

CHRIS HOWELL, INCE

Senior Noise Specialist



Mr. Howell is a Project Manager in the Environmental Services division. Mr Howell is the Burns & McDonnell noise lead. He manages general environmental permitting teams, with a specialty in generation and noise analyses. Mr. Howell leads an experienced team of permitting specialists who conduct feasibility studies and assist clients with regulatory compliance and/or mitigation efforts. Mr. Howell's clients range from generation, transmission and distribution, to transportation. Many of Mr. Howell's projects

require public involvement, testimony, and/or interaction with regulatory agencies. Mr. Howell is an Associate at Burns & McDonnell.

EDUCATION

- ▶ BS, Mechanical Engineering

MEMBERSHIP

- ▶ Institute of Noise Control Engineering

15 YEARS WITH BURNS & MCDONNELL

17 YEARS OF EXPERIENCE

Prevailing Winds Wind Farm, Prevailing Winds LLC.

Avon, SD, 2016

Noise Lead. Mr. Howell performed predictive noise modeling using CADNA and assisted Prevailing Winds with public testimony during the licensing and permitting phase of a 200-MW wind farm.

Lone Tree Wind Farm, Leeward

Bureau County, IL, 2017

Noise Lead. Mr. Howell performed predictive noise modeling using CADNA to assist Leeward in the permitting and licensing phase for a proposed wind farm in Bureau County, IL. Octave band analysis and existing wind farms cumulative impacts were performed. Mr. Howell provided written and oral testimony in front of the zoning board.

Thunder Spirit Wind Farm, Allete Clean Energy

Adams County, ND, 2017

Noise Lead. Mr. Howell performed predictive noise modeling using CADNA to assist ACE in the permitting and licensing for a proposed 155.5-MW wind farm in Adams County, ND. Octave band analysis and existing wind farms cumulative impacts were performed. Mr. Howell provided written and oral testimony in front of the zoning board.

Mendota Hills Wind Farm Repower, Leeward

Lee County, IL, 2016

Noise Lead. Mr. Howell performed predictive noise modeling using CADNA to assist Leeward in the permitting and licensing phase for repowering an existing wind farm, using fewer, larger turbines. Comparisons were performed to the currently operating wind farm's impacts. Mr. Howell provided written and oral testimony for the project.

Milligan 1 and 3 Wind Farms, Aksamit

Saline County, NE, 2016

Noise Lead. Mr. Howell performed predictive noise modeling using CADNA to assist Aksamit in the permitting and licensing phase of 374-MW of turbines in Saline County, NE. Written and graphical descriptions of impacts were provided.

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Energia Sierra Juarez Wind Farm, Sempra International

Baja California, Mexico, 2014

Noise Lead. Mr. Howell performed predictive noise modeling using CADNA to assist Sempra in the permitting and licensing phase of a 155-MW wind farm. Impacts at nearby sensitive receptors were depicted using isopleths of equal sound level overlaid onto aerials of the project area.

Top Crop 3&4 Wind Farm, Horizon Wind Energy

Livingston, Grundy, and LaSalle Counties, IL, December 2011

Noise Lead. Mr. Howell performed ambient monitoring and predictive noise modeling using CADNA to assist Horizon in the permitting and licensing phase of adding 300-MW of turbines to the existing TC1&2 Wind Farm. A cumulative analysis of various surrounding wind farms was completed the three counties as a whole using data from nearby, non-Horizon wind farms in conjunction with the Horizon project and various design options.

Twin Groves Phases 4 & 5, Horizon Wind Energy

McLean County, IL, 2009 And 2011

Noise Lead. Mr. Howell performed background noise monitoring and predictive noise modeling using CADNA to assist Horizon in the permitting and licensing phase of a 500-megawatt wind farm. He successfully assisted with public testimony. Later, Mr. Howell assisted Horizon with the determining the noise implications that changing turbines would have to the already approved wind farm.

Rail Splitter, Horizon Wind Energy

Logan and Tazewell Counties, IL, 2008 and 2011

Noise Lead. Mr. Howell performed background noise monitoring and predictive noise modeling using CADNA to assist Horizon in the permitting and licensing phase of a 500-megawatt wind farm. Later, Mr. Howell assisted Horizon in determining what cumulative noise impacts would occur when of adding WindBOOST technology.

Bright Stalk, Horizon Wind Energy

Chenoa, IL, 2010

Noise Lead. Mr. Howell performed background noise monitoring and predictive noise modeling using CADNA to assist Horizon in the permitting and licensing of a 400-megawatt wind farm. He provided written and oral public testimony.

Meadow Lake Phases 1-5, Horizon Wind Energy

White County, IN, 2009 and 2011

Noise Lead. Mr. Howell led a team that performed background noise monitoring and predictive noise modeling using CADNA to assist Horizon with permitting and licensing of a 500-megawatt wind farm, in multiple phases. Later, Mr. Howell assisted Horizon in determining what cumulative noise impacts would occur when of adding WindBOOST technology to increase the as-built wind turbines power output.

Lompoc Wind Farm, Acciona

Santa Barbara, CA, July 2010

Noise Lead. Mr. Howell performed predictive noise modeling using CADNA to assist Acciona in the permitting and licensing phase of a wind farm. He also created documentation regarding public interaction and action plans. He also developed a monitoring plan for the project and was to coordinate a team of specialists to carry out ambient noise monitoring. The project is currently on hold.