The licensee is proposing to locate the anemometer as shown on the plan submitted with the condition compliance application entitled "Attachment 2: Site Plan", prepared by Sebago Technics on March 11, 2009 and amended by

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George Baker on April 26, 2011. The anemometer location will be located just off of the access road in an existing cleared area at the following GPS coordinates Latitude 44d 05' 41.96" Longitude 68d 51' 54.21". In reviewing the proposed anemometer location the Department identified concern regarding the presence of turbine wake turbulence at that location. Prior to utilizing the proposed anemometer location in the revised operation protocol, the licensee must demonstrate that the selected location is adequate for the measurement of surface level wind speeds. The licensee must submit 10 m wind speed data collected at the proposed anemometer location during the period May 1-August 31, 2011 correlated with 10 m wind speed data collected at ML-C Webster to the Department for site suitability concurrence prior to formal incorporation of the wind shear calculation data into the SCADA system. In the event that the Department determines that the new anemometer location is not acceptable, the applicant shall submit a new location to the Department for review and approval.

In addition to the revised operating protocol, the licensee submitted (1) a proposed operational sound measurement compliance protocol to revise the method by which the Department will determine if the licensee is in compliance with the standards for the control of noise; and (2) a complaint response protocol to revise the method by which FIW will collect and respond to citizen complaints associated with the ongoing operation of the FIW facility. These two proposals would replace previous protocols already incorporated into the certification. The Department has reviewed the proposed protocols and revised them as necessary to ensure compliance with the Department's Noise Regulations, 06-096 CMR 375 § 10. The revised plan entitled "Fox Islands Wind Operational Sound Measurement Compliance Assessment Plan and Complaint Response and Resolution Protocol" dated April 27, 2011 is attached and incorporated into this Order as Appendix A.

The Department has reviewed the information submitted by the licensee, and based upon that review and the conditions present during the July 2010 complaint period, the Department finds that this revised operating protocol satisfactorily addresses the requirement of Special Condition #8, provided that the licensee operates the facility in accordance with the revised operating protocols outlined herein and the Fox Islands Wind Operational Sound Measurement Compliance Assessment Plan and Complaint Response and Resolution Protocol dated April 27, 2011.

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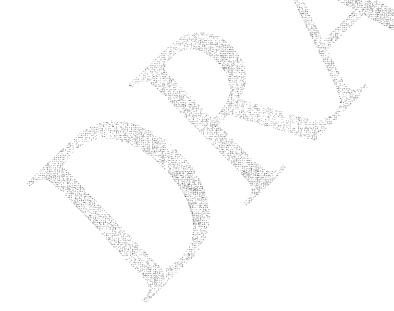
Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

Based on the facts set forth above, the Department concludes that FOX ISLANDS WIND, LLC has complied with Special Condition #8 of Department Certification #L-24564-ES-A-N provided that the licensee operates the facility in accordance with the revised operating protocol outlined herein and the Fox Islands Wind Operational Sound Measurement Compliance Assessment Plan and Complaint Response and Resolution Protocol dated April 27, 2011 attached and incorporated into this Order as Appendix A.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES...

dc/l24564lc/ats#73311



Appendix A

Fox Islands Wind

Operational Sound Measurement Compliance Assessment Plan and Complaint Response and Resolution Protocol April 27, 2011

Operational Sound Measurement Compliance Assessment Plan

The FIW sound compliance protocol dated November 25, 2009 and subsequently amended on June 23, 2010 and August 11, 2010 is repealed and replaced in its entirety by the following Operational Sound Measurement Compliance Assessment Plan (Plan), which will be effective on May 4, 2011. This Plan requires, as set forth below, that Fox Islands Wind (FIW) monitor and report the noise generated by the facility in such a manner to accurately and consistently measure wind turbine sound levels under all operational and meteorological conditions. The Plan further requires license modification in the event noise generated by the facility does not comply with the applicable noise standards.

- 1. FIW shall comply with the Maine Department of Environmental Protection (MDEP) regulations for the control of noise (06-096 CMR 375.10) and shall affirmatively demonstrate during all compliance testing periods that the FIW facility is operating in such a manner that the sound power output at the compliance testing location on the parcel owned by Arthur Farnham (tax map 9, lot 21B-1) (ML-A Farnham) is no greater than 55 dBA daytime (7 A.M. to 7 P.M.) or 45 dBA nighttime (7 P.M. to 7 A.M.) under all routine operating conditions.
- 2. Non-compliance is defined as FIW sound levels exceeding 55 dBA at ML-A Farnham or as calculated from ML-C Webster for (6) contiguous 10 min. intervals or (9) 10 min. intervals in a single day (7 A.M. to 7 P.M.) or 45 dBA at ML-A Farnham or as calculated from ML-C Webster for (6) contiguous 10 min. intervals or (9) 10 min. intervals in a single night (7 P.M. to 7 A.M.).
- 3. The compliance testing periods for the FIW facility are May 1, 2011 to August 31, 2011, the same calendar period in 2015, and then the same calendar period every five years thereafter until the cessation of operations or decommissioning of the FIW facility. The compliance testing period was determined by MDEP and represents the period of the calendar year in which local meteorological conditions exhibit the greatest likelihood of containing periods of inversion. An inversion period, characterized by higher wind speeds aloft than at ground level, generally represents the optimal time to measure wind turbine sounds. In other words, periods of inversion are the conditions under which sound levels are more likely to be in excess of those predicted. The designation of a limited compliance measurement period shall in no way absolve FIW from the responsibility of maintaining compliance with the MDEP regulations for the control of noise (06-096 CMR 375.10) under all routine operating conditions regardless of meteorological conditions or

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the time of year. The compliance testing period has been designated to focus the compliance reporting efforts of FIW to the calendar period with the greatest likelihood of obtaining ideal compliance measurement conditions.

4. The ML-A Farnham compliance testing location shall be added to the existing ML-C Webster compliance testing location for all compliance testing periods subject to the attainment of all necessary and customary permissions from the property owner. The compliance testing location at ML-A Farnham shall be inspected for suitability and approved by MDEP staff prior to the installation of any noise monitoring equipment by FIW.

[Note: If adequate permissions or site suitability for the use of the ML-A Farnham compliance testing location can not be obtained, the ML-C Webster compliance testing location shall be solely used for the collection of compliance data and all data calculations shall be back calculated to reflect the conditions at ML-A Farnham.]

- 5. FIW shall submit biweekly compliance reports to MDEP during the compliance testing period (May 1st to August 31st). The first compliance report shall be submitted on May 20, 2011 for the period May 1, 2011 to May 13, 2011 with subsequent compliance reports due in biweekly increments until the end of each compliance testing period. Compliance reports shall be a summary of the 10 min. meteorological and sound measurement findings as described in paragraph 6 below and shall include a summary of all compliance findings during that biweekly compliance period. The final, compliance report submitted for the compliance testing period (May 1st to August 31st) shall include a summary of all compliance findings during each biweekly compliance report submitted for each 2 week increment throughout the compliance testing period (May 1st to August 31st) and shall be submitted to MDEP by FIW no later than 45 days following the close of each compliance testing period. All compliance reports shall include a summary analysis of the operational, meteorological, and sound data collected during the report period as well as the specific compliance data specified in paragraph 6 below.
- 6. The Plan requires FIW to comply with the Department's regulations for the control of noise with respect to noise level output and the collection of noise data, and further includes the following specific requirements:
 - a. The noise and meteorological compliance monitoring equipment installed at the compliance testing locations (ML-A Farnham and ML-C Webster) shall remain in place and must collect continuous data 24 hours per day, 7 days per week during all periods when the facility's turbines are turning.
 - b. The compliance testing locations (ML-A Farnham and ML-C Webster) shall be maintained free of vegetation and other material greater than 2 feet in height for a 75-foot radius around the noise and meteorological monitoring equipment. FIW shall inspect and demonstrate by photographs, compliance with this requirement with each biweekly compliance report.
 - c. FIW may continue to collect 10 m meteorological measurements at the ML-C Webster compliance testing location and is not required to collect duplicate information at the ML-A Farnham compliance testing location. Results shall be reported, based on 1-second integration intervals, and be reported synchronously with hub level and sound level measurements at 10

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minute intervals. Both the wind speed average and wind speed maximum shall be reported from surface stations.

- d. Compliance reports shall, at a minimum, provide analysis of all operational conditions that exhibit wind shear conditions. Wind shear analysis shall be provided for those times in which the compliance data collected indicate the following conditions existed:
 - Maximum 10 min. mean hub level wind speed > 7 meters per second (ms) at Turbine 1 (T1), Turbine2 (T2) or Turbine 3 (T3). Maximum 10 min. mean hub level wind speed is defined as the greatest 10 min. mean wind speed as recorded at T1, T2 or T3; and
 - No greater than 6 mph mean 10 m surface (ML-C Webster) wind speed.
- e. FIW shall include the following in each compliance report for each 10-minute measurement period when the facility's turbines are turning:
 - All sound and audio (.wav) data files. Audio files will be required from both the ML-A Farnham and ML-C Webster locations and must be time stamped to coincide with the sound and meteorological data collection sequence and be of sufficient quality to allow analysis of obvious gross extraneous noise. Should any sound data collection be conducted with an attendant per Chapter 375.10, the attendant's notes and observations may be substituted for the audio files during that period;
 - All surface and 80 m wind speed/direction data (T1-T3);
 - All meteorological, sound, windscreen and audio instrumentation specifications and calibrations;
 - All data (sound & meteorological) surface and hub level wind speed requirements shall be reported both chronologically at 10 min. intervals and binned for compass quadrants (S-W, W-N, N-E, E-S);
 - All concurrent time stamped turbine operational data. The date, time and duration of all activations of the new 2 dBA NRO setting must be specifically highlighted;
 - All A-weighted equivalent sound level;
 - All 10/90% exceedance levels;
 - All ten 1- minute 1/3 octave band linear equivalent sound levels (dB);
 - All amplitude modulation repetitive events binned by amplitude integers beginning at 6 dBA and greater with number of events per amplitude. Where amplitude is defined as the peak event amplitude minus the mean minima sound levels immediately before and after the event, as measured at an interval of 50 ms or less, A-weighted and fast time response, i.e. 125 ms; and
 - Calculation and application of short duration repetitive sound (SDRS) and tonal sound penalties.
- 7. All compliance data reported shall be free of obvious gross extraneous noise including, for example; traffic, aircraft flyovers, morning chorus (birds), evening chorus (frogs), and residential sounds.
- 8. In the event of disputed FIW routine operational sound levels due to extraneous sounds the MDEP reserves the right to obtain a third party review of the conflicting data. FIW shall be responsible for reimbursing the MDEP for any expenses incurred in the initial review of all compliance data and any expense incurred if a third party review is necessary to resolve conflicting data analysis.

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9. FIW and MDEP recognize that sound compliance testing is dynamic and subject to unique influences that may require modification of the specific requirements outlined within this Plan. FIW must propose in writing in advance of implementation for MDEP review and approval any alternative testing methods. MDEP may, at its sole discretion, make changes by addendum to this Operational Sound Measurement Compliance Assessment Plan.

10. If FIW or MDEP determine that the facility is not operating in accordance with Chapter 375.10 of Department rules, FIW shall immediately cease operation of the facility under the specific conditions present during the period of non-compliance and within 30 days of the determination of non-compliance submit a revised operation protocol to MDEP in the form of an application to amend Department Certification # L-24564-ES-A-N. The FIW facility shall remain shut down under the specific conditions identified in the determination of non-compliance until such time as a new operating protocol is approved by the MDEP.

Complaint Response and Resolution Protocol

FIW shall implement the following procedure for receiving input and responding to the public to address concerns regarding the facility's compliance with applicable sound level standards. This protocol is in addition to the Plan set forth above.

The intent of the sound complaint response and resolution protocol is to:

- Provide a transparent process for reporting sound complaints to FIW;
- Provide a consistent approach to documenting and resolving complaints and to inform subsequent compliance testing efforts;
- Provide a process for informing MDEP and interested persons of sound complaints; and
- When necessary, cease the operation of the facility so that a further revised operation protocol can be put in place.

The proactive measures identified in this "Sound Complaint Response and Resolution Protocol" will facilitate a more complete understanding and evaluation of potential sound complaints and will ensure that those complaints are appropriately addressed by FIW. FIW has informed the Department that it invites the public to participate in this process to ensure that the FIW facility remains a positive contributor to the community.

- 1. FIW shall provide a contact person and 24 hour "hotline" telephone number for complaints regarding sound from the project. Contact information along with a copy of this protocol and a "Sound Complaint Record Form" will be mailed to all abutters, consistent with the definition of abutters set forth in Chapter 2 of the MDEP regulations. In addition, a sign shall be posted at the main gate to the facility notifying the public of the presence of the Complaint Response and Resolution Protocol and directing the general public to the "hotline" telephone number and where to go to get a copy of the "Sound Complaint Record Form".
- 2. FIW may request that the public fill out the "Sound Complaint Record Form" for complaints regarding sound from the project; however, completion of a written form is not required in order to make a complaint on the hotline. The purpose of the form is to ensure that a standardized set of basic information is collected for each complaint in order to facilitate analysis. The following

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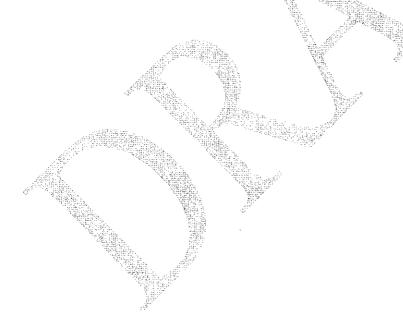
information shall be required from the complainant, either by phone or by written form, in order to process the complaint:

- Name and address of complainant;
- Date, time and duration or periods of the sound event;
- A description of the sound event, for example, the complainant may provide relative amplitude, source of annoyance, steady or fluctuating, low/mid/high or mix of frequencies/pitch, noticeable vibration, indoor or outdoor, and specific location; and
- A description of other audible sounds from sources outside and, as applicable, inside the
 dwelling of the complainant.
- 3. When a complaint is received either in writing or over the hotline, FIW shall review its data collected at the ML-A Farnham and ML-C Webster compliance testing locations and log the following information on the Sound Complaint Record Form:
 - The mean hub level wind speed/s in ms at T1, T2 and T3 during the complaint period;
 - The 10 m surface (ML-C Webster) wind speed/s in mph during the complaint period;
 - T1 wind direction during the complaint period by compass quadrants (S-W, W-N, N-E, E-S);
 - A-weighted 10 min equivalent sound level/s unadjusted for extraneous sounds during the complaint period;
 - 10 min 10/90% exceedance levels during the complaint period; and
 - Hourly 1/3 octave band sound pressure levels (dB) for the complaint period.
- 4. FIW shall maintain all complaint log information for a period of five years from the date a complaint was received. The complaint log shall include all the complaint specific information provided by the complainant and FIW as well as the final disposition or resolution provided by FIW. FIW shall post the complaint log and any associated data used in determination of the final disposition or resolution of the complaint in a place accessible to the general public via the internet and shall update the complaint log weekly. FIW shall notify all residents in Vinalhaven and MDEP of how to access the complaint log. Notification may be achieved by direct mailing or posting in a newspaper of local distribution. In addition, FIW shall create a "Sound Response Complaint Form and Follow-up Record" for each complaint received. The "Sound Response Complaint Form and Follow-up Record" for each complaint received shall be sent to the complainant and MDEP within 30 days of receiving a complaint unless otherwise approved by MDEP.
- 5. The FIW response to each complaint shall depend on the specific situation, but may include, without limitation, a visit to the location of the complaint; inspection of the operating condition of the turbines to evaluate potential upset conditions that might increase sound levels; sound monitoring by FIW; an evaluation of the complaint by FIW's sound consultant; or a formal compliance assessment. In the event that FIW conducts sound monitoring at a complaint location, FIW will provide MDEP with reasonable advance notice, allow MDEP to observe or monitor the sound monitoring, and provide MDEP with the results of the sound monitoring.
- 6. If FIW or MDEP determines that there is a consistent pattern of complaints that suggests that sound levels from the project may be exceeding applicable MDEP regulations pursuant to Chapter 375.10, FIW shall undertake a formal compliance assessment following the procedures outlined in the Plan outlined above relative to the specific complaint data in order to determine if the facility is in compliance with MDEP regulations for the control of noise (06-096 CMR 375.10) and, if

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necessary, develop and implement an appropriate modification to the operating protocol for ensuring that the project continues to meet applicable sound level limits. FIW shall provide a copy of the formal compliance assessment to the MDEP for review and concurrence prior to the implementation of any corrective action.

- 7. If, after a formal compliance assessment, FIW or MDEP determines that the facility is not operating in accordance with Chapter 375.10 of Department rules (06-096 CMR 375.10), FIW shall immediately cease operation of the facility under the specific conditions present during the complaint period or periods that led to the formal compliance assessment and within 30 days of the determination of non-compliance, submit a revised operation plan to the MDEP in the form of a project amendment application to Department Certification # L-24564-ES-A-N, to correct the non-compliance issue. The FIW facility shall remain shut down under the specific conditions identified in the complaint or complaints until such time as a new operating plan is approved by the MDEP.
- 8. FIW shall be responsible for reimbursing the MDEP for any expenses incurred in the review of any sound complaint data.
- 9. FIW and MDEP recognize that sound compliance testing is dynamic and subject to unique influences that may require modification of the specific complaint response process outlined within this complaint response and resolution protocol. Further analysis not outlined herein may be required at the sole discretion of MDEP.





DEP INFORMATION SHEET Appealing a Commissioner's Licensing Decision

Dated: May 2004

Contact: (207) 287-2811

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner: (1) in an administrative process before the Board of Environmental Protection (Board); or (2) in a judicial process before Maine's Superior Court. This INFORMATION SHEET, in conjunction with consulting statutory and regulatory provisions referred to herein, can help aggrieved persons with understanding their rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

DEP's General Laws, 38 M.R.S.A. § 341-D(4), and its Rules Concerning the Processing of Applications and Other Administrative Matters (Chapter 2), 06-096 CMR 2.24 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written notice of appeal within 30 calendar days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner and the applicant a copy of the documents. All the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

The materials constituting an appeal must contain the following information at the time submitted:

- 1. Aggrieved Status. Standing to maintain an appeal requires the appellant to show they are particularly injured by the Commissioner's decision.
- 2. The findings, conclusions or conditions objected to or believed to be in error. Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
- 3. The basis of the objections or challenge. If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
- 4. The remedy sought. This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.

- 5. All the matters to be contested. The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
- 6. Request for hearing. The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
- 7. New or additional evidence to be offered. The Board may allow new or additional evidence as part of an appeal only when the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or show that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2, Section 24(B)(5)

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

- 1. Be familiar with all relevant material in the DEP record. A license file is public information made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.
- 2. Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal. DEP staff will provide this information on request and answer questions regarding applicable requirements.
- 3. The filing of an appeal does not operate as a stay to any decision. An applicant proceeding with a project pending the outcome of an appeal runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge initiation of the appeals procedure, including the name of the DEP project manager assigned to the specific appeal, within 15 days of receiving a timely filing. The notice of appeal, all materials accepted by the Board Chair as additional evidence, and any materials submitted in response to the appeal will be sent to Board members along with a briefing and recommendation from DEP staff. Parties filing appeals and interested persons are notified in advance of the final date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision. The Board will notify parties to an appeal and interested persons of its decision.

II APPEALS TO MAINE SUPERIOR COURT

Maine law allows aggrieved persons to appeal final Commissioner licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2.26; 5 M.R.S.A. § 11001; & MRCivP 80C. Parties to the licensing decision must file a petition for review within 30 days after receipt of notice of the Commissioner's written decision. A petition for review by any other person aggrieved must be filed within 40-days from the date the written decision is rendered. The laws cited in this paragraph and other legal procedures govern the contents and processing of a Superior Court appeal.

ADDITIONAL INFORMATION: If you have questions or need additional information on the appeal process, contact the DEP's Director of Procedures and Enforcement at (207) 287-2811.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.