

**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. § 248, authorizing the construction)
and operation of a 5 wind turbine electric)
generation facility with associated electric)
collection 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. ____

**PREFILED TESTIMONY OF
KENNETH H. KALISKI, P.E.**

**ON BEHALF OF
GEORGIA MOUNTAIN COMMUNITY WIND, LLC**

March 26, 2009

Mr. Kaliski’s testimony evaluates the noise impacts of the proposed Georgia Mountain Community Wind Project under Section 248(b)(5) of Title 30, Vermont Statutes Annotated.

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| Exhibit Petitioner KHK-2 | Noise Impact Study |

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1 **1. Introduction**

2 Q1. Please state your name and business address.

3 A1. My name is Kenneth Kaliski. My business address is: Resource Systems Group,
4 Inc., 55 Railroad Row, White River Junction, VT 05001.

5

6 Q2. By whom are you employed and in what position?

7 A2. I am the Director of Environmental Services at Resource Systems Group, Inc. at
8 the company’s headquarters in White River Junction.

9

10 Q3. Please describe your educational background and work experience.

1 A3. I have a BA in Biology and Environmental Studies from Dartmouth College and a
2 BE in Engineering from the Thayer School of Engineering at Dartmouth College.
3 My educational experience includes coursework in sound level monitoring, noise
4 control engineering, active noise control, indoor and outdoor acoustical modeling,
5 vibration control, sound level meter design, and the physics and mathematics
6 involving sound and its propagation. I am the co-holder of a patent for an
7 environmental noise monitoring system.

8
9 I have worked at Resource Systems Group since 1986, and serve on its Board of
10 Directors. In my twenty years with Resource Systems Group, I have given
11 testimony before all of Vermont's nine District Commissions and the
12 Environmental Board regarding noise, traffic, air, and related impacts. Some of
13 the most relevant Environmental Board cases where I have evaluated potential
14 impacts from noise include John and Joyce Belter, Bane Granite Quarries, Black
15 River Rod and Gun Club, Hannaford, John Russell Corp., and Alpine Stone. In
16 addition, I provided testimony in the Section 248 proceeding for the Green
17 Mountain Power Searsburg wind project and Vermont Electric Power Company's
18 ("VELCO") Northwest Reliability and Lamoille projects. My resumé is attached
19 as Exhibit Petitioner KHK-1.

20
21 Q4. Do you hold any professional licenses or certifications?

1 A4. I am a licensed professional engineer in the States of Vermont and New
2 Hampshire. I am Board certified through the Institute of Noise Control
3 Engineering. I am a member of the Acoustical Society of America, the Air and
4 Waste Management Association, the Institute of Transportation Engineers, and
5 am a Qualified Environmental Professional as certified through the Institute of
6 Environmental Practice. I am chairman of the Board Certification Exam
7 Subcommittee and a member of the Board Certification Committee for the
8 Institute of Noise Control Engineering. Resource Systems Group is a member of
9 the National Council of Acoustical Consultants.

10

11 **2. Summary of Assessment and Conclusion**

12 Q5. What is the purpose of your testimony?

13 A5. My testimony details the results of noise studies for the proposed Georgia
14 Mountain Community Wind Project (“Project”). A copy of my report is included
15 as Exhibit Petitioner KHK-2.

16

17 Q6. What noise standards did you apply to evaluate the Project’s potential noise
18 impacts?

19 A6. There are no federal or state noise standards. The World Health Organization’s
20 (“WHO”) “Guidelines for Community Noise” suggests noise criteria based on the
21 most recent scientific research on noise effects. The Guidelines, published in

1 1999, recommend a limit of 50 dBA,¹ averaged over the day to protect against
2 moderate annoyance, and 45 dBA, averaged over the night to protect against sleep
3 disturbance. The U.S. Environmental Protection Agency (“EPA”) has also
4 established Protective Noise Level Guidelines. These guidelines are not intended
5 to be applied as standards. For most residential areas, the protective Level is 55
6 dBA. We recommend that an appropriate standard to apply to this Project would
7 be the WHO sleep disturbance criteria of 45 dBA averaged over the summer
8 months when windows are likely to be open.²

9

10 Q7. Please summarize your findings and conclusions regarding the Project’s potential
11 noise impacts.

12 A7. Using 5 wind turbines with a projected sound level of 106 dBA and a hub height
13 of 80 meters, this Project meets this standard by 5 dB or more during the night.

14 We also conclude that the sound levels from the turbines will no rise to a level
15 that can create hearing damage, activity interference, or pose quality of life
16 concerns. As to construction noise, we conclude that due to the limited duration
17 of the activities and the setbacks involved, construction noise will not result in

¹ The acronym dBA refers to decibels weighted according to the so-called “A” scale to account for human perceptions to noise frequencies. The acronym Ldn refers to a day-night sound level where nighttime sounds are weighted by + 10 decibels. *In re: Northwest Vt. Reliability Project*, Docket No. 6860, Order of 1/28/05 at 143, n.162.

² We note that the Town of Georgia has adopted a Zoning Ordinance Performance Standard of 70 dBA at the property line. Regardless of whether this ordinance is applicable to a Section 248 project, our analysis demonstrates that this standard will be met.

1 unduly adverse impacts. Details of our analysis and findings are included on our
2 report, Exhibit Petitioner KHK-2.

3

4 Q7. Does this conclude your testimony at this time?

5 A7. Yes, it does.