STATE OF VERMONT
PUBLIC SERVICE BOARD

Petition of Georgia Mountain Community Wind, LLC, for a Certificate of Public Good, pursuant to 30 V.S.A. Section 248, authorizing the construction and operation of a 5-wind turbine electric generation facility, with associated electric and interconnection facilities, on Georgia Mountain in the Towns of Milton and Georgia, Vermont, to be known as the "Georgia Mountain Community Wind Project"	)	Docket No. 7508

PREFILED DIRECT TESTIMONY OF
RICHARD LETTY

ON BEHALF OF THE
VERMONT DEPARTMENT OF PUBLIC SERVICE

September 18, 2009

Summary: Mr. Letty provides a peer review of the *Noise Impact Study for Georgia Mountain Community Wind* prepared by the noise consultant for the petitioner in the proceeding for this project. The purpose of this peer review is to determine the adequacy and completeness of the noise assessments contained in the report and to determine if the predicted noise levels from the wind turbine project are in compliance with state and local noise regulations and consistent with Vermont precedent in interpreting Act 250 and Section 248. KM Chng reviewed the results of the noise modeling analysis for the wind turbine site to determine how the noise analysis was performed, and what assumptions were made regarding the sound propagation and attenuation factors used in the noise impact assessment.

Direct Testimony
of
Richard Letty

Q. Would you please state your name?

A. Richard Letty.

Q. What is your business address?

A. My office is in Burlington, Massachusetts. The address is 25 Mall Road, Burlington, MA 01803.

Q. Who is your current employer and what position do you hold?

A. I am a senior noise consultant at KM Chng Environmental Inc., a consulting firm that specializes in noise, vibration and air quality assessments for various types of infrastructure development and transportation projects nationwide.

Q. What are your background and qualifications?

A. I have over 35 years of experience in managing and performing environmental noise and vibration assessments for infrastructure development and transportation projects. My range of experience includes noise and vibration monitoring and analyses programs in support of EISs, EAs, siting studies, Preliminary Engineering process, and construction activities for a wide variety of projects throughout the country.

My work experience with wind turbines includes a peer review for the City of Newburyport, MA for the proposed wind turbine installation in an industrial park, and a wind turbine site evaluation for the Town of Hull, MA that included a noise measurement program to characterize the existing ambient background sound levels correlated with wind speed in the area of the proposed wind turbine. For my ongoing work with the Maryland Power Plant Research

Program, I am providing the noise review and evaluation of the Applicant's noise study submittals, an independent noise assessment, and expert witness testimony at the PSC cross-examination hearings. My most recent assignment under this Task Order contract included assisting in the development of a database for evaluating noise from wind turbine facilities being proposed in the State of Maryland. As part of this study, I visited and obtained preliminary noise measurements of operating mountaintop wind turbines at the Meyerdale Facility in Pennsylvania and the Mountaineer Facility in West Virginia for Environmental Resources Management (ERM) and the Maryland Department of Natural Resources to determine if the noise levels from the wind turbines comply with the Maryland State Noise Regulations. KM Chng also provided peer review of the noise assessment prepared by the proponent of the Long Island Offshore Wind Park for the Federal Minerals Management Service that was responsible for the EIS for this project. This project would consist of 40 wind turbines off the south shore of Long Island.

My resume is provided as Exhibit DPS-RL-1.

Q. Have you provided testimony before the Public Service Board in a Section 248 case?

A. No. I have not.

Q. Have you been retained by the Vermont Department of Public Service in connection with the application for a Certificate of Public Good by Georgia Mountain Community Wind LLC?

A. Yes, I have.

Q. What services have you been asked to provide in connection with that representation?

A. I have been asked to review the work of the applicant's consultants regarding the potential noise impact of the proposed wind project, and to evaluate the methods and conclusions drawn by the consultants.

Q. What steps did you take to familiarize yourself with the project?

A. I have read all documents submitted by the petitioner relevant to noise. These include the prefiled testimony and all exhibits submitted by Kenneth Kaliski of Resource Systems Group including the *Noise Impact Study for Georgia Mountain Community Wind*. I read the transcript of the public hearing held on June 9, 2009 at the Georgia Elementary School, and attended the Site Visit held on July 30, 2009.

Q. In connection with your testimony on these issues have you prepared Exhibits?

A. Yes. I prepared a memorandum titled *Peer Review of the Noise Impact Study for Georgia Mountain Community Wind* dated September 4, 2009. This document accompanies this testimony as Exhibit DPS-RL-2.

Q. Can you describe this exhibit?

A. Yes. This document provides comments relating to my peer review of the Noise Impact Study for Georgia Mountain Community prepared by the applicant's noise consultant. As part of the peer review, I evaluated the noise measurements, noise criteria, methodology, and the noise modeling results of the proposed wind turbine impact assessment.

Q. What were your conclusions and how do they compare with the analysis prepared by the applicant?

A. I agree with the applicant's noise consultant that the project would be in compliance with the nighttime noise impact criterion of 45 dBA. However, the

noise study does not address the issue of audibility. For example, the calculated noise level from the wind turbines is 40 dBA at the nearest residential receptor located on Georgia Mountain Road (the Wimble Brothers Organic Dairy Farm). However, the daytime ambient background L90 sound level measured at this same location (the north measurement site) is 29 dBA, and the measured nighttime L90 sound level is 25 dBA. Although the predicted noise levels from the wind turbines are below the nighttime noise criterion of 45 dBA, this noise level is well above the measured L90 noise levels at this location. As a result, the noise levels from the wind turbines will most likely be audible when outdoors at this location. The issue of audibility also applies for the nearest residential receptors on Westford Road (the south measurement site) where the measured L90 noise levels are 33 dBA during the day and 26 dBA during the night. At this location, the predicted noise level from the wind turbines is 35 dBA along Westford Road and 38 dBA at the nearest residential receptor at the end of Ted Road. As a result, the noise levels from the wind turbines would be audible when outdoors at these locations.

When indoors, the wind turbine noise levels would be reduced by 15 dBA with the windows open, and by 25 dBA with the windows closed. In addition, indoor noise from television, music, air conditioning, conversation, and other indoor activities should make the wind turbines inaudible when indoors, except at night when the house is quiet and the windows are open.

The measured L90 noise levels west of Georgia Mountain along North Road are somewhat higher at 40 dBA during the day and 41 dBA at night. These higher noise levels are due to the higher local traffic volumes on North Road. The predicted noise levels from the wind turbines are expected to range from 35 to 38 dBA at the residential receptors along North Road. Because the predicted noise levels from the wind turbines are below the measured L90 sound levels, the wind turbines are expected to be inaudible in this area.

These results indicate that the wind turbines would be audible (outdoors)

at the nearest residential receptors on Georgia Mountain Road and Westford Road. However, a more detailed assessment of the audibility issue, including a graphic showing the areas where the wind turbines could be audible, should be provided in the noise study report submitted by the project sponsor's noise consultant.

Q. Does this conclude your testimony at this time?

A. Yes it does.

Exhibit DPS-RL-1

Resume of Richard Letty

Exhibit DPS-RL-2

Peer Review of the Noise Impact Study