James Damon Direct Testimony, Ex	James	Damon	Direct	Testimony.	Ex.	
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OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION BY PREVAILING WIND PARK, LLC FOR A PERMIT FOR A WIND ENERGY FACILITY IN BON HOMME, CHARLES MIX, AND HUTCHINSON COUNTIES, SOUTH DAKOTA, FOR PREVAILING WIND PARK ENERGY FACILITY

SD PUC DOCKET EL 18-026

PRE-FILED DIRECT TESTIMONY OF JAMES DAMON
ON BEHALF OF PREVAILING WIND PARK, LLC

May 30, 2018

1	I.	INTRODUCTION AND QUALIFICATIONS
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- 3 Q. Please state your name, employer, and business address.
- 4 A. My name is James Damon. I am a Senior Project Manager at sPower Development
- 5 Company, LLC ("sPower"). My business address is 2180 South 1300 East, Suite
- 6 600, Salt Lake City, Utah.

7

- 8 Q. Briefly describe your educational and professional background.
- 9 A. I have a Bachelor of Arts in Urban Studies and Political Science, and a Master's
- 10 Degree in City and Regional Planning.

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- 12 I am a Senior Project Manager and manage a 500-megawatt ("MW") development
- portfolio at sPower. I am responsible for structuring and negotiating land
- 14 agreements, negotiating and managing engineering and procurement contracts,
- 15 performing technical due diligence for project acquisitions, managing project
- budgets, and managing third-party consultants. I have over 10 years of experience
- in renewable energy development.

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19 A copy of my resume is attached as **Exhibit 1**.

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- 21 Q. Could you explain the relationship between Prevailing Wind Park, LLC
- 22 ("Prevailing Wind Park" or the "Applicant") and sPower with respect to the
- proposed Prevailing Wind Park Energy Facility ("Project")?
- 24 A. Prevailing Wind Park, a South Dakota limited liability company, is a wholly owned
- subsidiary of sPower. Prevailing Wind Park will own and develop the Project.

- Q. Could you please describe sPower's experience in the renewable energy
- 28 **industry?**
- 29 A. sPower is the largest private owner of operating solar assets in the United
- 30 States. sPower owns and operates a portfolio of solar and wind assets greater than
- 1.3 gigawatts ("GW") and has a development pipeline of more than 10 GW. sPower

is owned by a joint venture partnership between The AES Corporation (NYSE: AES), a worldwide energy company headquartered in Arlington, Virginia, and the Alberta Investment Management Corporation, one of Canada's largest and most diversified institutional investment fund managers.

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- 37 Q. What is your role with respect to the Project?
- 38 A. I am the Project manager, and in that role, I oversee development of the Project.

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40 II. PURPOSE OF TESTIMONY

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- 42 Q. What is the purpose of your Direct Testimony?
- 43 A. The purpose of my testimony is to provide an overview of the Project's development
- history, including: Project site selection, site analysis, and layout and facility design.
- I also provide testimony regarding Project operational considerations.

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- 47 Q. What exhibits are attached to your Direct Testimony?
- 48 A. The following exhibits are attached to my Direct Testimony:
- 49 Exhibit 1: Resume

- Q. Please identify the sections of the Application to the South Dakota Public
- 52 Utilities Commission for a Facility Permit ("Application") that you are
- 53 sponsoring for the record.
- A. I am sponsoring the following portions of the Application:
- Section 1.0: Introduction
- Section 2.0: Project Development Summary
- Section 3.0: Facility Permit Application
- Section 4.0: Names of Participants
- Section 5.0: Name of Owner and Manager
- Section 6.0: Purpose of, and Demand for, the Wind Energy Facility
- Section 7.0: Estimated Cost of the Wind Energy Facility
- Section 9.0 Alternate Sites and Siting Criteria

- Section 15.6: Electromagnetic Interference
- Section 19.0: Time Schedule
- Section 20.0: Community Impact (with the exception of those subsections
- 66 concerning cultural resources)
- Section 21.0: Employment Estimates
- Section 23.0: Future Additions and Modifications
- Section 25.0: Reliability and Safety
- Section 26.0: Information Concerning Wind Energy Facilities
- Section 27.4: Applicants Burden of Proof
- Section 28.0: Testimony and Exhibits
- Section 29.0: References
- Appendix A: Figures
- Appendix O: RF Impact Report
- Appendix P: 2009 Berkeley Property Values Study
- Appendix Q: 2013 Berkeley Property Values Study

79 III. PROJECT OVERVIEW

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Q. Who will own and operate the Project?

82 A. Prevailing Wind Park will own, manage, and operate the Project.

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84 Q. Please provide a basic description of the Project, including where it is located.

- A. The proposed Project is an up to 219.7-MW nameplate capacity wind energy facility
- to be located within a 50,364-acre project area ("Project Area") in Bon Homme,
- Charles Mix, and Hutchinson counties, South Dakota. The Project will consist of the
- 88 following components:
- Up to 61 wind turbines;
- Access roads to wind turbines and associated facilities;
- An underground electrical power collector and communication system;
- A collector substation;
- Up to four permanent meteorological ("MET") towers;

- An operations and maintenance ("O&M") facility; and
 - Additional temporary construction areas, including crane paths, public road improvements, a laydown yard, and one or more concrete batch plants (as needed).

Q. Has Prevailing Wind Park secured all of the necessary private property rights for the Project?

A. Yes. Prevailing Wind Park has secured all of the private land rights necessary to construct the Project. Prevailing Wind Park will work with local units of government to obtain the necessary road crossing and utility permits for the Project.

Q. How and where will the Project interconnect to the electric grid?

A. The Project will interconnect with Western Area Power Administration's ("WAPA") existing Utica Junction Substation, located approximately 27 miles east of the Project. The Applicant is proposing to construct a new 115-kilovolt ("kV") gen-tie line in Bon Homme and Yankton counties from the collector substation to the Utica Junction Substation. The gen-tie line and step-up interconnection substation are not under the jurisdiction of the South Dakota Public Utilities Commission ("Commission") and will be permitted in Bon Homme and Yankton counties.

Q. Has the Project identified an off-taker for the energy it will produce?

115 A. Yes. In January 2018, Prevailing Wind Park entered into a 30-year 200-MW power purchase agreement ("PPA") with a South Dakota load-serving entity.

Q. What is the proposed development schedule for the Project?

A. Prevailing Wind Park expects to commence construction activities in the Fourth Quarter of 2018 and have the Project operational in the Fourth Quarter of 2019. However, commencement of construction is dependent on the timing of interconnection studies, required transmission upgrades, and securing Project financing.

IV. OVERVIEW OF SITE SELECTION

- 127 Q. Please provide an overview of the Project's development history.
- A. A group of local investors formed Prevailing Winds, LLC in 2014, following the successful development of the 80 MW B&H Wind Project (now Beethoven Wind Project), to create additional sources of income for area landowners and economic growth for the local communities through wind energy.

Prevailing Winds, LLC filed an application with the Commission in June 2016 for a 200-MW wind farm with up to 100 2.3-MW wind turbines. At that time, Prevailing Winds, LLC did not have all private land rights secured for the Project and did not have an off-taker for the energy that would be produced. Prevailing Winds, LLC subsequently withdrew the application in August 2016.

In October 2017, sPower acquired the Prevailing Wind Park, LLC assets and development rights to the Project from Prevailing Winds, LLC. sPower formed Prevailing Wind Park, LLC which has undertaken extensive development activities, acquired all necessary private land rights, and secured an off-taker for the Project's output.

Q. How was the location of the Project initially identified?

A. In 2015, Prevailing Winds, LLC conducted feasibility studies to identify a potential wind project location along WAPA's Fort Randal to Utica Junction to Sioux City double-circuit 230-kV transmission line. Three separate site alternatives along the line were studied, and a site in Bon Homme and Charles Mix counties was initially selected. This site was selected due to the superior wind resource, lower population density, and lower environmental risks, as compared to the alternative sites. Following selection of the initial site and Prevailing Wind Park's acquisition of the Project, the Project boundary has been further refined over time based on the results of community outreach, land acquisition, agency coordination, and completion of additional studies. These refinements have included a shift of the Project boundary

to the north away from the Missouri River. In addition to acreage in Bon Homme and Charles Mix counties, the Project Area now includes acreage in Hutchinson County.

V. TURBINE MODEL SELECTION

Q. Has Prevailing Wind Park made a final turbine model selection for the Project?

A. No, not at this time. Prevailing Wind Park is considering turbines with an energy production range between 3.6 MW and 3.8 MW, and the Application contains information regarding two representative turbines, the General Electric ("GE") 3.8-137 and the Vestas V136-3.6 turbine models. The final decision regarding turbine model will be made prior to construction.

Q. Why is it important for the Project to have flexibility with respect to the turbine model selected?

A. Identifying one turbine option at this time would make it difficult for Prevailing Wind Park to negotiate the best turbine price with suppliers. Turbine supply agreements are not typically executed until after receipt of most major permits. This timing is due, in part, to the large capital investment required in connection with wind turbine acquisition. Additionally, flexibility in turbine model selection will provide for optimization of Project design, as it will allow Prevailing Wind Park to consider known conditions of the Project Area and all wind turbines commercially available at the time of construction – turbine technology is continually evolving, so such flexibility will allow the Project to take advantage of the latest technological developments in wind turbines. For any wind project to remain competitive, it must have the flexibility to use the latest turbine technology at the lowest costs.

VI. PROJECT CONFIGURATION

185 Q. Is the Project's proposed configuration depicted in Figure 2 of the Application?

A. Yes, Figure 2 to the Application shows the 63 turbine locations proposed for the configuration of the Project. Please note that the turbine numbers go from 1-58 and 60-64; as the turbine location 59 was eliminated.

Q. Is this same configuration proposed for any turbine model selected?

A. Yes. The configuration shown in Figure 2 to the Application will be used for the turbine model finally selected for the Project, whether the GE model, the Vestas model, or another comparable turbine model is used. Depending on the turbine model selected, a subset of the 63 proposed turbine locations will be used in order to reach a total output of up to 200 MW. Although not all of the 63 proposed locations will be used, acoustic and shadow flicker modeling was conducted at all 63 proposed turbine locations for both of the representative turbine models. If a different turbine model is ultimately selected, Prevailing Wind Park will update its acoustic and shadow flicker modeling.

- Q. Is the configuration sited so as to minimize potential environmental impacts?
- A. Yes. The Project's proposed configuration was sited to minimize potential environmental impacts, as discussed in Sections 10.0 through 15.0 and 17.0 and 18.0 of the Application and in the Direct Testimony of Bridget Canty.

- Q. Is the Project configuration designed to comply with all applicable County and
 State turbine setback requirements?
- 209 A. Yes.

- Q. Please identify the applicable specific setbacks for the Project and other requirements and commitments that affect turbine setbacks.
- A. The applicable setbacks, requirements and commitments are listed in the Table 9-2 in the Application and provided below.

Category	Requirements/Commitments				
State Requirements					
Setbacks	Turbines shall be set back at least 500 feet or 1.1 times the height of the tower, whichever is greater, from any surrounding property line (SDCL 43-13-24).				
Bon Homn	ne County Requirements ^a				
Setbacks	(a) Distance from currently occupied off-site residences, business and public buildings shall be not less than one thousand (1,000) feet. Distance from the residence of the landowner on whose property the tower(s) are erected shall be not less than five hundred (500) feet or one point one (1.1) times the system height, whichever is greater. For the purposes of this section only, the term "business" does not include agricultural uses.				
	(b) Distance from right-of-way of public roads shall be not less than five hundred (500) feet or one point one (1.1) times the system height, whichever is greater.				
	(c) Distance from any property line shall be not less than five hundred (500) feet or one point one (1.1) times the system height, whichever is greater, unless appropriate easement has been obtained from adjoining property owner.				
Noise	Noise level produced by the LWES shall not exceed forty-five (45) dBA, average A-weighted sound pressure at inhabited dwelling existing at the time the permit application is filed, unless a signed waiver or easement is obtained from the owner of the dwelling.				
	The permittees shall submit a report of predicted noise levels at habitable residential dwellings within one mile of proposed tower locations to the Board no less than forty-five (45) days prior to commencing construction.				
Voluntary	Commitments in Charles Mix and Hutchinson Counties				
Setbacks	(a) Distance from currently occupied off-site residences, business and public buildings will be not less than 1,000 feet. Distance from the residence of the landowner on whose property the tower(s) are erected will be not less than 500 feet or 1.1 times the system height, whichever is greater. The term "business" does not include agricultural uses.				
	(b) Distance from right-of-way of public roads will be not less than 500 feet or 1.1 times the system height, whichever is greater.				
	(c) Distance from any property line will be not less than 500 feet or 1.1 times the system height, whichever is greater, unless appropriate easement has been obtained from adjoining property owner.				
Noise	Noise level produced by the wind turbines will not exceed 45 dBA, average A-weighted sound pressure at currently inhabited dwellings, unless a signed waiver or easement is obtained from the owner of the dwelling.				
Shadow FI	icker Commitment				
Shadow Flicker	Shadow flicker produced by the wind turbines will not exceed 30 hours per year at currently inhabited dwellings of non-participants.				
Bon Homme	County, South Dakota, Zoning Ordinance (amended November 3, 2015)				

219 Q. Your table notes a shadow flicker commitment for non-participating 220 landowners. Please explain that commitment.

A. Yes. With respect to shadow flicker, only Bon Homme County has a specific wind energy system ordinance and the ordinance does not specify a standard for shadow flicker. It indicates that the county may require the installation of a shadow flicker control system under certain circumstances. In lieu of a specific standard, Prevailing Wind Park commits to limit shadow flicker at non-participating residences in the Project Area to no more than 30 hours per year. As described in Mr. Aaron Anderson's Direct Testimony, conservative shadow flicker modeling indicates a level above 30 hours per year for one non-participating residence. Prevailing Wind Park is undertaking updated analysis using more realistic modeling assumptions for that residence and will update the predicted shadow flicker level with supplemental testimony. If updated modeling results still show more than 30 hours per year of shadow flicker, Prevailing Wind Park will work with the landowner to implement mitigation techniques, such as screening or implement operational controls to ensure experienced shadow flicker levels are below 30 hours per year.

VII. FINAL MICRO-SITING

- Q. Could the remaining cultural resource survey, and other surveys, wetland and waterbody delineations, and geotechnical work require changes to the turbine locations?
- A. Yes. As discussed further in the Direct Testimony of Bridget Canty, Prevailing Wind Park must complete wetland and waterbody delineations, cultural resource surveys, a rare plant habitat assessment, and geotechnical evaluations to finalize the micrositing of turbines. The wetland and waterbody delineations and rare plant habitat assessment are in process. Additionally, Prevailing Wind Park is in the process of field verifying areas of potential untilled grasslands that, based on the 2018 desktop analysis, exhibit recent signs of disturbance or that were added to the Project Area after the prior field verifications were completed.

Minor shifts in the proposed turbine locations could be required due to the results of the remaining survey work and the geotechnical evaluations.

Q. What is Prevailing Wind Park's request with respect to flexibility for future minor shifts in the turbine locations presented in Figure 2 of the Application?

A. Prevailing Wind Park requests that the permit allow turbines to be shifted within 500 feet of their currently proposed locations, so long as specified noise requirements, setbacks and the Applicant's shadow flicker commitment are not exceeded, cultural resource impacts and habitats for listed species are avoided, and wetland impacts are avoided to the greatest extent practicable. If turbine shifts are greater than 500 feet, exceed the noted thresholds, or do not meet the other limitations specified, Prevailing Wind Park would either use an alternate turbine location or obtain Commission approval of the proposed turbine location change.

Q. Is the siting flexibility requested by Prevailing Wind Park consistent with the land use requirements of Bon Homme and Hutchinson counties?

Yes. It is our understanding that the approvals obtained from Bon Homme and Hutchinson counties will authorize the use of the land for a wind energy system and that the turbine locations can be adjusted so long as applicable setbacks and other requirements are met.

Q. With respect to other facilities, what is Prevailing Wind Park's request with respect to final micro-siting?

A. As a result of final micrositing, shifts in the access roads and collector system, as well as changes in the locations of the O&M facility, met towers, Project substation, concrete batch plant, and laydown/staging areas, may be necessary. Therefore, Prevailing Wind Park requests that the permit allow those facilities to be modified, as needed, so long as the new locations are on land leased for the Project, cultural resources and habitats for listed species are avoided, wetland impacts are avoided to the greatest extent practicable, and all other applicable regulations and requirements are met.

Q. Are any future modifications or expansions of the Project planned?

A. No, other than potential minor shifts during Project micro-siting, no future modification or expansions are planned.

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VIII. PROJECT OPERATION AND MAINTENANCE

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- Q. Discuss the personnel that will be involved in operation and maintenance of the Project.
- A. The Project's expected life span is approximately 30 years. During this time, a maintenance crew will be on-site 24-hours a day, seven days a week to monitor turbine operations from the O&M building and conduct maintenance activities, as needed.

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Overall, it is predicted that, during operation and maintenance, the Project will create approximately 8 to 10 full-time jobs paying \$35,000 - \$80,000 per year. Up to six of those positions will be for wind technician jobs paying \$60,000 to \$70,000 annually.

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- Q. Discuss the inspections that will be conducted and when they will occur.
- A. All major components of the wind turbines will undergo routine maintenance according to the schedules established by the component manufacturer.

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- Q. How will the Project be monitored between inspections?
- A. All proposed turbine models have supervisory control and data acquisition ("SCADA") communication technology to control and monitor the Project. This system permits automatic, independent operation and remote supervision, allowing simultaneous on-site and off-site control of the wind turbines.

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- Q. How reliable will the wind turbines and associated infrastructure be?
- A. Prevailing Wind Park requires availability guarantees from turbine manufacturers and O&M service providers to maintain the turbine at 98 percent availability or higher.

IX. DESIGN, CONSTRUCTION, AND OPERATIONAL CONSIDERATIONS

Q. What safety features will be incorporated into the Project?

- A. Prevailing Wind Park has incorporated or will incorporate a number of safety and security measures to protect persons and property, including, but not limited to:
- Wind turbine towers setback from residences and existing roadways in
 accordance with or in excess of applicable regulations;
 - Wind turbine locations will comply with applicable noise requirements;
 - During construction and operation of the Project, temporary (safety) and permanent fencing will be used to restrict access to the site;
 - Warning signs will be in place and Project facilities (turbine tower doors, gates at facilities, etc.) will be locked when not in use;
 - Regular maintenance and inspections will be conducted; and
 - A professional engineer would certify that the foundation and tower design of the turbines is within accepted professional standards, given local soil and climate conditions.

Q. How has Prevailing Wind Park accounted for existing infrastructure (including existing communications systems) in designing the Project?

A. Prevailing Wind Park has conducted a microwave beam path analysis and sited in a manner that avoids all identified microwave beam paths and communication systems. Prevailing Wind Park also submitted a Project notification letter to the U.S. Department of Commerce National Telecommunications and Information Administration ("NTIA"). NTIA's determination is expected around the beginning of June 2018.

The Department of Defense and the Department of Homeland Security Long Range Radar Joint Program Office's "pre-screening tool" used to evaluate the impact of wind turbines on air defense long-range radar was applied to the Project Area and returned a result of "no anticipated impact" (green) to Air Defense and Homeland

Security radars. Additionally, the Project is not likely to impact weather radar operations at NEXRAD Weather Surveillance Doppler Radar Stations.

- Q. Will the Project participate in the South Dakota One-Call program?
- 348 A. Yes.

- Q. With respect to use of existing local roads as haul roads, will Prevailing Wind Park coordinate with local road authorities regarding the use and restoration of those roads?
- A. Yes. Prevailing Wind Park will coordinate with applicable local road authorities to obtain road use agreements and/or necessary road permits prior to construction to ensure safe and efficient use and to minimize and mitigate Project impacts to haul roads. The road use agreements will also address improvements to existing roads and restoration of haul roads to their pre-construction condition following construction. Additional information concerning haul roads is contained in Sections 20.4.1.1 and 20.4.2.1 of the Application.

- Q. What steps will the Project take to prepare for a potential emergency situation at the Project site during construction and when the Project is operational?
- A. Prevailing Wind Park and its construction team will coordinate with local and county emergency management to develop procedures for response to emergencies, natural hazards, hazardous materials incidents, manmade problems, and potential incidents concerning Project construction. During Project operations, the Project operator would coordinate with local and county emergency management for the purpose of protecting the public and the property related to the Project during natural, manmade or other incidents. The Project would register each turbine location and the O&M building with the rural identification/addressing (fire number) system and 911 systems.

373 Q. Has Prevailing Wind Park considered electromagnetic interference in connection with the construction and operation of the Project?

A. Yes. Prevailing Wind Park completed an RF Impact Study, consisting of three sections: microwave point-to-point path analysis; airports, radar stations, and military aircraft operations; and NTIA notification. See Section 15.6 of the Application and Appendix O for additional detail.

- 380 Q. Will the Project be designed, constructed, and operated in compliance with all applicable federal, state, and local regulations?
- 382 A. Yes.

X. PROJECT BENEFITS

- 386 Q. Please describe the local and state benefits the Project will provide.
 - A. The Project is expected to create both short-term and long-term positive impacts to the local economy. Impacts to social and economic resources from construction activities would be short-term. Local businesses, such as restaurants, grocery stores, hotels, and gas stations, would see increased business from construction-related workers during the construction phase of the Project. Local industrial businesses, including aggregate and cement suppliers, welding and industrial suppliers, hardware stores, automotive and heavy equipment repair, electrical contractors, and maintenance providers, would also likely benefit from construction of the Project. In addition to the direct payments, construction of the Project would create a \$14.9 million boost to the local economy.

- Prevailing Wind Park estimates that \$220,000 of food, supplies, and fuel would be purchased locally by the Project and Project staff annually (or \$20.4 million over the life of the Project). The Project would generate approximately \$60 million in direct economic benefits for local landowners, local communities, and the State of South Dakota. Over the life of the Project (30 years), it would create direct payments of more than:
- Approximately \$37 million to landowners, including an average of \$1,230,000

annually from lease payments:

- 406 • Approximately \$6 million to Bon Homme County, or \$201,000 annually from 407 taxes paid; • Approximately \$4.2 million to Charles Mix County, or \$140,000 annually from 408 409 taxes paid; • Approximately \$913 thousand to Hutchinson County, or \$30,500 annually from 410 411 taxes paid; 412 Approximately \$1.5 million to area school district(s), or \$371,000 annually from 413 taxes paid; and 414 Approximately \$11.1 million to the State of South Dakota, or \$336,000 annually 415 from taxes paid. 416 417 XI. CONCLUSION 418 419 Q. Does this conclude your Direct Testimony?
- 422 Dated this 30th day of May, 2018.

423 _____

424 James Damon

A. Yes.

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JAMES DAMON

JDamon@spower.com 347.436.6808

Accomplished project developer with \$300,000,000 of projects in construction or operating assets.

PROFESSIONAL EXPERIENCE

sPower

Senior Project Manager

January, 2018 - Present

- Manage 500 MW development portfolio
- Responsible for structuring and negotiating land agreements
- · Research and identify ew greenfield opportunities in CAISO, SPP and MISO footprints
- Negotiate and manage engineering and procurement contracts
- Perform technical due-diligence for project acquisitions
- Manage project budgets and CapEx inputs for financial models
- Manage third-party consultants and legal counsel

EDF Renewable Energy

Development Manager

April, 2011 - January, 2018

- Lead developer of 80 MW Copenhagen Wind Farm—Lewis County, New York (currently in construction)
- Lead developer of ~800 MW SPP development pipeline
- Cultivated 400 MW pipeline in New York, Michigan, Ohio and Wisconsin
- Strengths in land acquisition, regulatory compliance, environmental and local permitting
- Responsible for structuring and negotiating land agreements
- Performed technical due-diligence for project acquisitions
- Managed project budgets and CapEx inputs for financial models
- Identified and managed third-party consultants and legal counsel

RESOLVE

Senior Associate, National Wind Coordinating Collaborative (NWCC)

February, 2009 - March, 2011

- Prioritized stakeholder priorities with U.S. Department of Energy's programmatic goals and Federal policy initiatives
- Managed Steering Committee, Transmission and Siting Workgroups, including conference call facilitation, work plan development, and in-person meetings
- Organized regional and national policy and technical forums focused on renewable and transmission integration, transmission planning, utility wind siting, and wind and wildlife interactions
- Provided technical expertise and advice on comprehensive wind siting and zoning to the American Planning Association, Massachusetts Institute of Technology, and Consensus Building Institute
- Developed and managed annual budget exceeding \$700,000
- Expanded outreach efforts and identify non-traditional stakeholder groups to participate in NWCC
- Researched and draft white papers on siting, transmission, and wildlife technical and policy issues
- Managed Program Associate and Project Assistant assignments

Ohio Department of Development

Coordinator, Ohio Wind Working Group

April, 2007 - February 2009

- Interpreted local zoning laws and assisted project developers to secure development rights
- Advised local planning and elected officials on county and township land use codes and zoning
- Key adviser to State Legislature and Public Utilities Commission on developing comprehensive wind siting guidelines
- Developed community outreach plan for wind development for State of Ohio including wind development guides for landowners and siting recommendations for planners

- Drafted and updated Ohio Wind Working Group's three-year, strategic action plan
- Served as liaison between Ohio Wind Working Group and Director of the Office of Energy

EDUCATION

Masters Degree, City & Regional Planning Knowlton School of Architecture, The Ohio State University December, 2008

Bachelor of Arts, Urban Studies & Political Science University of Connecticut

May, 2006

PROJECT AND TRANSACTION EXPERIENCE (In Construction or Operating Assets)

Project	Transaction	Dates	Responsibilities
Copenhagen Wind Farm, 80 MW (Lewis County, NY)	15-year PPA (power and RECS) to National Grid	2011- 2018 (Expected COD, December, 2018)	 Led multi-year State Environmental Quality Review process and EIS – completed in 2014 Managed land campaign – 100% secured: ~8,000 acres of land, 8.8 miles of 115 kV ROW, numerous waivers and easements, and land purchase agreements Managed all local permitting – secured several Special Use Permits and numerous variances for project components Led ALTA Survey, Civil Engineering, Geotechnical work Provided support for HCP/ITP process for Indiana and Northern-Long-Eared bats, ACOE Nationwide Permit, and PILOT
Carroll Area Wind Farm 20 MW (Carroll County, IA)	25-year PPA with Mid- American. Sold to NJ Resources Clean Energy Ventures	2011-2014 (COD, 2015)	 Land acquisition, Title/Curative Process, Community Relations
Patton Wind Farm 38 MW (Cambria County, PA)	Sold to EverPower	2011- 2011 (COD, 2012)	Land acquisition