



KENNETH H. KALISKI P.E., Q.E.P., INCE BD. CERT.
DIRECTOR OF ENVIRONMENTAL SERVICES

EDUCATION, LICENSES, AND CERTIFICATIONS

B.E. Engineering, Dartmouth College
B.A. Biological Sciences and Environmental Studies, Dartmouth College
Qualified Environmental Professional, Inst. of Professional Environmental Practice
Licensed Professional Engineer, Vermont and New Hampshire
Board Certified, Institute of Noise Control Engineering

EXPERIENCE

Mr. Kaliski is the Director of Resource Systems Group's Environmental division. He has been with the firm since its founding in 1986. He manages projects and has served as an expert witness in the areas of community noise, air pollution, and traffic impacts. His projects include work throughout the United States. In addition to developing the firm's air pollution and noise programs, he has authored much of the firm's traffic, air, and noise software, including air emissions offset calculators, sound monitoring processing utilities, and air benefits calculators. He co-holds a patent for a continuous sound monitoring system.

RESPONSIBILITIES & RELEVANT PROJECTS (PARTIAL LIST)

Noise Forecasting for a Wind Turbine Demonstration Project—conducted noise measurements and modeling for a proposed 12-tower wind turbine project by the Green Mountain Power Company in Searsburg, Vermont. Used the NTerrain model to quantify the effects of atmospheric loss, vegetation, wind, and terrain features on octave-band noise levels in the area.

Wind Turbine Noise Impact Study – Conducted a noise analyses and feasibility study a 20-turbine wind farm in Western Massachusetts.

Wind Farm Noise Analysis – Conducted a study of the noise impacts of the Brodie Mountain Wind Project specifically with respect to a nearby condominium development. Sound levels were monitored continuously over several days and these monitored levels were then correlated against ridgeline wind speed. A report was issued. The project is ongoing.

Review of Wind Turbine Impact Study – For the Maine Land Use Regulatory Council, reviewed the noise impacts for a proposed 580 turbine, 210 MW wind farm in the Boundary Region in western Maine.

Wind Farm Noise Impact Analysis – Conducted a study of the noise impacts from a proposed 30 to 45 MW wind farm in southern Vermont. The analysis included correlation of hub height wind speed with background sound levels measured at seven locations around the proposed facility, modeling of 8,760 days of meteorology, preparation of a report, and testimony to the Public Service Board.

Northern Vermont Wind Turbine Noise Review – Reviewed the noise impacts of a 52 MW wind turbine in Northern Vermont. Analyzed both monitoring and modeling data to determine whether the project conformed with the Public Service Board's Section 248 criteria.

Plains Wind Farm Noise Analysis – Conducted an analysis of the noise impacts of a proposed wind farm in the Midwestern U.S. The project includes community sound monitoring over a 14-day period in the winter and summer, and modeling sound levels against a “relative” standard. This wind farm is expected to generate approximately 150 MW of power. The project is ongoing.

Wind Farm Substation Noise – analyzed the noise impacts from a large utility substation associated with a wind farm in northern New York.

Kansas Wind Farm Study – Conducted sound propagation modeling for a proposed 100 MW wind farm in Kansas. Measured background sound levels at several locations around the proposed site. Calibrated the sound model using measurements at an operating wind farm in Kansas. Prepared a report comparing the impacts to a noise standard and suggested mitigation necessary to meet the standard.

Velco Northwest Reliability Project – directed the noise studies required for the Velco Northwest Reliability Project (NWRP). This project involved sound monitoring and/or sound propagation modeling at 12 distribution substations. Measurements met IEC/IEEE standards. Equipment analyzed included transformers, a shunt reactor, synchronous condensers, and a phase angle regulator transformer. Background sound monitoring included directionality measurements of the transformers and property line/fence-line measurements. A report was prepared and submitted to the Public Service Board (PSB) outlining the potential for noise impacts and the mitigation required to meet standards.

MEMBERSHIPS/AFFILIATIONS

Institute of Noise Control Engineering
Acoustical Society of America
Air and Waste Management Association
Institute of Professional Environmental Practice
Institute of Transportation Engineers
Tau Beta Pi Engineering Society

PUBLICATIONS AND PRESENTATIONS

Kaliski, K. and Duncan, D., *Propagation modeling Parameters for Wind Power Projects*, Sound & Vibration Magazine, Vol. 24 no. 12, December 2008

Kaliski, K., and Duncan, E., *Propagation Modeling Parameters for Wind Turbines*, Proceedings of the 2007 Institute of Noise Control Engineers NOISECON 2007.

Kaliski, K., *Sound Advice: Evaluating Noise Impacts in a Changing Landscape*, American Wind Energy Association Fall Symposium, November 2008.

Hathaway, K. and Kaliski, K., *Assessing Wind Turbines using Relative Noise Standards*, Proceedings of the 2006 Institute of Noise Control Engineers INTERNOISE 2006.

Duncan, E. and Kaliski, K., *Improving Sound Propagation Modeling for Wind Turbines*, Acoustics 08, Paris 2008

Kaliski, K. H., Mills-Tettey, A., Seitaridou, E., Collier, R., *Low-Complexity Continuous Noise Monitoring System for Communities, Small Airports, and Remote Areas*, Proceedings of the 2001 Institute of Noise Control Engineers NOISECON 2001.