

EXHIBIT 10

Record Hill Wind Project Sound Level Assessment -- Peer Review

ROXBURY, MAINE

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April 30, 2009

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Review Basis

Record Hill Wind LLC (RHW) proposes to operate a 55 MW wind energy facility in the Town of Roxbury, Oxford County, Maine. At the request of the Maine Department of Environmental Protection (MDEP) a peer review is undertaken to determine if the noise study is reasonable and technically correct according to standard engineering practices and the Department Regulations on Control of Noise (06-096 CMR 375.10).

The proposed wind farm noise assessment report will be generally critiqued unless detailed criticism is given.

1.0 Introduction

The stated objectives of the sound assessment were to measure pre-existing (predevelopment) ambient sound levels, determine the expected sound levels from routine operation of the wind project and compare RHW sound levels with the relevant environmental noise standards.

The report describes the project vicinity, land uses in the project vicinity, applicable DEP sound level limits, sound level estimates from RHW operations and compares expected future sound levels with MDEP limits. Sound levels from the construction activities and operation of electric collection facilities are briefly discussed and the associated substation and maintenance facility are not addressed.

2.0 Sound and Decibels

Informational.

3.0. Noise Control Standards and Sound Level Limits

Land-use ordinances for Roxbury and Byron indicate that no quantitative noise standards are enacted in these municipalities, consequently Maine DEP Chap 375.10 regulations apply.

Sound level limits were determined at protected locations and property lines based on land owner agreements and land uses. Record Hill Wind LLC is pursuing agreements with local landowners that would exempt the project on respective properties from sound level limits under MDEP rules.

Nine nearby sensitive receiver points (protected locations with most restrictive sound level limits and other points of interest for local landowners) are listed with site descriptions, approximate distances from nearest wind turbine, MDEP hourly limits/ limit basis.

4.0 Site/Project Description

The wind turbine portion of the Record Hill Wind project consists of 22 Clipper C 96, 2.5 MW turbines located in the town of Roxbury along a North-South ridgeline that includes the south side of Record Hill, Flathead Mountain, Mine Notch and Partridge Peak.

The town of Byron Maine borders the project from the North, Route 17 through Roxbury Village lies to the east, Route 120 (Roxbury Notch Road) to the south and Roxbury Pond (Ellis) to the West. Permanent and seasonal residential properties lie along Routes 17 and 120, the Shore Road and Roxbury Pond. The report indicates land uses in the vicinity surrounding the proposed turbine sites consist of undeveloped/forestry land. Record Hill Wind LLC holds a lease with the local landowner to install and operate wind turbines at the proposed locations.

The report indicates that the project area is also extensively used for recreation including hunting, ATV and snowmobile trails. According to a local merchant, recreational activities peak during the summer months.

Operation of the substation and transmission line is not expected to generate significant sound levels. Sound level estimates for the wind project to not include these facilities.

The topography surrounding the project site is varied. To the West, a broad plain extends for several miles and contains several small ponds with more mountainous features to the east. Immediately east of the project ridgeline lies a river valley. Wind flow around the ridgeline will be significantly influenced by these varied features.

5.0 Record Hill Wind Sound Levels

Standard construction sounds, operation modeling and wind turbine information is provided.

Record Hill Wind LLC proposes to not confirm ambient sound levels at respective protected locations, but rather, in recognition of the rural nature of the site accept the most conservative regulation levels of 55 dBA daytime and 45 dBA nighttime. Mention is made of elevated wind effects on ambient noise during wind speeds required for turbine operation.

6.0 Sound Level Limits

Sound level limits were determined at protected locations and property lines based on land owner agreements and land uses. As previously mentioned, Evergreen has obtained leases or agreements with many local landowners to exempt the project from sound level limits at those sites.

Nine nearby sensitive receiver points are listed with proposed measurement locations respective to residences/property boundaries and estimated development impact.

7.0 Future Sound Levels

7.1 Construction

Standard discussion

7.2 Proposed Operation

Operation sound level estimates were based on an acoustic model employing CADNA/A software utilizing area topography, wind turbine locations (as provided by Stantec), manufacturer specifications and several model assumptions (point source wavefront divergence, mixed ground cover, moderate downwind conditions, etc.).

Wind turbine operation and sound power output relative to wind speed are discussed and plotted. Sound level estimates are based on full turbine sound power output plus an uncertainty factor of ± 5 dBA to allow for wind turbine sound power specification (IEC 61400-11) and outdoor propagation prediction (ISO 9613-2) margins of error. Attenuation factors were intentionally omitted from the estimate model, which may have lessened resulting estimates further.

Selected sensitive receiver position sound level estimates from routine wind turbine operation range from 39-45 dBA. Actual measured sound levels will vary substantially with wind speeds/directions, subsequent to microphone interference and numerous wind generated noise sources (ambient + operation).

Wind speed generally varies with the elevation and may contain both horizontal and vertical components. Routine operating sound levels near maximum operating power will occur under a wide range of surface level conditions, characterized by times when wind turbines are completely inaudible due to high ambient noise and at times when surface level operation noise is more prominent.

Accurate, measurement-derived operation sound levels can only be made when conditions permit, a clear separation between operation and background noise. Forested receiver locations may not allow separation of operation and ambient noise sources under windy conditions.

Tonal and short duration repetitive sounds are not expected based on manufacturer specifications and prior experience, but short duration repetitive sounds may occur as a result of amplitude modulation during some conditions -- to be specified in recommendations.

8.0 Conclusions and Recommendations

Maine DEP sound level limits based on land use and land owner agreements were conservatively set at "quiet limits -- 45 dBA nighttime./55 dBA daytime" (within 500 feet of residence).

The proposed sensitive receiver sites, PL1 through PL9, are reasonable in number and general location to assess wind turbine operation compliance for nearby protected locations. Operations of the substation and transmission lines generally do not generate significant sound levels.

The wind project prediction model based on CADNA/A software with incorporation of an uncertainty factor of ± 5 dBA and intentional omission of possible attenuating factors may yield a reasonable if not conservative estimate, if short duration repetitive sounds are not problematic.

I will further recommend specifications for RSE's recommendations to measure predevelopment ambient sound levels at respective protected locations under conditions representative of operations with subsequent project operation compliance testing.

Conclusion - (Peer Review)

It's my opinion the Record Hill Wind Project noise assessment is essentially reasonable and technically correct according to standard engineering practices and the Department Regulations on Control of Noise (06-096 CMR 375.10) with a possible omission involving excessive amplitude modulation and the resulting penalty for short duration repetitive sound.

The wind project prediction model based on CADNA/A software with incorporation of an uncertainty factor of + 5 dBA and intentional omission of possible attenuating factors yields an estimate that does not account for potential excessive amplitude modulation under stable atmospheric conditions, which would invoke a 5 dB penalty for short duration repetitive sounds, potentially resulting in borderline protected locations (within 2 dBA of respective MDEP limits) receiving greater than predicted sound levels, even potentially in excess of 45 dBA. The 1 possible measurement location is PL5 along RT 120.

Infrasound, sonic frequencies <20 Hz, have been widely accepted to be of no concern below the common human perception threshold of 85-90 dBG for non-pure tone sounds. There is insufficient, broadly accepted evidence to conclude otherwise. Numerous national infrasound standards limit industrial facilities, impact equipment and jet engines, but wind turbine infrasound levels fall far below these standards.

Wind turbines, rotating, under conditions necessary for power production produce a measurable broadband (lower frequencies) amplitude modulation of sound ("swoosh" and/or "thump") at ± 1 Hz, which should not be confused with infrasound.

The A-weighting scale is widely used in noise ordinances, equipment specification and sound control regulation. The introduction of C-weighting for the assessment of wind turbine sound is preliminary and unrefined on a broad basis. Current international wind turbine acoustic output standards do not require dBC or dBG rating.

I recommend a required routine operation noise compliance assessment methodology for wind turbine projects based on very selective meteorological, background sound conditions and careful specified sound measurement parameters which will require compliance measurements under most favorable conditions for sound propagation, during periods of significant maximum amplitude modulation and appropriate measurement parameters.

Compliance sound assessment of wind turbines require carefully specified measurement conditions, monitoring specifications and reporting requirements. 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 will be necessary. If background ambient monitoring is proposed, locations and times 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 mph with concurrent turbine hub-elevation wind speeds sufficient to generate the maximum continuous rated sound power from the five nearest wind turbines to the measurement location. [Note: These conditions occur during inversion periods usually between 11pm-5am.] 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 five nearest 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). Selection of monitoring locations should require concurrence from MDEP.
- d. 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.

e. 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). Short duration repetitive events should be characterized by event duration and amplitude. Event frequency is defined as the average event frequency \pm 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.).

f. Compliance locations should be determined in consultation with the Department.

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 data for each location should be gathered and submitted to the Department at the earliest possible opportunity after the commencement of operation, with consideration for the required weather, operations, and seasonal constraints.

Record Hill Wind Project Sound Level Assessment Supplement -- Peer Review

ROXBURY, MAINE

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August 10, 2009

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Review Basis

Record Hill Wind LLC (RHW) proposes to operate a 50.6 (formerly a 55) MW wind energy facility in the Town of Roxbury, Oxford County, Maine. At the request of the Maine Department of Environmental Protection (MDEP) a peer review is undertaken to determine if this supplement is reasonable and technically correct according to standard engineering practices and the Department Regulations on Control of Noise (06-096 CMR 375.10).

The proposed wind project noise assessment supplement will be generally critiqued unless detailed criticism is given.

1.0 Introduction

The stated objectives of the supplement were to determine the expected sound levels from routine operation and compare RHW sound levels with the relevant environmental noise standards.

The report describes replacement of the formerly proposed Clipper C96 turbines with the Siemens 2.3 MW Mk II and the resulting sound level/ MDEP sound level limit estimates at nearby protected locations.

5.0 Record Hill Wind Sound Levels

The supplement describes sound expected from operation of the Siemens wind turbines.

5.2 Proposed Operation

Siemens wind turbine sound power levels are contrasted with and compared to Clipper turbines. The Siemens turbines have decreased sound power levels at frequencies above 400 Hz and conversely increased below 400 Hz resulting in a net decrease for the Siemens turbine of 3.5 dB(A) and conversely, an increase of 1.7 dB(L) over the Clipper.

Operation sound level estimates (based on CADNA/A software and standard assessment elements, including WINDTEST specifications, point source divergence, mixed ground cover, moderate downwind conditions, etc.) are contrasted with previously designated Clipper wind turbines.

Wind turbine operation and sound power output relative to wind speed are discussed and plotted. Sound level estimates are based on full turbine sound power output plus an uncertainty factor of ± 5 dBA to allow for wind turbine sound power specification (IEC 61400-11) and outdoor propagation prediction (ISO 9613-2) margins of error. Selected sensitive receiver position sound level estimates from routine wind turbine operation range from 34 - 43 dBA, which are 5-20 dBA below MDEP limits for day/night requirements.

Wind speed generally varies with the elevation and may contain both horizontal and vertical components. Routine operating sound levels near maximum operating power will occur under a wide range of surface level conditions, characterized by times when wind turbines are completely inaudible due to high ambient noise and at times when surface level operation noise is more prominent.

5.4 Tonal and Short Duration Repetitive Sound

Tonal sounds are not expected based on manufacturer provided specifications. Short duration repetitive sounds may occur as a result of amplitude modulation during some conditions and have the potential to exceed 6 dBA, but RSE does not expect them to cause exceedence of the applicable MDEP limit.

6.0 Conclusions and Recommendations

Maine DEP sound level limits based on land use and land owner agreements were conservatively set at "quiet limits -- 45 dBA nighttime./55 dBA daytime" (within 500 feet of residence).

The proposed sensitive receiver sites, PL1 through PL9, are reasonable in number and general location to assess wind turbine operation compliance for nearby protected locations. Operations of the substation and transmission lines generally do not generate significant sound levels.

Predicted sound levels in this estimate, including tonal and short duration repetitive sounds are below MDEP limits.

RSE's recommendations to measure routine operation sound levels at respective protected locations under a rigorous protocol and condition requirements is appropriate.

Conclusion - (Peer Review)

It's my opinion the Record Hill Wind Project noise assessment is reasonable and technically correct according to standard engineering practices and the Department Regulations on Control of Noise (06-096 CMR 375.10).

Routine operating sound levels should be measured within the first year of operation to demonstrate compliance using the following protocol, which includes specific meteorological conditions.

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.

The sound compliance assessment for the Record Hill Wind Project requires carefully specified measurement conditions, monitoring specifications and reporting requirements to characterize and consistently quantify wind turbine sound levels. Operations

compliance for the project should be demonstrated when the following outlined conditions have been met for 12, 10-minute measurement intervals per monitoring location meeting 06-096 CMR 375.10 requirements.

Some compliance test locations may exhibit unique characteristics requiring modification of its compliance assessment requirements. Assessment modifications may be necessitated by elevated ambient sound levels, availability of stable atmospheric conditions, less than maximum sound power output from turbines under possible measurement conditions, etc. Assessments requiring alternative methods should be thoroughly proposed including their basis in writing by the applicant as part of the pretest Compliance Assessment Plan and shall be reviewed and approved by the DEP in advance of performing the compliance assessment test.

Extraneous sounds could potentially or do complicate routine operation compliance assessment. In the case of RHW, the Swift River and various mountain streams contribute to ambient background sound levels depending on weather and flow conditions. If RHW must adjust for such sounds, background ambient sound level measurements will be necessary. If background ambient sound level measurements are proposed, locations, times and flow conditions will be determined with concurrence from the DEP and as further described below.

- a. Compliance should be demonstrated when the required operating/test conditions and sound level limits per 06-096 CMR Chapter 375.10 have been met for twelve 10-minute measurement intervals at each representative monitoring location.
- b. Compliance should also be demonstrated and analyses of either short duration repetitive or tonal sound should not be required when the total of all sound for each of the twelve, 10-minute measurement results are equal or greater than 5 dBA below the applicable DEP noise limit for each representative monitoring position even with wind speeds equal or less than 6 mph. When the total of all sound for each of the twelve, 10-minute measurement results are equal or greater than 10 dBA below the applicable DEP noise limit for any representative monitoring position, short duration repetitive and tonal sound analyses should not be required for that position. Compliance under this paragraph requires that the monitoring positions were downwind and the wind turbines were operating at full sound power.
- c. Measurements should be obtained during weather conditions when wind turbine sound is most clearly noticeable. To the extent reasonably possible, measurements should be conducted when the measurement location is downwind of the development and maximum surface (10 meter) wind speeds ≤ 6 mph with concurrent turbine hub-elevation wind speeds sufficient to generate the maximum continuous rated sound power from the five nearest wind turbines to the measurement location. These conditions generally occur during inversion periods usually between 11pm-5am and can also occur earlier in the evening around sunset. A downwind location is defined as within 45° of the direction between a

- d. 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 should be excluded from reported data. The intent is to obtain measurements that meet the specified criteria for the entire 10-minute interval.
- e. Selection of monitoring locations should require concurrence from Maine DEP. Sound monitoring locations will 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).
- f. Maine DEP concurrence on meteorological site selection is required. To the extent reasonably possible, meteorological measurements of wind speed and direction should be collected using anemometers at a 10-meter height above ground and at the center of large unobstructed areas that are generally correlated with sound level measurement locations. Locations that cannot meet these criteria due to the lack of large unobstructed areas in the general vicinity of the compliance monitoring positions can be utilized with DEP concurrence and could require adjustments to reflect the actual conditions found at the protected locations selected for measurements. 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 will be reported from surface stations. Individual 1-second wind gusts greater than 6 mph during any 10-minute measurement interval do not necessarily prevent the use of sound measurements taken during those intervals from being used to demonstrate compliance with the DEP noise limits.
- g. 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). Short duration repetitive events should be characterized by event duration and amplitude. Event frequency is defined as the average event frequency +/- 1 standard deviation 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 milliseconds). 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. To the extent possible, reported measurement results should have minimal extraneous noise in the respective measurement intervals in accordance with (c.). Evaluation of tonal or short duration repetitive sounds are not required where measured sound levels are 5 dBA or more below the applicable limits.

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