Jack B Honor

Director of Development

Grid Scale Power, New York

Biography

Mr. Honor joined EDF Renewables in 2018 is responsible for overseeing and managing the development of grid scale renewable energy and energy storage projects in New York. Based in Saratoga County, New York, Jack manages a diverse team of developers, land agents, environmental & engineering consultants, attorneys, and lobbyists to navigate the complex development and permitting process in New York.

Jack has 10 years of solar development and management experience in New York State and currently leads a development portfolio of approximately 1,200MW – all located in New York. Prior to joining EDFR, he managed the origination & development of over 100MW of distributed generation projects throughout the country.

EDF Renewables Project Experience

Grid Scale Projects

Tracy Solar Energy Center, Jefferson County, NY (119MW) - 2020 NYSERDA LSR contract.

Homer Solar Energy Center, Cortland County, NY (90MW) - 2020 NYSERDA LSR contract.

Rich Road Solar Energy Center, St. Lawrence County, NY (240MW + 20MW/4hr ESS)- 2022 NYSERDA LSR contract

Columbia Solar Energy Center, Herkimer County, NY (350MW + 20MW/4hr ESS)- 2022 NYSERDA LSR Contract

Genesee Road Solar Energy Center, Erie County, NY (250MW+ 20MW/4hr ESS)

Fraser Energy Storage, Delaware County, NY (135MW/4hr)

New York State Greenfielding Program – multiple active developments totaling approximately 1,000MW

Distributed Scale Projects

Barton Mines Solar, Johnsburg NY (2MW)

Delta Solar, Delta Township, MI (20MW)

Flambeau Solar, Flambeau WI (2MW)

Northwest Jacksonville Solar, Jacksonville FL (10MW)

Town of Clifton Park NY Landfill (1MW)

Town of Ontario NY (2MW)

Mohawk Valley Community College (2MW)

Town of Oneida (1MW)

City of Rome NY, Landfill (2MW)

City of Rome NY, Lamphear Road (2MW)

Education

Bachelors of Science, Economics, Union College (NY), 2009

RSG
the science of insight

KENNETH KALISKI, PE, INCE BD. CERT.

Senior Director

Ken Kaliski has 35 years of experience, having worked in all of RSG's market areas with a focus on engineering and advanced analytics. His technical specialty is in noise control engineering, where he works on projects such as community noise monitoring and modeling, architectural acoustics, transportation noise, and industrial noise control. He also works on complex modeling projects in the fields of market and energy research. Ken is the co-holder of Patent 7,092,853 for an Environmental Noise Monitoring System.

EXPERIENCE

35 years

EDUCATION

BE, Engineering, Thayer School of Engineering, Dartmouth College (2002)

AB, Biological Sciences and Environmental Studies, Dartmouth College (1985)

PROJECT EXPERIENCE

Cassadaga Wind – Project manager for a comprehensive noise impact assessment of the Cassadaga Wind project in western New York. The project included seasonal sound monitoring at six sites, background infrasound monitoring, short- and long-term sound propagation modeling, construction noise modeling, and evaluations of annoyance potential using the Community Noise Rating and published dose-response curves. Designed mitigation to meet project design goals, town standards, and proposed regulatory limits. Prepared prefilled testimony and attended New York State Article 10 hearings on the project.

National Survey of Attitudes of Wind Power Project Neighbors – Project manager for a study of the of the factors that affect audibility and annoyance from wind turbines. This study is based on a national survey of people or live around wind power projects, which was conducted by the Lawrence Berkeley National Laboratory and funded by the U.S. Department of Energy. The result of the study was published as a peer-reviewed paper in the Journal of the Acoustical Society of America (see publications, below).

Black Fork Wind – Conducted a noise assessment of this 100.5 MW wind project in Richland and Crawford Counties in Ohio. Monitored background sound levels over a two-week period for eight locations over an eight-day period. Correlated wind speed measured at project met towers with background wind speeds and assessed the average background sound level over all sites for use in comparing modeled wind turbine sound levels to Ohio's relative sound standard. Presented testimony to Ohio Power Siting Board.

Massachusetts Research Study on Wind Turbine Acoustics – Leading a study on wind turbine sound to help the State of Massachusetts Clean Energy Center and

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Department of Environmental Protection improve the regulation of wind turbines in the State. The study includes detailed data collection around five wind projects in New England, support to the Wind Turbine Technical Advisor Committee of the MassDEP, and quantitative analysis of factors such as infrasound, amplitude modulation, sound levels, and sound propagation modeling.

Highland Plantation Wind Farm – Managed the noise study for the Highland Plantation Wind Farm near Bingham, Maine. The project included long-term sound monitoring at five locations around the site and modeling the 39 turbines proposed for the project. Sound propagation modeling was done to assess conformance with the Maine DEP standards, and mitigation was recommended in a report as part of the permitting proceedings.

Scioto Ridge/Hardin Wind – Managed the pre-construction noise study for the 242 MW Scioto Ridge/Hardin Wind project in Hardin and Logan Counties, Ohio. Oversaw the installation of 13 sound monitors around the project and modeling of sound at all residences around the project from construction, the operating wind turbines, and associated transmission line and substation. Prepared direct testimony for the project for consideration at the Ohio Public Siting Board.

Spruce Mountain Wind, Maine – Conducted assessment of turbulence intensity and potential impacts to amplitude modulation during permitting. During post-construction, management of continuous 24/7/365 compliance monitoring system. Developed software for processing combining 50 ms sound monitoring data with turbine SCADA and met tower instrumentation to assess sound pressure level, amplitude modulation, and tonal sound over 10-minute compliance periods.

Review of Wind Project on Behalf of Oakfield Township – Retained by the Oakfield Township in Maine, reviewed the noise portion of the application of First Wind to construct a wind farm. Provided presentations to the Township on general noise topics and, separately, on the findings of our review. Consulted to the Wind Energy Committee on language for a proposed ordinance.

Deerfield Wind Farm, VT – Prepared a noise study for Vermont's Section 248 filing on a 34 MW wind power project proposed for southern Vermont. The project included background sound monitoring, sound propagation modeling of the wind turbines and substation, and preparation of reports and exhibits. Sound modeling included analyses of 8760 hours of meteorology. A report was prepared and testimony was presented to the Section 248 Board

Kingdom Community Wind – Prepared a noise assessment of a 63 MW wind project in Lowell, Vermont. The project included background sound monitoring at six locations, detailed sound modeling to assessment annualized impacts, testimony before the Public Service Board, and post-construction sound monitoring.

PUBLICATIONS

Haac, R., Kaliski, K., Landis, M., Hoen, B., Rand, J., Firestone, J.,,Elliott, D., Hübner, G.,, and Pohl, J. "Wind turbine audibility and noise annoyance in a national U.S. survey: Individual perception and influencing factors." The Journal of the Acoustical Society of America 146.1124 (2019).

Kaliski, K., Bastasch, M., and O'Neal, R., "Regulating and predicting wind turbine sound in the U.S.," Proceedings of Inter-Noise 2018, Chicago, Il, August 2018.

Old, I., Kaliski, K., “Wind turbine noise dose response – Comparison of recent studies,” 7th International Conference on Wind Turbine Noise, May 2017

Duncan, E., Kaliski, K., Old, I., and Lozupone, D., “Methods for Assessing Background Sound Levels during Post-Construction Compliance Monitoring within a Community,” Proceedings of the 6th International Meeting on Wind Turbine Noise 2015.

McCunney, R., Mundt, K., Colby, D., Dobie, R., Kaliski, K., and Blais, M., “Wind Turbines and Health; A Critical Review of the Scientific Literature,” Journal of Occupational and Environmental Medicine 56(11) 2014.

Kaliski, K.; Duncan, E.; McPhee, P; West, C.R.; O'Neal, R.; Zimmerman, J.; Snyder, J., “The Massachusetts research study on wind turbine acoustics - Methods and goals”, Proceedings of NoiseCon14, Fort Lauderdale, Florida, 2014.

Kaliski, K., Neeraj, G., “Prevalence of complaints related to wind turbine noise in northern New England,” Proceedings of Meetings on Acoustics, Vol 19, 2013

Kaliski, K., “Winning Community Acceptance: Dispelling Myths and Promoting the Realities about Wind Power – Noise Impacts,” AWEA New England Regional Wind Energy Summit, 2012, and AWEA Community Wind Working Group webinar, 2012

Kaliski, K., Wilson, D.K., Vecherin, S., Duncan, E., “Improving Predications of Wind Turbine Noise Using PE Modeling,” *Proceedings of the 2011 Institute of Noise Control Engineers NOISECON 2011*

Kaliski, K., and Duncan, E. “Calculating Annualized Sound Levels for a Wind Farm,” *Acoustical Society of America, Proceedings of Meetings on Acoustics*, Vol. 9, 2010.

Park, L, Lawson, S, Kaliski, K., Newman, P. and Gibson, A. “Modeling and Mapping Hiker’s Exposure to Transportation Noise in Rocky Mountain National Park,” *Park Science* Vol. 26 No 3, Winter 2009-2010.

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

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

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

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

Collier, R. and Kaliski, K. “A Low-Complexity Environmental Noise Monitoring System for Unattended Operation in Remote Locations,” Presented at the *Acoustical Society of America conference*, Salt Lake City, 2007.

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

PRESENTATIONS

Haac, T., Kaliski, K., Landis, M., and Hoen, B., "Predicting audibility of and annoyance to wind power project sounds using modeling sound," Webinar, Lawrence Berkeley National Laboratory, 2018.

Haac, T, Landis, M., Kaliski, K., Hoen, B., Rand, J., Firestone, J., Pohl, J., Heubner, G., Elliot, D., "Public acceptance of wind energy: Impact of sound levels," Acoustical Society of American, 2018.

Kaliski, K., Lozupone, D., McPhee, P., O'Neal, R., Zimmerman, J., Wilson, K., Rowan-West, C., "The MassCEC Wind Turbine Noise Research Project – Research Goals and Preliminary Results," Acoustical Society of America, Indianapolis, 2014.

Kaliski, K., Duncan, D., McPhee, P., O'Neal, R., Zimmerman, J., Rowan West, C., "The Massachusetts Research Study on Wind Turbine Acoustics – Methods and Goals", AWEA, 2014.

Kaliski, K., "Wind Turbines – Noise Generation, Exposure, and Stressors," Society of Environmental Toxicology and Chemistry North Atlantic Chapter, 2013.

Kaliski, K., Neeraj, G. "Prevalence of complaints related to wind turbine noise in northern New England," 21st International Congress on Acoustics, Montreal, 2013.

Kaliski, K., "Winning Community Acceptance: Dispelling Myths and Promoting the Realities about Wind Power – Noise Impacts," AWEA New England Regional Wind Energy Summit, 2012, and AWEA Community Wind Working Group webinar, 2012.

Kaliski, K., "Topics in Public Acceptance, Human Impacts: Sounds and Shadow Flicker," New England Wind Energy Education Project Conference *Wind Energy in New England: Understanding the Issues Affecting Public Acceptance*, 2011.

Kaliski, K., "Wind Turbine Noise Regulation," (webinar) New England Wind Energy Education Project, 2010.

Kaliski, K. "Sound Advice: Evaluating Noise Impacts in a Changing Landscape," American Wind Energy Association Windpower 2009 Conference and Exposition 2009.

Kaliski, K. "Calibrating Sound Propagation Models for Wind Power Projects," *State of the Art in Wind Siting Seminar*, October 2009, National Wind Coordinating Collaborative.

LICENSES, CERTIFICATIONS, MEMBERSHIPS, AWARDS, AND AFFILIATIONS

- Licensed Professional Engineer (PE), States of VT, NH, MA, IL, and MI
- Board Certified, Institute of Noise Control Engineering (INCE)
- William W. Land Distinguished Noise Control Engineer Award (INCE)
- INCE Certification Board
- Co-Chair Wind Turbine Noise Technical Activity Committee (INCE)
- Acoustical Society of America
- Tau Beta Pi Engineering Society