STATE OF MAINE KENNEBEC, ss		SUPERIOR COURT CIVIL ACTION Docket No. AP- 2011-142
FOX ISLANDS WIND NEIGHBORS, et al.,	``	
Torribbinios wind reprotes, et al.,	, 1	
PETITIONERS	í	
1 D T T T T T T T T T T T T T T T T T T	Ś	
v.	Ś	AFFIDAVIT OF
	í	JAMES CASSIDA
MAINE DEPARTMENT OF ENVIRONMENTAL	á	
PROTECTION,)	
11101201111	,	

- I, James Cassida, being first duly sworn, does depose and say as follows:
 - 1. I make this affidavit based on my personal knowledge.

RESPONDENT

2. I worked for the Maine Department of Environmental Protection for 22 years. Prior to my resignation on August 19, 2011 to work in the private sector, I was the Director of the Division of Land Resources Regulation within the Bureau of Land & Water Quality at the Maine Department of Environmental Protection (the "Department"), having been appointed to this position in 2009.

)

- 3. In my capacity as Director of the Division of Land Resource Regulation, I had supervisory responsibility for the licensing of the Fox Island Wind Project (the "Project') to Fox Islands Wind ("FIW"), issued on June 5, 2009 (the License"), and I had both direct and supervisory responsibility for the Department in its dealings with FIW on subsequent compliance issues.
- 4. When the Project was licensed, the Department was concerned that the operation of the facility could generate noise in excess of the sound level limits set forth in DEP Noise Rule, 06-096 CMR ch. 375 §10 (the "DEP Noise Rule") because of wind shear conditions that might be expected for a project located on an island in the Gulf of Maine. During the review of the license application, the Department requested that the applicant incorporate a 5 dBA safety factor in its noise prediction model, consisting of a 2 dBA margin of error for the design power output of turbines and a 3 dBA margin of error for modeling sound propagation. The 5 dBA safety factor has been used voluntarily by other recently licensed wind projects to add a level of conservatism to the prediction model as a buffer to the noise standard. Despite the request, the applicant opted to not include the 5 dBA safety factor.

- 5. The Department's concern led to the inclusion of Condition No. 8 in the License issued to FIW, stating that: "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."
- 6. Almost immediately after the Project began operations in late October/early November, 2009, the Department began receiving complaints from those living near the Project about the noise generated by the facility.
- 7. On September 9, 2010, the Department's acoustic consultant, Warren Brown, determined that a complaint filed by neighbors of the Project for the evening of July 17-18, 2010, when reviewed against the background of other sound recordings in earlier complaints, evidenced a significant body of consistent meteorological and sound data indicating sound levels greater than the applicable limits in the DEP Noise Rule.
- 8. Based on this finding, the Department was prepared to take action pursuant to 35-A M.R.S.A. §3456.3 ("Enforcement of standards") and Condition No. 8 of the Project's License to require FIW to change its operating protocols to bring the Project into compliance with the DEP Noise Rule.
- 9. Before taking such action, the Department requested the Town of Vinalhaven to confirm that it did not want to take responsibility for enforcement under 35-A M.R.S.A. §3456.3. The Board of Selectmen of the Town of Vinalhaven confirmed that it was ceding enforcement to the Department in a letter dated November 22, 2011.
- 10. On November 23, 2010, the Department wrote a Letter of Determination to FIW notifying FIW that that the Department had determined that there was a violation of the noise limits on July 17-18, 2010, and that the compliance issue was not limited to conditions on the night of the complaint because "the facility is likely to exceed the required sound compliance level of 45 dBA when there is significant vertical and directional wind shear." The letter, a copy of which is attached hereto as *Exhibit A*, required FIW to adopt an acceptable revised operating protocol as provided for in Condition No. 8 of its License. It was my intent on behalf of the Department that this letter was an enforcement action taken pursuant to 35-A M.R.S.A. §3456.3.
- 11. Following the issuance of the Letter of Determination, the Department requested FIW's cooperation to submit meteorological, operational and sound data from the Project so that the Department's consultant could further refine his understanding

- 17. Instead of submitting the requested revised operational protocol by March 23, 2011, FIW scheduled another meeting with Commissioner Brown on March 24, 2011 to further address the compliance issue. At the meeting, in addition to the Commissioner Brown, those attending were George Baker, Tom Doyle, his attorney, Deputy Commissioner Patricia Aho, the Director of the Land Bureau, Teco Brown, Assistant Attorney General Amy Mills, project manager Dan Courtemanch, Warren Brown and me. The meeting was contentious, with FIW arguing that it was only required to address the precise conditions that existed on July 17-18 in a revised operating protocol. Staff tried to explain why submittal of additional data would be beneficial in that its evaluation would likely narrow the range of wind shear that was seen as problematic. Despite assurances from Warren Brown that he believed that the range derived from just the July 17th and 18th data was artificially high and that additional data would likely narrow the range, FIW was steadfast in its resistance to submitting additional data. Eventually, the Commissioner, Deputy Commissioner Aho and Teco Brown stepped out of the room to confer privately and after a while came back and said, "this is what is going to happen." FIW is only required to address the limited conditions that exited on the night of July 17-18 in its revised protocol and then it would have to demonstrate compliance under the new protocol. FIW has 15 days to submit the required revised protocol application and the Department will process the application within 15 days of receiving it.
- 18. Following the meeting, I wrote FIW setting a deadline of April 11, 2011 for the submission of a revised operating protocol in accordance with the instructions of Commissioner Brown at the March 24 meeting. The letter further outlined in bullet format all of the required elements that were required to be included in the application.
- 19. On April 11, FIW submitted a revised operation protocol application.
- 20. As part of the application FIW submitted a revised compliance assessment plan. After reviewing the submittal staff determined that the plan, as submitted, was not adequate to address facility compliance moving forward. In response to this determination staff drafted an Operational Sound Measurement Assessment Plan and attached it as "Appendix A" to the proposed Condition Compliance Order, a copy of which is attached hereto as *Exhibit C*.
- 21. The conditions outlined in the Operational Sound Measurement Assessment Plan were determined by staff to be necessary to ensure that future operation of the facility were conducted in a manner that was compliant with the permit and the DEP noise rules.

- 22. On or about April 27, 2011, Darryl Brown resigned as Commissioner of the Department and was replaced by Acting Commissioner James Brooks.
- 23. On April 28, the Department sent out a draft of a Condition Compliance Order with the proposed Appendix A attached.
- 24. On May 2, 2011, FIW met with Acting Commissioner Brooks, together with me and other Land Bureau staff, expressing displeasure with Appendix A, claiming it was unreasonable. Acting Commissioner Brooks decided that he needed time to understand the issues and deferred any further action to a date to be determined to allow him time to get up to speed on the history and details of the project.
- 25. After a couple of weeks Acting Commissioner Brooks and I spoke and he informed me that he had discussed this matter with the Governor's Office and that based on his understanding of the matter and guidance from the Governor's Office he wanted to try to work out a compromise plan with FIW. Based on feedback provided by Acting Commissioner Brooks, I redrafted Appendix A to remove the shutdown provisions and to make other changes that would address issues FIW had raised. The goal of the revision was to attempt to work with FIW on the Condition Compliance Order and the proposed Appendix A without sacrificing the requirement that FIW effectively demonstrate future compliance through procedures that would allow the Department to meaningful assess compliance.
- 26. On June 9, 2011, FIW met again with Acting Commissioner Brooks and me and other Land Bureau staff to discuss the revised Appendix A provisions. In the meeting, FIW remained steadfast that what the Department was asking them do was unreasonable and was directly contrary to the arrangement they had made with former Commissioner Brown. At one point Acting Commissioner Brooks called a recess and pulled George Baker into a private meeting to discuss the impasse. After the private session we adjourned the full meeting and Acting Commissioner Brooks notified everyone that he would be making a ruling within the next several days.
- 27. Shortly after this meeting, Acting Commissioner Brooks resigned from the Department for a job in the private sector and was replaced by Acting Commissioner Patricia Aho.
- 28. Acting Commissioner Aho had been following the matter to some degree but needed to be briefed on the latest details. She request that Jim Brooks provide her with his notes and she would review them and determine the next course of action.
- 29. While on vacation in late June and early July, 2011 I received an email from staff letting me know that Acting Commissioner Aho was considering issuing a

Condition Compliance Order limited only to what FIW was willing to accept, namely, corrective action for the conditions that existed on July 17-18 with no Appendix A attachment further outlining a revised methodology for measuring compliance. I considered this proposed action an abdication of the Department's responsibilities with regard to compliance by FIW with the terms of its License and the DEP Noise Rule and patently unfair to the citizens of Vinalhaven who had raised legitimate concern about noise compliance. I conveyed my views to Acting Commissioner Aho in an email dated June 17, 2011, a copy of which is attached hereto as *Exhibit D*.

Dated: 12/22/11

James Cassida

STATE OF MAINE Cumberland, ss

December , 2011

Personally appeared the above-named James Cassida, and being sworn, made oath that the foregoing statements by him described are upon his own personal knowledge to be true.

Notary Public/Attorney My commission expires:

of the range of wind shear conditions in which compliance was an issue. The Department was able to determine a range of wind shear that was problematic from the limited data on July 17th and 18th, however, it was the Departments fear that the range could be artificially high and that a review of additional data would allow for a more precise determination of the range of wind shear condition that had a direct effect on compliance.

- 12. FIW never submitted the information requested by the Department.
- 13. In January 2011, Darryl Brown was appointed Commissioner of the Department.
- 14. Commissioner Brown informed me on more than one occasion that he believed Maine's environmental regulation was burdensome for businesses in Maine and that Department staff needed to be more business friendly and assist business development.
- 15. Several weeks after Commissioner Brown was appointed, I became aware that he had met with FIW and its attorney about the compliance issues identified in the November 23, 2010 letter. At the time of the meeting neither I nor any other licensing or enforcement staff within the Division of Land Resource Regulation were made aware of the meeting. In my experience this was unusual in that the Commissioner of the Department usually took great pains to avoid meeting directly with entities on enforcement issues to avoid the appearance of political influence. The practice has been for a Commissioner leave such meetings to staff. On the rare occasions when a Commissioner would meet with regulated entities on compliance issues, it was always the practice to either include staff in the meeting or, at a minimum, get briefed by staff prior to the meeting.
- 16. In response to FIW's failure to voluntarily submit the additional data requested by the Department, Department staff drafted a letter repeating the Department's determination of non-compliance during the evening of July 17-18 and the likelihood of non-compliance during other periods when there is significant vertical and directional wind shear. In the draft, the Department again requested that FIW initiate corrective action. Commissioner Brown verbally instructed staff to not send the letter and that he would instead talk to George Baker, FIW's president, and his attorney with the "thrust of the message." In order to document the instructions for the record, I paraphrased our verbal conversation in an email and placed the email in the project record. Shortly after receiving the email, Commissioner Brown instructed me to send the letter after all, which I did on March 9, 2011, a copy of which is attached hereto as *Exhibit B*. The letter set a deadline of March 23, 2011 for FIW to submit for approval a revised operation protocol.

STATE OF MAINE



Department of Environmental Protection



JOHN ELIAS BALDACCI GOVERNOR 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.

Augusta 17 State House Station Augusta, Maine04333-0017 (207) 287-7688 Fax: (207) 287-7826 Ray Bldo., Hospital St

BANGOR 106 HOGAN ROAD BANGOR ME 04401 (207-941-4570 FAX 207-941-4584

PORTLAND 312 CANCO ROAD PORTLAND, MAINE 04103 (207) 822-6300 FAX: (207) 822-6303 Presque Isle 1235 Central Drive, Skyway Park Presque Isle, Maine 04769-2094 (207) 764-0477 Fax: (207) 764-3143 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 Casuda

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

cc:

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

file

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION





DARRYL N. BROWN COMMISSIONER

PAUL R. LEPAGE GOVERNOR

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.

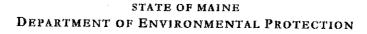
The deadline for submittal of the revised operation protocol application is March 23, 2011. The Department is willing to assist FIW in any reasonable manner that would be helpful to FIW in the preparation of the application materials. I look forward to hearing from you.

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







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 1-(207)-287-7283 Fax

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 Provironmental 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

L-24564-ES-L-C 2 of 12

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 OE 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 urbines 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 conditions.

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

L-24564-ES-L-C 3 of 12

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.

5. 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.

L-24564-ES-L-C 4 of 12

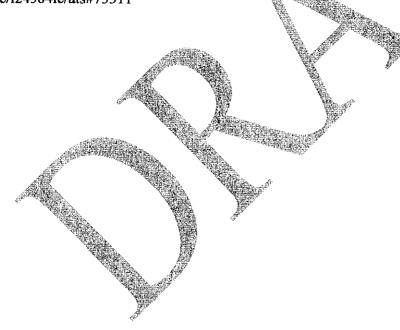
Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been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



L-24564-ES-L-C 5 of 12

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.W.) 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

L-24564-ES-L-C 6 of 12

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 MLA 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 unhing.
 - 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

L-24564-ES-L-C 7 of 12

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) and speed.
- e. FIW shall include the following in each compliance report or <u>each 10-minute measurement</u> 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 spotes 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 hib 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.

L-24564-ES-L-C 8 of 12

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

L-24564-ES-L-C 9 of 12

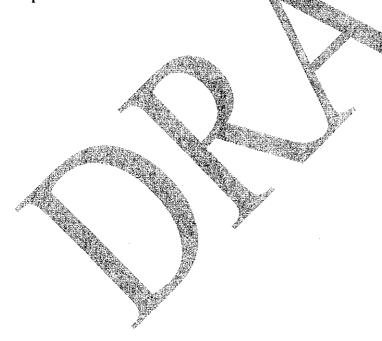
information shall be required from the complainant, either by phone or by written form, in order to process the complaint:

- 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 complaint 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

L-24564-ES-L-C 10 of 12

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 \$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 good 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 TIME IY 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 of 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.



From: Cassida, James

Sent: Friday, June 17, 2011 2:41 PM

To: Aho, Patricia

Cc: Brooks, James P; Brown, Teco; Courtemanch, Daniel; Mullen, Mike; Mills, Amy

Subject: Fox Islands Wind draft Order with the revised Appendix A

Commissioner:

Attached is the most recent draft of the Fox Islands Wind Condition Compliance Order with the revised version of Appendix A dated May 25, 2011 attached. This document was drafted in response to concerns raised by Fox Islands Wind to the original appendix A dated April 27, 2011. The compliance assessment and complaint response procedures outlined in appendix A are a necessary component of the revised operating protocol submitted by Fox Islands in response to the Department's November 23, 2010 letter of non-compliance. In order to determine if the facility is operating in compliance with Chapter 375.10 regulations under the new operations scheme the licensee <u>must</u> be required to document compliance. The protocols outlined in Appendix A document the exact procedures that must be followed by the licensee in order to satisfactorily document facility compliance. Further, given the complaint history of this facility it is absolutely necessary that the Department revise the complaint response protocol originally agreed to by the licensee. The existing complaint procedure puts all of the burden to document potential violations on the neighbors to the project which is patently unfair and inappropriate. The revised Appendix A simply requires the licensee to receive and resolve complaints, a responsibility that is routinely accepted by EVERY other wind power project in the State of Maine.

As I know you are aware the finalization of this permit review has been dragging since the original draft issued on April 27, 2011. The facility is now operating within the seasonal period that is optimal for compliance measurement and there has been no indication of willingness on the part of the licensee to implement the revised operation protocol and/or begin to record compliance data in accordance with the prescribed protocols outlined in the Appendix to the draft order. It is imperative that this matter be resolve soon lest we lose the entire compliance period and risk failing to responsibly address the concerns raised by the citizens of Vinalhaven.

DLRR staff strongly encourages you to authorize the issuance of the attached draft permit in its entirety.

James Cassida, Director

Division of Land Resource Regulation

Bureau of Land & Water Quality

james.cassida@maine.gov

592-1864

<<5-25-11 revised Fox Islands Wind LLC L24564LC.doc>>