

REPORT 1802-091507-A ADDENDUM

Title: Noise Model Update

Project: Roaring Brook Wind Farm Project

Location: Lewis County, NY

Prepared For: Iberdrola Renewables

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Revision: A

Issue Date: October 21, 2008

Reference No: TM-1802-091507-A Addendum

Attachments: Plot 1

1.0 Introduction

The results of the original noise impact assessment for the Roaring Brook Wind Project were reported in Hessler Associates, Inc. Report 1802-091507-A dated October 12, 2007. Since that time the locations of the some of the turbines have shifted and, at the request of Iberdrola (Formerly PPM Energy), the noise model has been updated. The modeling methodology was unchanged from the original study; only the turbine locations are new.

2.0 New Model Results

The sound contours associated with the latest site plan (valid as of 5/6/08) are shown in **Plot 1**. If this plot is compared to the sound contours from the original study (Plot 1, October 11, 2007) it can be seen that there is no significant difference in potential sound impacts, at least at the nearest permanent residence northeast of the Project area, which is still nearly 1 mile beyond the nominal impact threshold of 35 dBA. Project sound levels should be essentially negligible at this location (< 30 dBA) under almost all normal conditions and are unlikely to be significant even during unusual conditions, such as temperature inversions or sudden periods of high winds.

Since the original study was done, the existence of a number of seasonal cabins in the Project area has come to light. The cabins are shown in Plot 1. Most of these structures are fairly primitive (without electricity or running water) and are understood to be only intermittently occupied for short periods during the summer and in hunting season. Six of them (shown in green) are owned by project participants, including one (denoted as "A") that will be relocated before the project is built. No real concerns about noise are anticipated at these locations.

The closest non-participating cabins are expected to have exterior sound levels in the 43 to 50 dBA range, while the more distant structures have predicted sound levels of less than 40 dBA. The higher sound



levels at the closest cabins are of a magnitude where complaints might be expected if the structures were permanent residences rather than seasonal camps. However, because the cabins are only occupied for very brief periods, the reaction to noise is unlikely to be the same or as negative.

Disturbance from wind turbine noise at permanent residences is often associated with rare and short-lived periods of increased sound due to the passage of a storm front or unusual atmospheric conditions, as well as with continuous exposure to moderate noise over long periods and a lack of control over it. At seasonal cabins the exposure period is apparently likely to be only a few days at a time when there might not be any noise excursions, and when the turbines might not be operating at all. There is also the mental awareness that the noise, if considered unpleasant, can be stopped at any time by leaving the area, which seems likely to moderate any potential annoyance. Having said that, however, the potential for an adverse impact from Project noise at some of these cabins cannot be ruled out because the predicted sound levels of more than 40 dBA mean that turbine noise will be clearly audible above any natural background level.