

CHRIS HOWELL, INCE

Project Manager / Noise Lead



Mr. Howell is a Project Manager in the Environmental Services group, with a specialty in traditional and renewable generation permitting, and is also Burns & McDonnell's Noise Lead. He manages the overall environmental permitting and licensing of complex facilities. He leads an experienced team of permitting specialists who conduct feasibility studies and assist clients with regulatory compliance and/or mitigation efforts.

Chris has performed projects in all 50 of the United States, Puerto Rico, Canada, Mexico, Asia, Africa, and the Middle East. His clients range from generation, transmission and distribution, to transportation and other industries. Many of his projects require public involvement and/or interaction with regulatory agencies and expert testimony. Mr. Howell is an Associate at Burns & McDonnell.

SPECIALITIES

- ▶ Predictive Noise Modeling
- ▶ Noise Monitoring & Analysis
- ▶ Public Testimony

EDUCATION

- ▶ BS, Mechanical Engineering

ASSOCIATIONS

- ▶ Institute of Noise Control Engineering

18 YEARS WITH BURNS & MCDONNELL

20 YEARS OF EXPERIENCE

Panther Grove Wind Farm | TriGlobal Energy

Illinois | 2020 - Current

Noise Lead: Chris led a team that performed predictive modeling for the proposed Panther Grove Wind Farm. Chris helped with graphical representation of expected impacts. Chris will be providing testimony during the public county hearings.

Shady Oaks II Wind Farm | Algonquin Power

Illinois | 2019 - Current

Noise Lead: Chris managed a project team that performed ambient sound monitoring and the predictive modeling during for development of the proposed Shady Oak II Wind Farm. Chris helped with graphical representation of expected impacts and he provided technical assistance at public meetings. Cumulative impacts of the Shady Oaks I Wind Farm were included. Chris will be providing testimony during the public county hearings.

Arriba Wind Farm | NGC Partners

Colorado | 2019

Noise Lead: Chris provided predictive modeling and micro-siting assistance during the development of the proposed Arriba Wind Farm. The results of the study were used by the client to pursue a special use permit for the project.

Rosewater Wind Farm | EDP Renewables

Indiana | 2019

Noise Lead: Chris provided predictive modeling and guidance on public interaction. The results of these studies are being used by the client for public meetings and to pursue a special use permit for the project.



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Bitter Ridge Wind Farm | Scout Clean Energy

Indiana | 2019

Noise Lead: Chris managed predictive modeling and regulation interpretation and development assistance during the development of the proposed Big Blue River Wind Farm. The results of these studies will be used by the client to pursue a special use permit for the project.

Philip Wind Farm Permitting Studies | Philip Wind Partners, LLC

South Dakota | 2018

Noise Lead: Chris performed acoustical modeling for the proposed Philip Wind Farm in South Dakota. The results of the study were used by the client to pursue a special use permit for the project. Modeling was performed using CadnaA.

Prevailing Winds Wind Farm, Prevailing Winds LLC.

South Dakota | 2016 – Current

Noise Lead. Chris managed an ambient survey team, performed predictive noise modeling using CadnaA, and assisted Prevailing Winds with public testimony during the licensing and permitting phase of a 200-MW wind farm. Chris testified before the SDPUC and assisted Prevailing Winds in gathering data to bolster their application. Compliance measurements will occur in May of 2020.

Ruso Wind Farm Permitting Studies | Ruso Wind Partners, LLC

North Dakota | 2018

Noise Lead: Chris was Burns & McDonnell's performed acoustical modeling for the proposed Philip Wind Farm in North Dakota. The results of the study will be used by the client to pursue a special use permit for the project. Modeling was performed using CadnaA.

Thunder Spirit | ALLETE Clean Energy

North Dakota | 2018

Noise Lead: Chris managed and performed an acoustical assessment for ALLETE Clean Energy during the development, design, and construction of the Thunder Spirit II Wind Farm. The noise assessment study consisted of predictive modeling using the CadnaA software.

Big Sky Wind Farm Permitting Studies | Calpine

Illinois | 2018 - Current

Noise Lead: Chris managed a project team that performed ambient sound monitoring and the predictive modeling during for development of the proposed Big Sky Wind Farm. Chris helped with graphical representation of expected impacts and he provided technical assistance at public meetings. The results of the study were used by the client to pursue a special use permit for the project.

Mountain Breeze Wind Farm Permitting Studies | Leeward

Colorado | 2018 - 2019

Noise Lead: Chris provided predictive modeling and micro-siting assistance during the development of the proposed Mountain Breeze Wind Farm. The results of the study were used by the client to pursue a special use permit for the project.



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Big Blue River Wind Farm Permitting Studies | Confidential Client

Indiana | 2018 - Current

Noise Lead: Chris managed predictive modeling and regulation interpretation and development assistance during the development of the proposed Big Blue River Wind Farm. The results of these studies will be used by the client to pursue a special use permit for the project.

Nimbus Wind Farm Permitting Studies | Scout Clean Energy

Arkansas | 2018

Noise Lead: Chris performed predictive modeling during the development of the proposed Nimbus Wind Farm. The results of the study were used by Scout to pursue a special use permit for the project.

Lone Tree Wind Farm, Leeward

Illinois | 2017

Noise lead managed ambient monitoring and 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. Chris provided written and oral testimony in front of the zoning board.

Mendota Hills Wind Farm Repower, Leeward

Illinois | 2016 - Current

Noise lead managed and ambient monitoring and predictive noise modeling using CadnaA 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. Chris provided written and oral testimony for the project.

Milligan 1 and 3 Wind Farms, Aksamit

Nebraska | 2016

Noise lead performed predictive noise modeling using CadnaA to assist Aksamit in the permitting and licensing phase of 374-MW of turbines in Saline County, NE.

Broken Bow 2 Wind Farm | Sempra U.S. Gas & Power

Nebraska | 2015

Noise lead performed predictive modeling and commercial negotiation support for Sempra U.S. Gas & Power during development of a 75-MW wind energy project in central Nebraska.

Energía Sierra Juárez Wind Farm | Sempra Energy

Baja California, Mexico | 2013

Noise lead performed predictive noise modeling using CADNA to assist Sempra in determining specific wind turbine locations to avoid impacting nearby sensitive areas, and in the permitting and licensing phase of a 155-MW wind farm.



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Lompoc Wind Farm | Acciona

Santa Barbara, California | 2010 - 2011

Noise lead responsible for performing predictive noise modeling using CADNA to assist Acciona in the permitting and licensing phase of a wind farm. He is also creating documentation regarding public interaction and action plans. He is also developing a monitoring plan for the project and will coordinate a team of specialists who will carry out ambient noise monitoring.

Top Crop 3&4 Wind Farm, Horizon Wind Energy

Illinois | December 2011

Noise lead performed ambient monitoring and predictive noise modeling using CadnaA 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

Illinois | 2009 And 2011

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

Rail Splitter, Horizon Wind Energy

Illinois | 2008 and 2011

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

Bright Stalk, Horizon Wind Energy

Illinois | 2010

Noise lead performed background noise monitoring and predictive noise modeling using CadnaA to assist Horizon in the permitting and licensing phase of a 400-megawatt wind farm. He also assisted with public testimony.

Meadow Lake Phases 1-5, Horizon Wind Energy

Indiana | 2009 and 2011

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

