

Twin Forks Wind Farm, LLC

Macon County Special Use Permit Application



**Submitted to Macon County, Illinois June 3rd, 2015 by
Twin Forks Wind Farm, LLC**

PROJECT FACTS

- Location – **Macon County, IL**
- Nameplate Capacity – **approx. 280 MW**
- Townships – **Maroa, Austin, Illini, and Hickory Point Townships**
- Other Land Use – **Agriculture**
- Development Start – **Q4 2009**
- Projected Investment – **approx. \$500 million**
- Construction Target – **2016**
- Turbine options being considered:
 - ò **Vestas V110-2.0MW**
 - ò **GE 1.79MW-100**
 - ò **Siemens 2.3 MW**

TWIN FORKS WIND FARM

Proposed to be located in Macon County, Illinois, Twin Forks will bring approximately 280 MW of renewable generation to Illinois (assuming a 2.0 MW wind turbine). The project will harness the inexhaustible wind alongside traditional crop production which will continue on approximately 99% of the land area.

- **Projected total acres – ~over 24,000**
- **Signed Landowners - ~over 180**

BENEFITS TO THE COMMUNITY

Wind power development has brought economic benefits to many communities throughout the United States, providing jobs, landowner revenues, and taxes that have contributed significantly to the quality of life.

- **Construction Jobs – approx. 140 full-time equivalents**
- **Operations Jobs – approx. 10 full time, local positions throughout the life of the project**
- **Landowner Royalties – yearly payments and significant added value to farmland**
- **Property Taxes Revenue – Estimated Tax revenue payments of \$46 million to Macon County over 30 years**

ENVIRONMENTAL BENEFITS

Twin Forks Wind Farm will:

- **Avoids the release of approx. 500,000 tons of CO2 per year**
- **Displaces fossil fuel generation equivalent to taking approx. 85,000 cars off the road**
- **Provide electrical power for the equivalent of approximately 90,000 homes**
- **Avoids the release of approx. 2500 tons of SO2, the leading cause of acid rain**
- **Diversify Indiana's energy portfolio**

E.ON CLIMATE & RENEWABLES

E.ON Climate & Renewables North America is a subsidiary of E.ON SE, one of the world's largest energy and investor-owned utility companies in the world. E.ON is also one of the world's largest owners of renewable power projects and continues to expand its wind, solar and alternative energy portfolio. Having developed and constructed over 2,700 megawatts (MW) of wind projects in the United States, E.ON is one of the most experienced renewable power companies in the industry.

OUR PROJECTS

E.ON currently owns and operates 19 wind farms in Indiana, Illinois, Texas, Pennsylvania, and New York with over 2,700 MW of capacity. E.ON has built and operates 2 wind farms in Illinois (Ford and Iroquois County). E.ON constructed three projects in 2012, including Wildcat Phase I in Madison and Tipton Counties, Indiana, Magic Valley in Whitley County, Texas and Anacacho wind farm in Kinney County, Texas. In 2014, E.ON constructed Grandview wind farm in Carson County, Texas. E.ON has numerous projects under development across the country



PLANNING & ZONING DEPARTMENT

141 South Main Street, Suite 501
Decatur, Illinois 62523

217.424.1466 (voice)
217.424.1459 (fax)

PETITION FOR SPECIAL USE PERMIT

This petition is hereby submitted to the Zoning Administrator and the Zoning Board of Appeals of Macon County, Illinois to request a Special Use Permit. Failure to provide any of the following requested information may result in a delay of processing this petition until that time when the requested information is provided.

Part A – Petitioner Information*

Name: Twin Forks Wind Farm, LLC.

Address: c/o
E.ON Climate & Renewables North America, LLC
353 North Clark Street, 30th Floor
Chicago, IL 60654

Phone: 312-923-9463

Signature: _____

*The petitioners are the principals. They are acting on their own behalf, not in conjunction with any agent, company, corporation or firm and are not a business operating under an assumed name, a partnership, joint venture, syndicate or unincorporated voluntary association.

FOR OFFICE USE ONLY

Filed:

Current Zoning:
By:

Part B – Property Information

Legal Description:
See Appendix B of attached Macon County Special Use Permit Application.

Address or Location: See Appendix B of attached Application.

Tax ID Number: See Appendix B of attached Application.

Acreage: See Appendix B of attached Application.

Please answer the following questions in Parts C and D to the best of your ability. These questions address the criteria that the Zoning Board of Appeals reviews when considering the request for a Special Use Permit. Failure to answer or adequately address any of these issues may be detrimental to your petition. Please feel free to attach additional pages as necessary for your responses.

Part C – Purpose of the Special Use Permit

What is the specific purpose of the proposed Special Use on the property in question?

Applicant is seeking a special use permit approval from Macon County to construct and operate a utility scale wind farm that consists of up to 140 LWECS, consisting of wind turbine generators and associated roads, underground collection lines, an overhead transmission line, a collector substation, a switching station, operations and maintenance facility, ancillary facilities and temporary sites for staging, laying down equipment and preparing concrete. This wind farm will supply energy to the electrical grid and provide an additional source of renewable energy to the state of Illinois. See the attached Macon County Special Use Permit Application.

Part D – Standards for Special Use

1. What would be the impact of the proposed Special Use on the public health, safety, welfare or morals within the surrounding area?

See the attached Macon County Special Use Permit Application.

2. How would the proposed Special Use impact the use, enjoyment or value of property in the surrounding area?

See the attached Macon County Special Use Permit Application.

3. How would the proposed Special Use impact the normal and orderly development and improvement of property in surrounding area?

See the attached Macon County Special Use Permit Application.

4. Are there adequate utilities and facilities in place for the proposed Special Use? How would the proposed Special Use impact the utilities and facilities in the surrounding area?

See the attached Macon County Special Use Permit Application.

5. What would be the impact of the proposed Special Use on traffic in the area? Are any measures being taken to address ingress and egress to the proposed use?

See the attached Macon County Special Use Permit Application.

6. Would the proposed Special Use conform to all of the other regulations of the Macon County Zoning Ordinance, as well as all applicable state and local laws and regulations?

Yes. See the attached Macon County Special Use Permit Application.

Part E – Other Petition Information

Please feel free to attach any additional documentation that you wish in order to help explain your petition. Some examples of such information are: maps, photographs, letters of support, building schematics, survey of land, statistical data, case law, etc.

See the attached Macon County Special Use Permit Application.

Part F – Other Administrative Information

Property Owner (If different than petitioner) Legal Representative (Optional)

Name: See Appendix B of attached Application Name: _____

Address: See Appendix B of attached Application Address: _____

Phone: See Appendix B of attached Application Phone: _____

Signature: See Appendix B of attached Application Signature: _____

NOTE: The petitioner is responsible for the cost of the required legal publication for the hearing. A billing statement will be issued by the Macon County Planning and Zoning Department, and proof of payment must be received before the date of the hearing. Non-payment of the legal notice fees will result in the petition being continued to the following month.

A COPY OF THE PROPERTY DEED MUST BE ATTACHED TO THIS PETITION.

Please feel free to contact the Macon County Planning and Zoning Department if you feel you need any assistance in completing this petition. Copies of the Macon County Zoning Ordinance can be purchased at the Macon County Clerk's office for \$5.00 (five dollars).



MACON COUNTY PLANNING AND ZONING DEPARTMENT

Macon County Office Building
141 South Main Street, Suite 501
Decatur, Illinois 62523

PHONE: (217) 424-1466
FAX: (217) 424-1459

Instructions for Petitioners Requesting Rezoning, Special Use Permit or Variance

In order to obtain a change in zoning, a special use permit, or a variance, you must obtain a petition, on the appropriate form, to the Macon County Planning and Zoning Department. A petitioner may submit maps, data, or other supplemental information that would be beneficial in explaining the intent or justifying the reason for the zoning action.

It is required that the present owner of the property be involved in any petition concerning that property. If someone other than the owner is filing a petition (i.e., a renter or a prospective buyer), the signature of the property owner must be included on the petition to show that the owner supports the proposed zoning action.

The petition application must be completed in its entirety. Failure to complete any aspect of the application may result in a delay of the petition until that time when the missing information is provided. The completed petition must be accompanied by check- payable to Macon County Treasurer- for the appropriate filing fee.

The filing fee is nonrefundable.

After the Planning and Zoning Department receives a complete petition, a hearing before the Macon County Zoning Board or Appeals (ZBA) will be scheduled. At least 15 days before the hearing, a notice of the hearing will be placed in the Decatur Herald & Review newspaper (legal ads) indicating the day the hearing will be held. The petitioner will also receive a notice by mail, indicating the day and time that zoning hearings will begin. Also about 15 days before the hearing, a sign will be placed on the property to notify local residents that some form of zoning action has been requested. All Zoning Board of Appeals meetings are held on the 5th floor of the Macon County Office Building at 8:30 a.m.

The Zoning Board of Appeals will listen to evidence at the hearing both for and against the petition. The ZBA will make the final decision on whether or not to grant the petition in Variance cases only. In all other cases, the ZBA makes a recommendation to the Macon County Board regarding the petition. Before the County Board reviews the case, the petition is sent to the Environmental, Education, Health, and Welfare Committee (EEHW) of the County Board. The EEHW Committee reviews the record of the ZBA hearing and proposes a resolution to the Macon County Board to act on your petition. The County Board, at its next regular meeting, will review the case and will either make the final decision on the resolution at that time or the Board

may send the petition back to the ZBA for more evidence and/ or reconsideration. In all cases except Variances, the County Board will ultimately make the final ruling on your petition. The times and dates of the next EEHW Committee meeting and the County Board meeting will be available the day of the ZBA hearing. While it is not required, it is recommended that the petitioner attend both of these meetings.

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- A. Project Map & Site Plan
- B. Project Landowners (under lease agreement with Applicant)
- C. Vestas V-110 2.0; General Electric 1.79-100 and Siemens Wind Power SWT- 2.3-108
Wind Turbine Specifications
- D. Noise Study
- E. Standard Conditions for Environmental Impact Study
- F. Economic Impact Report
- G. Property Value Report
- H. Shadow Flicker Study
- I. Communication Tower Study

EXECUTIVE SUMMARY

Project Benefits to the Community

The proposed Twin Forks Wind Farm ("Project") will provide significant benefits to Macon County and to the Townships where the Project is proposed to be built (Maroa, Austin, Hickory Point, and Illini Townships). Wind farms have become a key part of helping to stabilize and revitalize farming communities through the positive economic impacts these large investments provide. The primary long-term economic benefits from the proposed Project to Macon County are: 1) property tax revenue, 2) participating landowner payments, 3) road improvements, and 4) the creation of new jobs.

Many regional benefits will be generated by this Project, including support for American-based "supply chain" manufacturing in Illinois. As wind development has expanded in the Midwest, new turbine manufacturing jobs have been created to meet the demand.

According to the U.S. Department of Energy:

By August 2012 the U.S. wind industry totaled more than 50,000 MW installed power capacity, over 16% of the 300,000 MW needed to achieve 20% by 2030. Wind power is expanding across the United States and is deployed in 31 states and territories. Texas alone has more installed wind power than all but five countries around the world. Over the past 4 years, the U.S. wind industry represented 35% of all new installed generation capacity. Wind energy will continue to be a fundamental component of the next era of energy projects to connect to the electricity grid. Interest in wind power continues to grow, with the proposed number of wind projects surpassing that of all other forms of generation.

Illinois ranks fifth in the nation for installed wind capacity, with 46 projects in 18 counties. Illinois consumers are seeing the benefits of wind. A 2012 Illinois Power Agency (IPA) report found that adding wind power to the electric grid reduced wholesale power prices by \$176.8 million while also creating jobs and economic growth. The state has attracted investment from major wind industry players, including tower manufacturer Trinity Structural Towers and gearbox manufacturer Winergy. The investment of large companies has allowed many smaller manufacturers to get involved in the wind energy supply chain. An investment in wind power is an investment in jobs, including jobs in operations and maintenance, construction, manufacturing and many support sectors. In addition, wind projects produce lease payments for landowners and increase the tax base of communities. As of 2013, annual lease payments in Illinois totaled almost \$11,000,000. Also as of 2013, between 3000 and 4000 direct and indirect jobs had been created or supported by the wind industry in Illinois.

Local economic benefits from the Project are summarized below. [Appendix F](#) presents in further detail the economic benefits this Project will provide to Macon County and to the broader region.

Property Tax Revenue

The Project will generate substantial tax revenue for Macon County taxing districts. Based on the current layout of up to 140 wind turbines and equipment costs, it is estimated that over the 30-year operating life of the Project, Twin Forks Wind Farm, LLC (“Applicant”) will generate approximately \$46 million in tax revenue for Macon County.

The following table outlines the estimated 30-year property tax revenue to taxing districts within the Project area based on current law.

Taxing District	Estimated 30-Year Total Tax Revenue*
Macon County School Districts	\$32,500,000
Macon County	\$6,100,000
Austin Township	\$4,700,000
Maroa Township	\$2,600,000
Illini Township	\$440,000
Hickory Point Township	\$30,000

*Estimated school district revenue does not factor in the reduction of state general aid associated with the increase in tax revenue. These numbers are based on an initial calculation for a project size of 141 wind turbines. Total net tax revenue and detailed calculation is reflected in [Appendix F](#).

Tax revenue payments will also benefit the other County taxing districts, including: the local libraries, fire departments, Conservation District, County health & mental health, and Richland Community College.

Participating Landowner Payments

The Project will provide a new, reliable and long-term revenue stream to participating landowners. Participating landowners are projected to collectively be paid in the range of \$1 to \$2 million each year for lease payments. This income will also have an impact on the community at large, as the increased income to these landowners will cycle throughout the local economy in the form of increased spending and investment. As the vast majority of participating landowners are local residents, it is anticipated that much of the income and increased spending that will be realized will remain within the County. In addition, this added revenue stream will add to the agricultural heritage of the area by allowing farmers and landowners to invest in equipment and technology, thereby reducing incentives to sell or otherwise develop the farmland for other purposes.

Road Improvements

Improvements will be made to roads throughout the Project area that will be used during the construction process. It is estimated that the value of road upgrades in Macon County will be in the range of \$5 to \$10 million. All of the improvements are borne by the Applicant alone, at no expense to Macon County. After completion of the Project, roads will be restored to their prior condition or better. These improvements will help offset a portion of future spending that would otherwise be incurred by the County on road construction. The improved conditions will result in lower costs for the local road authorities and will benefit the community at large.

Job Creation

In addition to increasing the tax base of Macon County, the Project will bring approximately 140 prevailing wage construction jobs to the area for 6 to 12 months. Approximately 10 local full-time, permanent Operations & Management jobs will be created to service the equipment for the duration of the Project. Additionally, substantial indirect benefits will also be realized by local businesses during the construction and operations phases of the Project.

Regional Impact on Manufacturing

Economic development created from this Project can also spur other, more traditional forms of investment and manufacturing in the region. The Applicant has provided an Economic Impact Report in [Appendix E](#), detailing the impacts on manufacturing and jobs.

Environmental Benefits

The power generated by the Project will provide electrical power on a yearly basis for the equivalent of approximately 90,000 homes. The Project will help the state of Illinois provide clean, renewable energy to its citizens and helps diversify the portfolio of energy generation in Illinois.

Wind farms are the most cost-effective way to produce new clean, renewable power. Wind is an inexhaustible, natural and free resource that is harnessed to provide a clean source of energy. Wind power does not burn or consume any fuel source, and does not emit the many varied pollutants that are emitted by traditional fossil fuel electrical generation. By generating electricity from wind farms instead of new coal- or gas-fired facilities, the Country, State and County can avoid the release of sulfur dioxide (a key part of the acid rain that degrades forests and the timber economy), nitrogen dioxide and soot (key components in the formation of atmospheric smog), mercury (a potent neurotoxin) and greenhouse gases (chemicals that contribute to atmospheric climate change). These direct impacts include the following:

- Annual state water consumption savings: 2,092,000,000 gallons
- Equivalent number of water bottles saved: 22,315,000,000
- Annual state carbon dioxide (CO₂) emissions avoided: 5,690,000 metric tons
- Equivalent number of cars taken off the road: 1,003,527

The United Nations Intergovernmental Panel on Climate Change predicts that climate change may contribute to the extinction of 20-30 percent of all species by 2030. Mitigating climate change poses an immediate need to reduce greenhouse gas pollution. Wind energy can play a role in reducing greenhouse gas pollution. For instance, based on the cumulative 60 GW of wind energy installed through 2012, approximately 95.9 million tons of CO₂ annually, or roughly 4.2 percent of CO₂ emissions from the entire power sector were avoided — equivalent to taking 17.5 million cars off the road. Wind energy production also emits no other airborne pollutants, such as particulates, methane, mercury, SO_x and NO_x. All of these pollutants have a proven harmful effect on human health and the environment, including wildlife.

Compatibility with Land Use/Preservation of Agricultural Uses

Operations of wind farm projects nationwide have demonstrated that they function in harmony with continued farming operations. Agricultural viability will be enhanced by the improvements to area roads as contemplated by the proposed Road Use Agreement, landowner lease agreements, and compliance with the Macon County Wind Ordinance. By entering into voluntary agreements with the Applicant, the over 180 participating landowners have demonstrated their confidence that an operating wind farm will be compatible with their farming operations today and into the future. Further, E.ON has demonstrated this compatibility with its landowners in 19 operational wind farms across the United States, including two operating Wind Farms in Ford and Iroquois Counties.

On average, a wind turbine takes up less than an acre of property, which includes any secondary structures like access roads, and underground or overhead electrical lines. Dimensions of wind facilities are minimal; the base diameter of a wind turbine is 15 feet wide, and can be maneuvered around with farm equipment without difficulty. Improved gravel access roads are constructed to connect wind turbines to existing roads within the County (approx. 16 feet wide). These level access roads are maintained by the Applicant, and are often used by the landowners to maneuver around the property more easily. The landowner is involved in the site design process prior to construction to ensure facilities are compatible with existing uses on the property. In summary, the total Project area is approximately 24,000 acres. Out of this, only approximately 200 acres, or less than 1% of the total Project area, will be taken out of production during the life of the Project, and will be returned to production after the Project is decommissioned.

Macon County Special Use Permit Application Detail (with excerpts and section references to the Macon County Wind Energy Conversion Systems Ordinance)

1. Purpose

The two principal purposes of any zoning ordinance are to protect the public health, safety and welfare, and to insure that any new development will not have a substantial negative impact on nearby property values. The Project will comply with these goals.

The lack of any impact on health from wind turbines has been repeatedly confirmed by numerous studies around the world. The following is a summary of some of those studies:

- Scientific Review Panel Findings: Canada, November 6, 2014:
Health Canada conducted a large-scale epidemiological study to address community health concerns in relation to wind turbines.
Preliminary findings suggested that self-reported sleep, illnesses, perceived stress and Quality of Life (QOL) were not found to be associated with wind turbine exposure.
- Recent peer reviewed publications:
McCunney et al. (November 2014) has conducted the largest critical review regarding wind turbines and health.
Conclusions: "The epidemiological and experimental literature provides no convincing or consistent evidence that wind turbine noise is associated with any well-defined disease outcome."
McCunney et al., 2014. Wind Turbines and Health. JOEM. 11(56): 108-130

Knopper et al. (June 2014) has also conducted one of the largest and most comprehensive reviews to date.
The authors concluded that, "Based on the findings and scientific merit of the available studies, the weight of evidence suggests that when sited properly, wind turbines are not related to adverse health."
Knopper et al., 2014 Wind turbines and Human Health. Front Public Health.2:63.
- International Reviews/Statements:

United Kingdom
Ad Hoc Expert Group on Noise and Health for Health Protection Agency – 2010

Canada
Ontario, Canada, Chief Medical Officer of Health Report – May, 2010
KFL&A Report "Wind Turbines and Health: A Modified Scoping Review," – April, 2011

Health Canada's Community Noise and Health Study (Wind Turbines) – October, 2014

Australia

Australian Medical Association – 2014

Scotland

Report on Health Impacts of Wind Turbines – April, 2013

- U.S. Scientific Review Panels - The following agencies have issued reports evaluating the potential health impacts associated with wind turbines:

Minnesota, 2009 [Minnesota Dept. of Health]

Vermont, 2010 [Vermont Dept. of Public Health]

Massachusetts, 2012 [Massachusetts DEP and Dept. of Public Health created an independent panel who issued a report in 2012]

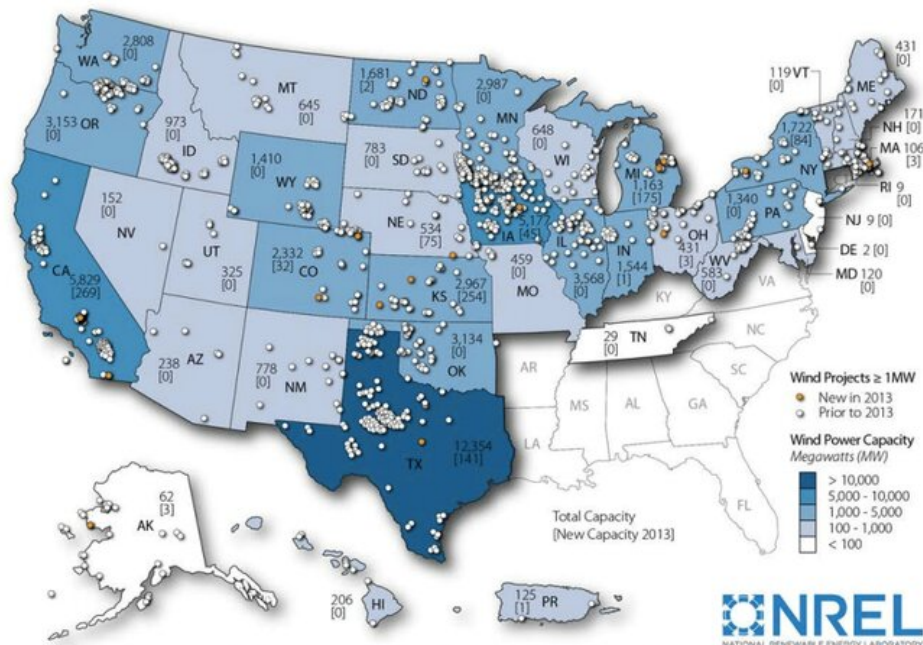
Maine, 2012 [Maine Dept. of Health and Human Services]

Illinois, 2012 [Springfield-Sangamon County Regional Planning Commission]

Oregon, 2013 [State of Oregon]

Wisconsin, 2014 [Wisconsin Wind Siting Council]

The question of the impact of wind energy facilities on property values has been measured for years, and demonstrated through many years of real life operational wind farm data throughout Illinois and across the United States.



Note: Numbers within states represent cumulative installed wind capacity and, in brackets, annual additions in 2013.

Numerous local, national and international studies confirm that any impact on property values is more perceived than real. The studies consistently confirm that there is no statistically significant negative impact on property values. Rather, a number of the studies confirm that property values near wind turbines either remain stable or even increase after the facility is constructed and commences operations. These studies include the following:

- *The Impact of Wind Power Projects on Residential Property Values in the United States: A Multi-Site Hedonic Analysis*, Ben Hoen (LBNL), Ryan Wiser (LBNL), Peter Cappers (LBNL), Mark Thayer (SDSU), and Gautam Sethi (Bard), 2009
- *Wind Farm Proximity and Property Values: A Pooled Hedonic Regression Analysis Of Property Values In Central Illinois*, Jennifer Hinman, 2010
- *The Effect of Wind Farms on Residential Property Values in Lee County, Illinois*, Jason Carter, 2011
- *Impact of the Lempster Wind Power Project on Local Residential Property Values*, Matthew Magnusson, MBA, Ross Gittell, James R Carter Professor Whittemore School of Business & Economics, University of New Hampshire, 2012
- *Impact of Industrial Wind Turbines on Residential Property Assessment In Ontario*, Municipal Property Assessment Corporation, Brian Guerin, BA (Hon), MRICS, M.I.M.A., Jason Moore, BAS (Hon), MBA, UBC Certificate of Real Property Assessment, Jamie Stata, BA, UBC Certificate of Real Property Assessment, Scott Bradfield, BSC (Hon), 2012
- *A Spatial Hedonic Analysis of the Effects of Wind Energy Facilities on Surrounding Property Values in the United States*, Ben Hoen (LBNL), Jason Brown (FRBKC), Thomas Jackson (Texas A&M), Ryan Wiser (LBNL), Mark Thayer (SDSU), and Peter Cappers, 2013

- *Relationship Between Wind Turbines and Residential Property Values in Massachusetts*, Carol Atkinson-Palombo, Assistant Professor, Department of Geography, University of Connecticut, Ben Hoen, Staff Research Associate, Lawrence Berkeley National Laboratory, 2014
- *The Windy City: Property Value Impacts of Wind Turbines in an Urban Setting*, Corey Lang, James J. Opaluch, George Sfinarolakis, Department of Environmental and Natural Resource Economics, University of Rhode Island, 2014

In addition, a survey was recently conducted of the County Assessors in all 18 Illinois Counties that host one or more operational wind farm projects. Without exception, the Assessors reported that there was no market evidence of a negative impact upon residential property values as a result of the development of and the proximity to a wind farm. That survey is included as Appendix G.

The Applicant will demonstrate throughout this Special Use Permit Application that it has ensured the safe, effective, and efficient use of wind energy conversion systems within Macon County while preserving and protecting the public health, public safety, natural resources, property values and aesthetic conditions within Macon County. With over 60,000 megawatts of wind capacity installed (approx. 45,000 + utility-scale wind turbines) in the United States, and the number of U.S. states with operating utility-scale wind energy projects currently at 39 plus Puerto Rico, wind energy has established itself to be a safe, effective, and proven way to generate clean electricity in our shared environment.

2. Applicability

The wind energy ordinance applies to all unincorporated lands within the boundaries of Macon County.

3. Macon County Wind Energy Conversion Systems Ordinance Definitions

The following definitions apply to the wind energy ordinance:

- A. **Agricultural Wind Energy Conversion System** - A wind energy conversion system that is used exclusively for agricultural purposes.
- B. **Environmentally Sensitive Area** - An area is determined to be an environmentally sensitive area on a case by case basis through consultation with the U.S. Fish and Wildlife Service and the Illinois Department of Natural Resources.
- C. **Kilowatt (kW)** - A unit of power equal to 1,000 watts.
- D. **Large Wind Energy Conversion System (LWECS)**- A wind energy conversion system by which the wind energy is converted to electricity, including but not limited to include any base, blade, foundation, generator, nacelle, rotor, tower, transformer, turbine, vane, wire, guy wire, or other components of the system, which has a rated capacity in excess of one hundred (100) kilowatt (kW).

- E. **Non-Participating Property Owner**- Landowner that is not participating in wind energy conversion systems on their property.
- F. **Principal Residential Structure** - A permanent structure, existing at the time of the issuance of the permit, that is used, or designed or intended to be used, for human habitation including but not limited to living, sleeping, cooking, or eating purposes or any combination thereof.
- G. **Small Wind Energy Conversion System (SWECS)** - A wind energy conversion system by which the wind energy is converted to electricity, including but not limited to include any base, blade, foundation, generator, nacelle, rotor, tower, transformer, turbine, vane, wire, guy wire, or other components of the system, which has a rated capacity within the range of ten to one hundred (10-100) kilowatt (kW).
- H. **Total Tower Height** - The vertical distance from ground level to the tip of a wind turbine blade when the tip is positioned at its highest point.
- I. **Wind Energy Conversion System (WECS)** - When used in this ordinance refers to both Large Wind Energy Conversion Systems and Small Wind Energy Conversion Systems.
- J. **Wind Farm Project** - A wind energy conversion system that includes all wind energy conversions systems, substations, and ancillary facilities.
- K. **Wind Tower** - The monopole, freestanding, or guyed structure than supports a wind turbine generator.

4. Permit Requirements

Special Use Permit

A special use permit approved by the Macon County Board is required for each LWECS and/or for each Wind Farm Project involving multiple LWECS located within the unincorporated lands within the boundaries of Macon County.

Applicant is seeking a special use permit approval from Macon County to construct and operate a utility scale wind farm that consists of up to 140 LWECS, consisting of wind turbine generators and associated roads, underground collection lines, an overhead transmission line, a collector substation, a switching station, operations and maintenance facility, ancillary facilities and temporary sites for staging, laying down equipment and preparing concrete.

1. A petition for special use permit for a LWECS and/or for each Wind Farm Project involving multiple LWECS shall be submitted to the Macon County Planning & Zoning Administrator.

2. A petition for Special Use Permit for a LWECS and/or for each Wind Farm Project involving multiple LWECS must be on a form approved by the Macon County Planning & Zoning Administrator and must be accompanied by:

- 1. A general written summary of the project including:***
 - a) A general description of the project, including its approximate name plate generating capacity;***
 - b) The potential equipment manufacturer(s) and type(s) of WECS(s);***

- c) Number of WECS towers, and name plate generating capacity of each WECS;**
- d) The maximum height of the WECS towers;**
- e) The maximum diameter of the WECS rotor(s);**
- f) Description of the applicant, owner and operator, including their previous WECS experience.**

The Applicant is currently considering three turbine models for this Project. The total number of turbines used in the Project will not exceed 140, and the proposed wind turbine layout will be generally interchangeable for each model. However, given the different power generation capacities of the turbine models in consideration, the total power output for the Project will range between 250.6 and 322 megawatts (MW) (See Table I below). Final wind turbine selection will be based on performance, output, cost and availability considerations.

Wind turbine information and specifications for these models are included below in Table I, summarizing the maximum wind turbine height, wind turbine rotor diameter, nameplate generating capacity, and manufacturer name and wind turbine model type information.

*Note, all maps, setbacks, noise and shadow flicker studies included in this Application have been based on the Vestas V110, 2.0 MW wind turbine at 95 meters hub height, unless otherwise noted. To the extent necessary, such studies will be updated prior to application for a building permit, and will demonstrate continued compliance with applicable requirements. Manufacturer data and turbine specifications are found in Appendix C.

Project Description

The proposed Project will consist of wind turbines, turbine access roads, underground electrical collection lines, overhead transmission line, the Project electrical substation, a switching station, and an operations and maintenance facility.

Each LWECS has an approximate base diameter of 15 feet which includes a cement stabilized gravel turnabout to allow for maintenance vehicle access for a total base width of approximately 60' diameter. Each turbine will be unfenced and access provided by an approximately 16' wide gravel access road. An approximately 3 foot square pad-mounted transformer will be located at the base of each wind turbine.

Underground 34.5 kV collection lines, which are insulated electrical cables buried at least 4 feet deep will connect the wind turbines to the Project electrical substation located near the center of the Project area (near School and Glasgow Roads).

A new switching station will be constructed adjacent to the existing Commonwealth Edison (ComEd) 345kV transmission line on the northwestern edge of the Project, near the intersections of the Macon, Dewitt, and Logan County borders. The Project electrical substation and switching station will be connected by an above-ground 345 kV electrical transmission line.

A permanent Operations & Maintenance facility and temporary Laydown Yard as well as a temporary concrete batch plant, if necessary, will also be located within the Project. Final site selection will be made for these facilities prior to building permit application submittal and will be presented to the Macon County Planning & Zoning Department for approval.

Table I: Wind Turbine Information

Turbine Manufacturer	Turbine Model	Per Turbine Nameplate Capacity	Max Number of Turbines	Total Megawatts	Total Height (80m vs higher hub height)	Rotor Diameter	Hub Height
Vestas	V1100	2.0 MW	140	280	135-150m (442'-492')	110 m (361')	80 m (263') or 95 m (312')
General Electric	1.79-100	1.79 MW	140	250.6	130 m -146 m (426'-479')	100 m (328')	80 m (263') or 96 m (315')
Siemens Wind Power	SWT- 2.3-108	2.3 MW	140	322	134 m- 152.5 m (440'-500')	108 m (354')	80 m (263') or 98.5 m (323')

2. The name(s), address(s), and phone number(s) of the applicant(s), Owner and Operator of the WECS, and all property owner(s) of the property where the Wind Farm Project is to be built.

The Applicant (Twin Forks Wind Farm, LLC) will also be the Owner of the Project. The Operator of the Project is intended to be EC&R O&M, LLC. EC&R O&M, LLC and Applicant are both Delaware limited liability companies, and wholly owned indirect subsidiaries of E.ON Climate & Renewables North America, LLC (ECRNA), the North American renewable subsidiary of E.ON SE.

The Applicant/Owner can be contacted as follows:

Applicant Address:
Twin Forks Wind Farm, LLC
353 N. Clark Street, 30 th Floor
Chicago, Illinois 60654
(312) 923-9463

Operator Address:
EC&R O&M, LLC
353 N. Clark Street, 30 th Floor
Chicago, Illinois 60654
(312) 923-9463

The participating property landowners under lease agreement with the Applicant (or which are currently held by EC&R Development, LLC, an affiliate of Applicant, and will be assigned to Applicant prior to seeking Building Permits) are listed in Appendix B.

3. A site plan of the WECS site(s) showing:

- a) Boundaries of the project;**
- b) Location of each WECS tower, guy lines and anchor bases (if any);**
- c) All WECS structures including, but not limited to, the project substations, interconnect substation and location and voltage of any overhead transmission lines;**
- d) Property lines;**
- e) Setback lines;**
- f) Public access roads;**
- g) Location of all existing structures with Principal Residential Structures identified;**
- h) Land use, zoning, public roads and structures within one thousand feet (1000ft) of the WECS site;**

A site plan of the WECS site(s) showing the above information is found in Appendix A.

4. The applicant shall notify the Planning & Zoning Department of any changes to the information provided above that occurs while the Special Use Permit application is pending.

Applicant will notify the Macon County Planning & Zoning Department in writing of any changes to the information provided above that occurs while the Application is pending regarding wind turbine type, Project layout, and participating landowners in the Project. The Applicant will fully comply with the Macon County wind ordinance Special Use Permit requirements and provide all necessary documentation demonstrating compliance with the Macon County Wind Ordinance. In no case, will the Project exceed 140 wind turbines.

5. All other required studies, reports, certifications, and approvals demonstrating compliance with the provisions of this Ordinance

All other required studies, reports, certifications, and approvals demonstrating compliance with the provisions of the Ordinance are found in Appendices A through J.

The Macon County Planning & Zoning Administrator will review the application materials for completeness and may request that the applicant provide additional information.

Building Permit Requirements [for reference]

A building permit is required for the installation of each LWECS and each SWECS located within the unincorporated lands within the boundaries of Macon County.

Applicant will abide by the terms of this requirement.

- 1. A petition for building permit for all WECS must be submitted to the Macon County Planning & Zoning Administrator and on an approved form.**
- 2. All WECS building/ construction plans shall include a certification by an Illinois Professional Engineer or Illinois Licensed Structural Engineer that the foundation and tower design of the WECS is within accepted professional standards, given local soil and climate conditions:**
- 3. Site plan with all of the following items to the extent that items mentioned below are identifiable by landowner or ALTA survey:**
 - a. Electrical cabling from the WECS Tower to the substation;**
 - b. Ancillary Equipment;**
 - c. Third party transmission lines;**
 - d. Wells;**
 - e. Septic Fields;**
 - f. Field tile location;**
 - g. Existing easements;**
 - h. Floodplain location and elevation, if applicable;**
 - i. Wetland location, if any**
- 4. Letter from the FAA stating the project is in compliance with FAA height and lighting requirements.**

Note, the Applicant agrees to fully comply with the Building Permit Requirements, pending approval of the Special Use Permit application.

Expiration of Permits

A Special Use Permit issued pursuant to this ordinance expires if:

- The LWECS is not installed and functioning within eighteen (18) months from the date the Special Use Permit is issued; or**
- The LWECS is out of service or otherwise unused for a continuous twelve (12) month period.**
- The Macon County Planning & Zoning Administrator, in his or her discretion, may grant reasonable extensions to these deadlines so long as action to cure the inactivity has been made through the time period involved. For purposes of this section, placing the system for sale or intending to use the system at a future date does NOT constitute active and consistent activity.**

A Building Permit issued pursuant to this ordinance expires if:

- The WECS is not started within twelve (12) months from the date that the building permit was originally issued. If construction starts within twelve (12) months, the building permit will expire one year from the date of issuance.**

5. Fees

The application for a special use permit must be accompanied by the fee required for each wind energy conversion system.

The Applicant has submitted a non-refundable Special Use Permit fee in accordance with the current Macon County Planning & Zoning fee schedule to the Macon County Planning & Zoning Department in the amount of \$248,720. The Fee is equal to: \$100 + \$10 per acre of leased land in the Project (as of 5/18/15).

Building permit fee required for each WECS and/or Wind Farm Project will be equal to the then current fee schedule that is adopted by the Macon County Board. The building permit fee shall be equal to the amount in effect at the time of issuance of the Special Use Permit(s).

6. Financial Assurance

Reasonable evidence of financial ability to construct, maintain and decommission a LWECS is a condition precedent to the issuance of any special use permit or building permit under this ordinance.

ECRNA is one of the nation's largest owners of renewable power projects. E.ON SE (E.ON), the parent company of ECRNA, has invested \$12.3 billion in renewable energy projects and continues to expand its share of renewable energy in the United States power generation portfolio. E.ON develops, owns, and operates some of the most efficient and highest performing renewable energy projects. Active in wind energy and photovoltaic renewable generation, ECRNA's staff of approximately 300 employees currently owns and operates 19 wind farms in the United States (within Illinois, Indiana, Texas, New York, and Pennsylvania) totaling over 2,700 MW of renewable capacity. E.ON's portfolio includes the world's second-largest onshore wind farm in Roscoe, Texas. (782 MW).

E.ON is one of the world's largest energy and investor-owned utility companies in the world. E.ON possesses the financial strength, expertise and commitment to meet the growing demand for safe and reliable renewable energy. With approximately 60,000 employees worldwide, E.ON is creating tomorrow's energy sources today, operating approximately 5 GW of renewable generation capacity world-wide, making it the world's 8th largest company in onshore wind generation. E.ON is also the world's 3rd largest company in offshore wind with installed generation. With partners, E.ON operates the London Array off the coast of Kent, the world's largest offshore wind farm project (630 MW). E.ON has taken a leading role in developing renewable energy sources worldwide.

The owner of a LWECS and/or for each Wind Farm Project involving multiple LWECS shall furnish to Macon County a bond covering the faithful and complete performance and compliance with the restoration requirements set forth in Section 8, in a form and amount approved by the Macon County Planning and Zoning Administrator.

Prior to seeking Building Permits, the Applicant will furnish to Macon County a bond covering the faithful and complete performance of the Project. The Applicant shall provide the Macon County Planning & Zoning Administrator with a written Notice of Termination of Operations if the operation of

the WECS is terminated. A WECS that is out of service for a continuous six (6) month period will be deemed to have been abandoned, excepting a Force Majeure (i.e. tornado, earthquake, flood, etc.) event in the Wind Farm Project or the electrical transmission line that the Wind Farm Project interconnects. Within twelve (12) months of receipt of Notice of Abandonment or within twelve (12) months of providing Notice of Termination of Operations, the Applicant will:

1. Remove all wind turbines, aboveground improvements, and outdoor storage; and remove all foundations, pads, and underground electrical wires to a depth of five (5) feet below the surface of the ground; and restore to the condition of the adjacent ground.
2. Remove all material from the property and dispose of the hazardous material in accordance with federal and state law.
3. Failure to comply with any of the conditions or restrictions imposed on a special use permit shall be deemed a violation of the Macon County Zoning Ordinance, as amended (Any person, firm, or corporation, or agents, employees, or contractors of such, who violate, disobey, omit, neglect, or refuse to comply with, or who resist enforcement of, any provisions of the comprehensive Macon County Wind Ordinance, shall be subject to a fine of not more than five hundred dollars (\$500) for each offense; and each day a violation continues to exist shall constitute a separate offense.

Additionally, for the first twelve (12) years after construction of the WECS is completed, the Applicant will, at least once every three years, provide proof of financial ability to deconstruct the WECS of the operation if the WECS were to be terminated. Such proof shall include the report of an independent Illinois Licensed Professional Engineer, which shall provide updated estimates of decommissioning costs and salvage value. After the first twelve years of operation, the Applicant will submit such proof of financial ability to deconstruct at least once every year thereafter. In each instance, the Applicant shall provide a copy of such reports to the Macon County Planning and Zoning Administrator.

7. Standards

7.1. Location

A. LWECS shall only be located in the A-1 Agricultural District, the M-1 Light Industrial District, or the M-2 Heavy Industrial District.

All LWECS in the proposed Project will be located within the A-1 Agricultural District.

B. A SWECS may be located within any zoning district that is conforming.

Not applicable for the purposes of this Application.

C. Absent an express delegation of authority from a municipality, the County shall not exercise siting authority of SWECS or LWECS within one and one-half (1 ½) mile of an incorporated municipality. The power to site SWECS or LWECS within one

and one-half (1 ½) mile of an incorporated municipality lies with the respective municipality.

Applicant has entered into a Cooperation and Release Agreement with the City of Maroa, allowing the Applicant to site and build LWECS within 1.5 miles of its incorporated boundary (west of Highway 51), but not closer than 0.25 mile from its incorporated municipal boundary.

Applicant has entered into a Cooperation and Release Agreement with the Village of Warrensburg, which would allow the Applicant to build LWECS within 1.5 miles of Warrensburg's incorporated boundary, but no closer than 0.5 miles of its incorporated boundary.

7.2 Setbacks

The following setbacks are required as described below.

Large Wind Energy Conversion System Setbacks:

- A. Principal Residential Structure on adjoining property- 1,000 feet or more***
- B. Principal Residential Structure- 1.1 times the total tower height or more from a principal residential structure existing on the same parcel as the WECS.***
- C. Environmentally Sensitive Areas- determined through consultation with the US Fish and Wildlife Services (USFWS) and the Illinois Department of Natural Resources (IDNR).***
- D. Property lines of non-participating property owners- 1.1 times the total tower height from all property lines of all non- participating property owners, measured from the center of the base of the tower to the property line.***
- E. Public/ Private right-of-way lines- 1.1 times the total tower height from all property lines, measured from the center of the base of the tower to the edge of the right-of-way line.***
- F. Gas Pipeline or Hazardous Liquid Pipeline- 1.1 times the total tower height, measured from the center of the base of the tower to the pipeline.***

See Appendix A for a Project map demonstrating compliance with the Macon County Wind Ordinance Large Wind Energy Conversion System Setbacks as of May 2015. Any changes in land lease status or ownership will be submitted to the Macon County Planning & Zoning Department.

7.3 Spacing and Density

A wind energy conversion system shall be separated from any other wind energy conversion system by a minimum of two hundred (200) feet measured from the tips of the blades when the blades are positioned parallel with the ground.

All LWECS will be separated more than two hundred (200) feet measured from the tips of the blades when the blades are positioned parallel with the ground. See Appendix A for a Project map demonstrating compliance with the Macon County Wind Ordinance Large Wind Energy Conversion System Spacing and Density.

7.4 Structure

A LWECS tower shall be of monopole construction.

All LWECS towers will be rolled steel tower sections and of monopole construction. Additional information for wind turbine specifications, dimensions, and representative drawings is provided in Appendix C.

7.5 Height

The total height of a WECS shall be five hundred (500) feet or less.

All WECS structures shall be (500) feet or less regardless of the wind turbine model selected. Anticipated turbine height is between 426 to 500 feet.

7.6 Clearance

The vertical distance from ground level to the tip of a wind turbine blade when the blade is at its lowest point must be at least thirty (30) feet.

For all wind turbine models considered in this Application, there will be at least sixty (60) feet of vertical distance from the ground level to the tip of the wind turbine blade when the blade is at its lowest point (all hub heights proposed in this application). See Table 1 for WECS hub heights and rotor diameters. Additionally, Appendix C provides more information on the wind turbines specifications and dimensions.

7.7 Access

All LWECS shall be constructed to prevent unauthorized climbing to include locking portals.

All LWECS being contemplated by the Applicant are unclimbable by design. The LWECS tower doors are heavy gauge steel and equipped with locks to prevent unauthorized personnel from entering the towers.

7.8 Electrical Distribution Lines

All electrical distribution lines associated with a WECS, other than wires necessary to connect the wind turbine to its base or from the collection substation to the transmission point of interconnect, shall be located underground. Any electrical distribution lines requiring overhead construction must be submitted for approval to the Macon County Board. All electrical components of the WECS shall conform to applicable state and national codes.

Applicant will comply with the Macon County Wind Ordinance on Electrical Distribution Lines Section 7.8 and shall locate all electrical distribution lines associated with a WECS underground (other than wires necessary to connect the wind turbine to its base or from the collection substation to the transmission point of interconnect). The Applicant will ensure the electrical components of the WECS (and electrical distribution lines) conform to applicable local, state, and national codes, and relevant

national and international standards. Upon final wind turbine selection and prior to Building Permit application submittal, the Applicant will provide further documentation and copies of certified Engineering drawing plans for all electrical equipment and applicable state and national code certifications ensuring compliance.

7.9 Lighting

Lighting must comply with all Federal Aviation Administration (FAA) requirements which shall be explained in the application. The minimum lighting requirement of the FAA shall not be exceeded.

Applicant will obtain “Determinations of No Hazard” certifications from the FAA for each wind turbine site prior to Building Permit Application submittal (in accordance with the Macon County Wind Ordinance Building Permit Application requirements). The Applicant has submitted wind turbine coordinates, maximum wind turbine heights, elevation data, and Project site plan maps to the FAA. The FAA will issue lighting requirements for each individual wind turbine site in the Project. Each turbine will be designated to be marked as “white paint only” or “white paint/synchronized red lights.” The Project lighting will comply with all FAA requirements. The Applicant will provide the FAA certifications to the Macon County Planning & Zoning Department prior to seeking Building Permits.

7.10 Equipment

Unless located underground, any electrical equipment associated with a WECS, excepting a substation, switching station, overhead transmission line and junction boxes, shall be located under the sweep area of a blade assembly to the extent practicable. LWECS Facilities must comply with FAA minimum requirements.

All WECS shall be equipped with a redundant braking system. This includes both aerodynamic over speed controls (including variable pitch, tip, or other similar systems) and mechanical brakes. Mechanical brakes shall be operated in a fail-safe mode. Stall regulation shall not be considered a sufficient braking system for over speed protection.

Any electrical equipment associated with a WECS (excepting a substation, switching station, overhead transmission line, and junction boxes) shall be located under the sweep area of blade assembly and will comply with FAA minimum requirements (see above for FAA minimum requirements and approvals).

All LWECS will be equipped with redundant braking systems.

7.11 Appearance, Color and Finish

The exterior surface of any visible components of a WECS must be a non-reflective, neutral color. Wind towers and turbines in an established wind farm system that are located within 1000 feet of each other must be of uniform design, including tower type, color, number of blades, and direction of blade rotation to the extent practicable.

All wind turbines, their towers, blades, and nacelles (sits atop tower section) will be painted in a non-reflective, neutral color. All WECS will be of uniform design, including type, color, number of blades, and direction of blade rotation (direction of blade rotation to the extent practicable).

7.12 Signs

No wind turbine, tower, building, or other structure associated with a WECS may be used to advertise or promote any product or service. No word or graphic representation, other than appropriate warning signs and owner identification, may be placed on a wind turbine, tower, building, or other structure associated with a wind energy conversion system so as to be visible from any public road.

No advertising, word or graphic representation (other than appropriate owner identification, emergency contact and warning signs and turbine ID) will be placed on a wind turbine, tower, building or other structure associated with a wind energy conversion system so as to be visible from any public road. “No trespassing” signs, “danger” signs, “emergency telephone number” signs, and “high voltage warning” signs may be posted at each WECS. Each private road providing access to each WECS in the Project may also post an Emergency-911 address road sign.

7.13 Noise

Noise levels from each WECS shall be in compliance with the applicable Illinois Pollution Control Board (IPBC) regulations (35 Illinois Administrative Code Subtitle H: Noise Parts 900, 901, 910).

The Project will comply with all applicable Illinois Pollution Control Board (IPBC) regulations. A noise study was completed by Hankard Environmental Acoustical Consultants in May of 2015. This study modeled the proposed Project and layout of all wind turbines and collection substation, as well their sound effects on all principal residential structures within the Project area. Principal residential structures were established by two forms of verification: a recent aerial visual confirmation of principal residential structures via a flyover of the Project area by Applicant’s surveying and engineering consultant, Atwell, LLC (May 2015), and subsequent on-the-ground visual survey of all principal residential structures within the Project during a comprehensive land survey and verification study (completed May 18, 2015).

The noise study found all proposed LWECS and collection substation to be in full compliance with the Illinois Pollution Control Board (IPCB) regulations. Regarding the proposed switchyard location near the existing ComEd 345kV transmission line (northwest corner of Macon County), sound emissions would be very similar to that of the sound levels of the existing 345kV ComEd transmission line already in use within the County. Potential noise effects would be limited to a walled-in/enclosed generator within the switchyard area, as well as a potential air conditioning unit within the switchyard control house. The generator for the proposed switchyard would run sparingly (likely less than 2 times per month for minimal amounts of time) to ensure backup power is available in the event of power loss. The sound level of such generator is minimal and will not exceed IPCB standards. For further

reference, see Appendix D, which includes a detailed description of the noise study and the IPCB standards.

7.14 Variances

When permitted by law, the Macon County Zoning Board of Appeals may consider and grant variances to one or more of the regulations contained in this Section 7.

8. Decommissioning Plan

A WECS that is out of service for a continuous six (6) month period will be deemed to have been abandoned, excepting a Force Majeure (i.e. tornado, earthquake, flood, etc.) event in the Wind Farm Project or the electrical transmission line that the Wind Farm Project interconnects to. The Macon County Planning & Zoning Administrator may issue a Notice of Abandonment to the owner of a WECS that is deemed to have been abandoned. Efforts to operate the system must be shown to have been active and consistent though the time period involved. For purposes of this section, placing the system for sale or intending to use the system at a future date does NOT constitute active and consistent activity.

The owner of a WECS shall provide the Macon County Planning & Zoning Administrator with a written Notice of Termination of Operations if the operation of the WECS is terminated. Additionally, for the first twelve (12) years after construction of the WECS is completed, the owner must, as least once every three years, provide proof of the owner's financial ability to deconstruct the WECS of the operation if the WECS were to be terminated. Such proof shall include the report of an independent Illinois Licensed Professional Engineer, which shall provide updated estimates of decommissioning costs and salvage value. After the first twelve years of operation, an owner is required to submit such proof of financial ability to deconstruct at least once every year thereafter. In each instance, the owner shall provide a copy of such reports to the Macon County Planning and Zoning Administrator.

Within twelve (12) months of receipt of Notice of Abandonment or within twelve (12) months of providing Notice of Termination of Operations, the owner of a WECS must:

- 1. Remove all wind turbines, aboveground improvements, and outdoor storage; and***
- 2. Remove all foundations, pads, and underground electrical wires to a depth of five (5) feet below the surface of the ground; and restore to the condition of the adjacent ground.***
- 3. Remove all material from the property and dispose of the hazardous material in accordance with federal and state law.***
- 4. Failure to comply with any of the conditions or restrictions imposed on a special use permit shall be deemed a violation of the Macon County Zoning Ordinance, as amended.***
- 5. All determinations of the Macon County Planning & Zoning Administrator may be appealed to the Macon County Zoning Board of Appeals.***

Applicant will fully comply with Section 8 "Decommissioning" of the Macon County Wind Ordinance. Additionally, for the first twelve (12) years after construction of the WECS is completed, the Applicant

will, as least once every three years, provide proof of the Applicant's financial ability to deconstruct the WECS of the operation if the WECS were to be terminated. Such proof shall include the report of an independent Illinois Licensed Professional Engineer, which shall provide updated estimates of decommissioning costs and salvage value. After the first twelve years of operation, the Applicant will submit such proof of financial ability to deconstruct at least once every year thereafter. In each instance, the Applicant shall provide a copy of such reports to the Macon County Planning and Zoning Administrator.

9. Annual Reports

The owner or operator of the LWECS must submit, on a yearly basis, a summary of:

- ***the operation and maintenance reports;***
- ***any physical modifications to the WECS;***
- ***complaints pertaining to setbacks, noise, appearance, safety, lighting, use of roads, shadow flicker, etc.;***

This report shall be submitted to the Planning and Zoning Administrator.

Applicant (or operator of the LWECS) will submit, on a yearly basis, a summary of the operation and maintenance reports, any physical modifications to the WECS, including complaints pertaining to setbacks, noise, appearance, safety, lightning, use of roads, shadow flicker, etc.

10. Standard Conditions for Environmental Impact Study

The following conditions should be included in the Special Use Permit for the LWECS. These conditions shall not be construed or attempt to stop, impede, or delay the operation of the existing sited Wind Energy Conversion System (WECS), but may be used to provide guidance in siting, construction, and use of Wind Energy Conversion Systems in order to protect the natural resources of Macon County.

A site-specific pre-and post-construction environmental impact study shall be conducted by a qualified professional, such as a certified wildlife biologist, in consultation with the U.S. Fish and Wildlife Service, and the Illinois Department of Natural Resources; and the Macon County Conservation District; and

A site-specific pre-and post-construction environmental impact study shall address the direct and indirect impacts of the proposed LWECS upon birds and bats as defined by the Federal and State threatened and endangered species requirements; and

A site-specific pre-and post-construction environmental impact study shall include an examination of known environmentally sensitive areas and other natural resources that may be impacted by the proposed LWECS; and

A site-specific pre-and post-construction environmental impact study shall take place from the beginning of the spring migration for birds and bats, whichever comes earlier in the calendar year, through the end of the fall migration for birds and bats, whichever comes latest in the calendar year.

The Applicant's consultant, Ecology & Environment (E&E), is a qualified and recognized environmental leader in environmental management, with nearly 1,000 employees in 85 engineering and scientific disciplines (to include certified wildlife biologists). E&E has significant experience in the environmental industry including the assessment of impact of wind energy on animals and habitats. Since 1970, E&E has completed environmental studies and work in 122 different countries, in nearly every ecosystem on the planet.

Applicant and E&E, on behalf of the Applicant, have conducted numerous site-specific pre-construction environmental impact studies pertaining to the Project in consultation with the US Fish & Wildlife Service, the Illinois Department of Natural Resources. A detailed, comprehensive analysis of all pre-construction and post-construction environmental impacts associated with the Project, demonstrating compliance with Section 10 of the Macon County Wind Ordinance's "Standard Conditions for Environmental Impact Study" is found in Appendix E.

Applicant has also directly consulted with Macon County Conservation District as well as providing Project boundaries and USDA conservation area data. Based on this information, there are no conservation areas within the Project area.

11. Drainage to Farmland

To the extent practicable, all underground wiring or cabling for the WECS shall be at a minimum depth of four (4) feet below grade or deeper if required to maintain a minimum one (1) foot of clearance between wire or cable and any agricultural drainage tile.

- A. To the extent practical, the applicant shall locate all existing agricultural drainage tile prior to establishing staging areas, construction access lanes or driveways, construction of the WECS, substations, and installation of underground wiring or cabling. The applicant shall contact affected landowners and tenants for their knowledge of the tile line locations prior to the proposed construction. Drainage districts shall be notified at least two weeks prior to disruption of tile.***
- B. All identified drainage tile lines shall be located and marked prior to construction to alert construction crews of the possible need for tile repairs.***
- C. Any agricultural drainage tile located underneath construction stage areas, access lanes, driveways, and substations shall be replaced properly.***
- D. All exposed tile lines shall be protected to prevent foreign materials from entering into the tile.***
- E. Permanent repairs shall be made within fourteen (14) days of the tile damage provided that weather and soil conditions are suitable; if conditions are not suitable within that time, a temporary tile repair shall be made. Immediate temporary repair shall be required if water is flowing through any damaged tile line.***
- F. All damaged tile shall be repaired so as to operate as pre and post construction.***

G. Following completion of the LWECS construction, the applicant shall be responsible for correcting all tile line repairs completed by Applicant that fail.

All soil conservation practices (such as terraces, waterways, etc.) that are damaged by the WECS construction shall be restored by the applicant to the pre-construction characteristics.

Applicant will comply with the Macon County Wind Ordinance Section 11 requirements: "Drainage to Farmland." Additionally, the Applicant is contractually bound in the lease agreements with all participating land owners to provide drain tile repair and replacements to any tile damage caused by Applicant's construction or operation activities. All farm drainage tiles which run under Applicant's permanent access roads will be either repaired with sufficiently strong material as to prevent future crushing, or will be re-routed around said road in a commercially economical manner which sufficiently restores the drainage of the property, which decision shall be based both on the drainage characteristics of the repair and the cost of performing such repair. The Applicant will also consult with the drainage district authorities responsible for the Project area. Upon completion of construction of the Project, Applicant shall provide participating landowners with GPS coordinate reading of the location of such repaired or replaced tile.

12. Erosion and Sediment Control Plan

Prior to the approval of the Building Permit, the applicant shall obtain a land disturbance permit from Macon County Planning and Zoning and provide a permanent soil erosion and sedimentation plan for all LWECS sites and access roads that conform to the current Natural Resource Conservation Service (NRCS) guidelines and is prepared by an Illinois Licensed Professional Engineer.

The Macon County Planning and Zoning Department will also request a Natural Resource Inventory (NRI) from the Macon County Soil and Water Conservation District for the owner of the LWECS.

Prior to seeking Building Permits, the Applicant will obtain a land disturbance permit from the Macon County Planning and Zoning Department and provide a permanent soil erosion and sedimentation plan for all LWECS sites and access roads that conform to the current Natural Resource Conservation Service guidelines (prepared by an Illinois Licensed Professional Engineer). Applicant will also assist and facilitate the Macon County Soil and Water Conservation District in providing the Macon County Planning and Zoning Department with a Natural Resource Inventory (NRI) for the LWECS.

13. Signal Interference

The owner of a WECS must take such reasonable steps as are necessary to prevent, eliminate, or mitigate any interference with cellular, radio or television signals caused by the WECS.

The Applicant will take reasonable steps necessary to prevent, eliminate, or mitigate any interference with cellular, radio or television signals caused by the WECS.

The Applicant has completed a Communication Tower Study for the Project, identifying all communication signal towers and their respective signal tower owners within the Project. A copy of the communication tower study is provided in Appendix I.

14. Shadow Flicker

The applicant shall conduct a study on potential shadow flicker. The study shall identify the locations of shadow flicker that may be caused by the project on a Principal Residential Structure and the expected durations of the flicker at these locations in a given year. The study shall identify problem areas where shadow flicker may interfere more than thirty (30) hours per year with Principal Residential Structure. Any shadow flicker on a Principal Residential Structure exceeding thirty (30) hours per year shall be eliminated or mitigated.

Shadow flicker can occur when certain conditions are in place including a clear sky and the sun in a position to cast a shadow on an object or the ground via an obstruction. Since the position of the sun moves constantly, on average shadow flicker can occur a few minutes per day. The Macon County Zoning Ordinance takes into account similar standards of 30 hours per year, which translates roughly to five minutes per day.

Shadow flicker is characterized by the wind turbine blades' ability to interrupt sunlight and create a repeating cycle of changing light intensity, which can cast shadows on the ground below. Shadow flicker can only occur when conditions are present including a clear sky, line of sight between the sun, object and receptor.

Photosensitive epilepsy (PSE), which affects up to 5% of people with epilepsy, is triggered by flashing light or certain patterns. According to the United Kingdom Epilepsy Society, however, the frequency of wind turbine blades has to be faster than 3 flashes per second (hertz) in order to trigger PSE. Flicker frequency due to a turbine is on the order of the rotor frequency (i.e., 0.6-1.0 Hz), which is far less than what is necessary to trigger PSE and is harmless to humans. According to the Epilepsy Foundation, only frequencies above 10 Hz are likely to cause epileptic seizures.

A shadow flicker study was completed on behalf of the Applicant by Stantec and is included as Appendix H. This study modeled the proposed Project and layout of all wind turbines as well as their effects on all principal residential structures within the Project area using a conservative scenario for maximum sun exposure. Any shadow flicker on a principal residential structure exceeding thirty (30) hours per year shall be mitigated.

15. Use of Public Roads in Macon County

An applicant, owner, or operator proposing to construct, operate, or maintain a LWECS and/ or for each Wind Farm Project involving multiple LWECS or related substation shall:

A. Identify all public roads within Macon County to be used for transporting Wind Energy Conversion System (WECS) components or substation components and/or equipment for the construction, operation, or maintenance of the WECS or substation; and

B. Provide the Macon County Planning and Zoning Administrator with:

The list of public roads to be used; and

An executed copy of applicable weight and size permits from appropriate governmental units having jurisdiction over identified public roads; and

An executed copy of each written Road Use Agreement and supporting documentation required by the appropriate governmental units having jurisdiction over identified public roads addressing:

- 1. The use and proposed repair plan for the public roads, bridges, and rights-of-way located within that governmental unit's jurisdiction; and***
- 2. The pre-construction baseline survey prepared and sealed by a State of Illinois Licensed Professional Engineer to determine existing road and bridge conditions for assessing potential damage to identified public roads; and***
- 3. The method to conduct a post-construction baseline survey prepared and sealed by a State of Illinois Licensed Professional Engineer to determine any actual damage to identified public roads and bridges; and***
- 4. Proposed remediation or compensation to the appropriate governmental unit having jurisdiction over identified public roads for any actual measured damage to public roads and bridges; and***
- 5. Performance/surety bonds or other financial assurance documents required to guarantee the performance of the Road Use Agreements.***
- 6. If no such written agreement is required by the governmental unit having jurisdiction over identified public roads, an executed written statement from said unit of government stating no agreement is required shall be submitted.***

Applicant will work closely with the County Highway Department and Township Road Commissioners to define the terms and conditions of a Road Use Agreement for the Project that will ensure activity as it relates to County and Township rights of way will be managed according to State, County and Township requirements. The Applicant has submitted a draft Road Use Agreement to Macon County as well as the respective Township Road Commissioners where the Project is located. Prior to seeking Building Permits, Applicant will ensure the Road Use Agreement fully complies with all of the terms of the Macon County Wind Ordinance Section 15. "Use of Public Roads in Macon County."

During the construction of the temporary facilities within public ROW, appropriate maintenance of traffic devices such as signage, flaggers and barricades will be provided according to IDOT Standard Specifications for roadside construction work on public roads. Construction vehicles that require special escort; overweight and oversize, will come with escort according to IDOT permit regulations. Other construction vehicles will not cause the level of service on the existing roads within and surrounding the project to shift from current levels due to the current low (annual average daily traffic) AADTs and infrequency of construction vehicle traffic within the project and at project boundaries, therefore no additional measures are necessary to ensure the same levels of service.

A draft copy of the Road Use Agreement has also been provided to the Macon County States Attorney and Planning & Zoning Department to ensure the framework of the agreement fully complies with all associated Road Use requirements in the Macon County Wind Ordinance.

16. Transferability / Property Owner Restoration Agreement

Each WECS lease shall have a signed agreement between the WECS owner and the property owner regarding restoration requirements as discussed in this ordinance.

Each Lease Agreement between the Applicant and a Landowner has a provision committing the Applicant to the terms of a restoration agreement. The provision imposes a contractual obligation on the Applicant to restore and decommission to standards equal to or greater than those set forth by the County.

Transfer of ownership of property shall carry all encumbrances, requirements, restrictions, and conditions from original owner to all subsequent owners. Special uses for all SWECS(s), LWECS(s), and or Wind Farm Projects are transferable.

Applicant agrees to the above provision that transfer of ownership of property shall carry all encumbrances, requirements, restrictions, and conditions from original owner to all subsequent owners. Applicant also agrees that Special Uses for all LWECS(s) and or Wind Farm Projects are transferable.

17. Violations

It is unlawful for any person to construct, install, maintain, modify, or operate a wind energy conversion system that is not in compliance with this ordinance or with any condition contained in a special use permit or building permit issued pursuant to this ordinance.

Applicant agrees to comply with this Section 17. "Violations" of the Macon County Wind Ordinance.

18. Conflict with Other Ordinances

Should any provision of this ordinance conflict with any other county ordinance, then the provisions of this ordinance shall apply and shall prevail, over other ordinances to the extent necessary to resolve the conflict.

Applicant will abide by the terms of this requirement.

19. Administration & Enforcement

The Macon County Planning and Zoning staff shall be charged with the enforcement of the Wind Energy Conversion System Ordinance.

The Macon County Planning & Zoning Staff may enter any property for which a special use permit or building permit has been issued under this ordinance to conduct an inspection to determine whether the conditions stated in the permit have been met as specified by statute, ordinance and code.

Applicant will abide by the terms of this requirement.

20. Penalties

Any person, firm, or corporation, or agents, employees, or contractors of such, who violate, disobey, omit, neglect, or refuse to comply with, or who resist enforcement of, any provisions of this comprehensive amendment, shall be subject to a fine of not more than five hundred dollars (\$500) for each offense; and each day a violation continues to exist shall constitute a separate offense.

Applicant will abide by the terms of this requirement.

21. Severability

The provisions of this ordinance are severable, and the invalidity of any section, subdivision, paragraph, or other part of this ordinance shall not affect the validity or effectiveness of the remainder of the ordinance.

Applicant will abide by the terms of this requirement.



E.ON
701 Brazos Street
14th Floor
Austin, TX 78701
www.eoncrna.com

June 3, 2015

Macon County Planning and Zoning Dept.
141 S. Main Street; Suite 501
Decatur, IL 62523

Attn: Jennifer Hoffman
Director of Planning and Zoning Dept.

Dear Ms. Hoffman,

Pursuant to our Special Use Permit application, we have provided a thumb drive that contains each vesting deed and memorandum (and if applicable any assignment or recorded amendment) for each signed landowner within our project boundary. You will also find a spreadsheet in Appendix B. of our application that shows the landowner, notification address, contact telephone numbers under Appendix B1 "Project Owner Information" and legal description of the property and PIN number under Appendix B2 "All Parcel & Owner Info".

Additionally, please note that in February 2015, we engaged Stewart Title Guaranty Company ("Stewart") to obtain all vesting deeds and to provide title commitments (to confirm ownership) on each parcel where we intend on siting our project. We have confirmed through the vesting deeds and the title commitments that the owners listed in the spreadsheet provided in the Special Use Permit application, shown in Column B in Appendix B1 "Project Owner Information", are the verified owners of the property listed in Column B "All Parcel & Owner Info" of the provided spreadsheet for all of the vesting deeds and title commitments reviewed to date. Any changes in land ownership will be provided to the Macon County Planning and Zoning Department as part of the Building Permit application, as per the Macon County Wind Energy Conversion System Ordinance requirements for Building Permits (Section 4).

Should you have any questions please do not hesitate to contact me at the number below or our paralegal, Tami Clare at 512-482-4057, or by email at Tami.Clare@eon.com.

Warmest Regards,

A handwritten signature in blue ink, appearing to read "Alison Gardner", is written over the typed name.

Alison Gardner
Assistant General Counsel

Appendix B1: Project Owner Information

Appendix B1: Project Owner Information

Lease #	Entity Name	Contact Name	Address	City	State	Zip Code	Phone 1	Phone 2
4	H. Gene Hoffman Trust - M. Eleanor Hoffman Trust	H. Gene Hoffman Trust	12205 Middle Creek Rd	Clinton	IL	61727	(217) 935-9646	
4	H. Gene Hoffman Trust - M. Eleanor Hoffman Trust	M. Eleanor Hoffman Trust	12205 Middle Creek Rd	Clinton	IL	61727	(217) 935-9646	
9	Sue Rogers Trust	Sue Rogers Trust	9049 Blue Sage Rd	Clinton	IL	61727	(217) 519-1913	
14	92131, LLC	92131, LLC	5650 Via Way	Zephyr Hills	FL	33540	(217) 429-4453	
22	Delores Ilene Clark Living Trust	Delores I. Clark Living Trust	9465 W 53rd Pl	Arvada	CO	80002	(303) 424-4222	
24	Don Westerman, Inc. I	Don Westerman, Inc.	782 E Hickory Point Rd	Decatur	IL	62526	(217) 877-3125	(217) 620-4958
27	Tirrell Jane Barnett Revocable Trust (FKA, Stoutenborough, James P., Jr.)	Tirrell J. Barnett Revocable Trust	305 Camellia Lane	Simpsonville	SC	29681	(864) 608-7988	
28	J. Leroy Wilson Trust - Ruth Ann Wilson Trust	Ruth Ann Wilson Trust	7879 Business Route 51	Clinton	IL	61727	(217) 935-0267	(217) 620-4748
29	Smith, Patricia Ann	Patricia Ann Smith	612 W Karen Dr	Decatur	IL	62526	(217) 877-6299	(217) 620-3948
30	Stoutenborough - Stoutenborough	Thomas C. Stoutenborough	221 W Jackson St	Maroa	IL	61756	(217) 794-3374	
30	Stoutenborough - Stoutenborough	James R. Stoutenborough	25583 Lincoln Rd	Deland	IL	61839	(217) 433-7466	
31	Marsh Heirs	Mary Ellen Smith	17801 Engewood Walk	South Bend	IN	46635	(574) 273-9591	(574) 252-9725
31	Marsh Heirs	Michelle K. Marsh	28 Inglewood Ln	Bloomington	IL	61704	(309) 665-0484	(574) 252-9725
31	Marsh Heirs	H. Daniel Marsh	2862 W School Rd	Maroa	IL	61756	(217) 794-3780	(217) 972-3063
31	Marsh Heirs	Sally Jo Honnold	4929 Forest Ave, Unit 3B	Downers Grove	IL	60515	(630) 541-7508	(630) 390-8780
31	Marsh Heirs	Alan T. Marsh	615 W Monroe St	Maroa	IL	61756	(217) 794-5153	(217) 853-3790
31	Marsh Heirs	Brandon J. Marsh	615 W Monroe St	Maroa	IL	61756	(217) 794-5153	(217) 853-0398
31	Marsh Heirs	Cody R. Marsh	615 W Monroe St	Maroa	IL	61756	(217) 794-5153	(217) 855-9246
32	Marsh, H. Daniel & Kathy K.	H. Daniel & Kathy K. Marsh	2862 W School Rd	Maroa	IL	61756	(217) 794-3780	(217) 972-3063
33	Montgomery, Kathleen (fka Mary J. Montgomery Estate)	Kathleen Montgomery	8340 N Thornydale Rd # 110-113	Tucson	AZ	85741	(520) 400-1233	
34	Montgomery, Daniel C. (fka Mary J. Montgomery)	Daniel C. Montgomery	469 Dwight Dr	Decatur	IL	62526	(217) 519-4005	(309) 303-7024
35	Montgomery - White (fka Mary J. Montgomery Estate)	Kevin Montgomery	28 Kirkwood Dr	Clinton	IL	61727	(217) 855-1401	
35	Montgomery - White (fka Mary J. Montgomery Estate)	Lynette White	2800 W Washington	Maroa	IL	61756	(217) 794-5028	
37	Wiles Family Partnership Ltd	Wiles Family Partnership, Ltd.	649 Lawson Hester Rd	Elkton	KY	42220	(270) 277-9491	(270) 277-6639
38	Trust No. 406-007 United Community Bank (fka Trust No. 406-407 (United Community Bank))	Trust No. 406-007	1900 W Iles Ave	Springfield	IL	62704	(217) 787-3000	
39	Finrock, Jr., Marvin & Shelley R. I	Marvin & Shelley Finrock	4086 Baptist Rd	Clinton	IL	61727	(217) 944-2457	
40	Farmshare Holdings, LLC	Farmshare Holdings, LLC	38W386 Burr Oak Ln	St. Charles	IL	60175	(847) 289-1000	
41	Estate of Marshall H. England (fka England, Marshall H.)	Estate of Marshall H. England	5660 W Washington Street Rd	Maroa	IL	61756	(217) 794-3762	
42	CH Moore Farms LP	C. H. Moore Farms, LP	121 S Center St	Clinton	IL	61727	(217) 620-6603	
43	Harris, Kenneth R. & Cynthia S.	Kenneth Rick & Cynthia Sue Harris	5660 W Washington Street Rd	Maroa	IL	61756	(217) 794-3762	
44	Logan Marital Trust and Logan Family Trust (fka Logan, Robert L.)	Logan Family Trust	723 Stevens Creek Blvd	Forsyth	IL	62535	(217) 330-8229	(217) 877-2188
44	Logan Marital Trust and Logan Family Trust (fka Logan, Robert L.)	Logan Marital Trust	723 Stevens Creek Blvd	Forsyth	IL	62535	(217) 330-8229	(217) 877-2188
45	Logan Enterprises, Inc.	Logan Enterprises, Inc.	2330 N Route 121	Decatur	IL	62526	(217) 855-8817	
46	Don Westerman, Inc. III	Don Westerman, Inc.	782 E Hickory Point Rd	Decatur	IL	62526	(217) 877-3125	(217) 620-4958
47	Hamm Family Farms LLC	Hamm Family Farms, LLC	205 South Walnut Street, Box 686	Rochester	IL	62523	(217) 498-9660	
48	Montgomery, Agnes	Agnes Montgomery	220 N Water St #200	Decatur	IL	62525	(217) 429-4453	
52	Montgomery - Montgomery	Agnes Montgomery	220 N Water St #200	Decatur	IL	62525	(217) 429-4453	
52	Montgomery - Montgomery	William P. Montgomery	6690 Little Galilee Rd	Clinton	IL	61727	(217) 944-2345	
53	Laurie L. Rau Living Trust	Laurie L. Rau Living Trust	4420 Meadow Dr	Pekin	IL	61554	(309) 657-2758	
54	Simkins Brothers, LLC	Simkins Brothers, LLC	7646 S. Allison Court	Littleton	CO	80128	(720) 556-1559	
55	Buth, Victor (2)	Victor Buth	220 North Macon St	Latham	IL	62543	(217) 674-3579	
57	Heft, Paul B. & Sonia Sue	Paul B. & Sonia Sue Heft	11025 West Lake Fork Rd	Kenney	IL	61749	(217) 796-3593	(217) 519-0731
60	England, et al (fka Marshall H. England Life Estate)	England Living Trust	19646 SW Lebeau Rd	Sherwood	OR	97140	(217) 625-2506	(503) 355-8586
60	England, et al (fka Marshall H. England Life Estate)	Vincent Randall England	2801 Galleon Ct NE	Tacoma	WA	98422	(217) 944-2345	
60	England, et al (fka Marshall H. England Life Estate)	Andrea J. England	6690 Little Galilee Rd	Clinton	IL	61727	(217) 944-2549	
60	England, et al (fka Marshall H. England Life Estate)	Linda Bailey	6690 Little Galilee Rd	Clinton	IL	61727	(217) 944-2549	
61	Robert E. Brame Trust & the Marital Trust (fka Robert E. Brame Life Estate)	Brame Marital Trust	12263 N Kenney Rd	Warrensburg	IL	62573	(217) 672-3258	
61	Robert E. Brame Trust & the Marital Trust (fka Robert E. Brame Life Estate)	Robert E. Brame Trust	12263 N Kenney Rd	Warrensburg	IL	62573	(217) 672-3258	
62	Leland Stanford England Life Estate	Leland Stanford England	5796 Gateway Dr	Mt. Zion	IL	62549	(423) 626-5179	(217) 945-2345
63	Zelhart, Imogene	Imogene Zelhart	12421 Glasgow Rd	Warrensburg	IL	62573	(217) 794-2200	(217) 794-3811
64	Edgecombe, Roger & Karen	Roger & Karen Edgecombe	9099 W Duroc Rd	Maroa	IL	61756	(217) 674-3780	
65	Don Westerman, Inc. II	Don Westerman, Inc.	782 E Hickory Point Rd	Decatur	IL	62526	(217) 877-3125	(217) 620-4958

Appendix B1: Project Owner Information

66	Morthland, Carmen Sue	Carmen Sue Morthland	3453 Las Vegas Rd	Decatur	IL	62526	(217) 875-5631	(217) 521-5629
67	Zelhart, John and Imogene	Imogene & John M. Zelhart	12421 Glasgow Rd	Warrensburg	IL	62573	(217) 794-2200	(217) 794-3811
68	Moore, Ramona K. & Gary R.	Gary & Ramona Moore	5766 West Duroc Road	Maroa	IL	61756	(217) 794-5354	
69	Crosier, Dale W.	Dale W. Crosier	15233 N Bearsdale Rd	Maroa	IL	61756	(217) 794-5573	
70	Deer Meadow Farms, Inc.	Deer Meadow Farms, Inc.	9049 Blue Sage Rd	Clinton	IL	61727	(217) 519-1913	
71	Ruwe, Chad	Chad Ruwe	14129 Bantam Rd	Maroa	IL	61756	(217) 520-5190	
72	Shull, Gregory L. & Donna	Gregory L. & Donna Shull	4710 W Duroc Rd	Maroa	IL	61756	(217) 794-5243	
73	Sherleen Scheibly Trust	Sherleen Scheibly Trust	3805 Freedom Blvd	Champaign	IL	61822	(217) 607-0883	
74	Killough, Linda S.	Linda S. Killough	10 Edgelea Cir	Clinton	IL	61727	(217) 935-5338	(217) 417-5338
78	Langley, Donald A.	Donald A. Langley	773 Cheatham Hill Trail SW	Marietta	GA	30064	(770) 427-2268	
79	Voorhees, Georgene	Georgene A. Voorhees	12928 Greenswitch Rd	Maroa	IL	61756	(217) 794-3719	(217) 619-2089
80	Stemler Trust LE and WAWA Dairy Farm (fka Stemler-WAWA Dairy Farm, Inc.)	WAWA Dairy Farm, Inc.	254 Wetzel Drive	Waterloo	IL	62298	(618) 939-7621	
80	Stemler Trust LE and WAWA Dairy Farm (fka Stemler-WAWA Dairy Farm, Inc.)	Kenneth H. Stemler Trust	390 Markham Plantation	Apex	NC	27523	(919) 303-1560	(217) 855-8022
81	Beverly Jean Spangler Revocable Trust - Alan P. Spangler Trust	Alan P. Spangler Revocable Trust	3204 E 29th Rd	Seneca	IL	61360	(815) 357-0718	
81	Beverly Jean Spangler Revocable Trust - Alan P. Spangler Trust	Beverly Jean Spangler Revocable Trust	3204 E 29th Rd	Seneca	IL	61360	(815) 357-0718	
82	Crosier, Vickie L.	Vickie L. Crosier	15233 N Bearsdale Rd	Maroa	IL	61756	(217) 794-5573	
83	Kenneth Smith LE - Patricia Smith LE	Patricia Ann & Kenneth W. Smith	612 W Karen Dr	Decatur	IL	62526	(217) 877-6299	
84	IRA 78-D-0747 (Hickory Point Bank, Trustee) (FKA Berry, John M.)	IRA 78-D-0747	225 North Water, Suite 202	Decatur	IL	62523	(217) 521-3537	(217) 872-6291
85	Stoutenborough LE - Stoutenborough LE	Thomas C. Stoutenborough	221 W Jackson St	Maroa	IL	61756	(217) 794-3374	
85	Stoutenborough LE - Stoutenborough LE	James R. Stoutenborough	25583 Lincoln Rd	Deland	IL	61839	(217) 433-7466	
86	Moyer, Sandra K.	Sandra K. Moyer	11767 Midway Rd	Argenta	IL	62501	(217) 521-2271	
87	Roberts Edinger (fka Roberts, Sharon J.)	Marilyn Jeane Edinger	2329 N. Birchwood Ave	Davenport	IA	52804	(563) 391-0046	
87	Roberts Edinger (fka Roberts, Sharon J.)	Sharon J. Roberts	2609 South Pine Street	Centralia	IL	62801	(618) 532-6981	
88	Wilson, Donald D. & Thelma M.	Donald D. & Thelma M. Wilson	13411 N Rte 51	Maroa	IL	61756	(217) 794-3359	(217) 341-4175
89	Stahl, Kenneth C. & Sharon Ann	Kenneth C. & Sharon Ann Stahl	340 W School Rd	Maroa	IL	61756	(217) 794-3898	
90	Leach, Trevor & Janice	Trevor & Janice Leach	802 W School Rd	Maroa	IL	61756	(217) 855-2882	
91	Leach, Trevor	Trevor Leach	802 W School Rd	Maroa	IL	61756	(217) 855-2882	
93	Smith, Kenneth & Patricia	Patricia Ann & Kenneth W. Smith	612 W Karen Dr	Decatur	IL	62526	(217) 877-6299	
94	Stemler, Kenneth LE et al (fka Estate of Luann Stemler (fka Stemler, Luann))	Nicole Stemler O'Connell	1212 Riggins Mill Road	Cary	NC	27519	(919) 303-1560	
94	Stemler, Kenneth LE et al (fka Estate of Luann Stemler (fka Stemler, Luann))	Colleen K. Stemler	207 Royal Tower Way	Cary	NC	27511	(919) 234-3968	
94	Stemler, Kenneth LE et al (fka Estate of Luann Stemler (fka Stemler, Luann))	Kenneth Stemler	390 Markham Plantation	Atex	NC	27523	(919) 303-1560	(217) 855-8022
95	Wikoff, Kenneth E.	Kenneth E. Wikoff	5 Prairie Ct	Tuscola	IL	61953	(217) 253-6876	(217) 714-0480
96	Bair, Nancy K.	Nancy K. Bair	PO Box 3	Minonk	IL	61760	(309) 432-2762	
99	Wickline, Barbara J.	Barbara J. Wickline	1514 Bradford Pl	Mesquite	TX	75149	(972) 289-4433	
100	Pense, Marcia K.	Marcia K. Pense	4436 W School Rd	Maroa	IL	61756	(217) 794-5247	(217) 454-3545
101	Trichel, James O.	James O. Trichel	4680 W School Rd	Warrensburg	IL	62573	(217) 433-5247	
102	E&E Pork Ranch	E&E Pork Ranch	9099 W Duroc Rd	Maroa	IL	61756	(217) 674-3780	
103	Estate of Mildred E. Baldwin (fka Mildred E. Edgcombe)	Mildred E. Baldwin	2 Michele Dr	Warrensburg	IL	62573	(217) 674-3780	
104	Buth, Victor	Victor Buth	220 North Macon St	Latham	IL	62543	(217) 674-3579	
105	Zelhart, John M.	John M Zelhart	12421 Glasgow Rd	Warrensburg	IL	62573	(217) 794-2200	(217) 794-3811
106	Millikin University	Millikin University	1184 W Main St	Decatur	IL	62522	(800) 373-7733	(217) 424-6211
107	Samuel D. Jarvis Family Trust	Samuel D. Jarvis Family Trust	1401 Koester Dr, Suite 100	Forsyth	IL	62535	(217) 620-3131	(217) 876-7700
108	Perkinson, Russell E. (fka Charles D. Perkinson Trust)	Russell E. Perkinson	PO Box 65	Thawville	IL	60968	(217) 387-2236	
109	County Board of School Trustees of Macon County, Illinois	Macon County Board of School Trustees	10090 N Kenney Rd	Warrensburg	IL	62573	(217) 672-8374	(217) 454-1551
111	Alsup, Virginia etal (fka Alsup, Virginia Rau)	Allen R. Alsup	10090 N Kenney Rd	Warrensburg	IL	62573	(217) 672-8374	(217) 454-1551
111	Alsup, Virginia etal (fka Alsup, Virginia Rau)	Carol Ann Myers	10090 N Kenney Rd	Warrensburg	IL	62573	(217) 672-8374	(217) 454-1551
111	Alsup, Virginia etal (fka Alsup, Virginia Rau)	Harold Eugene Alsup	10090 N Kenney Rd	Warrensburg	IL	62573	(217) 672-8374	(217) 454-1551
111	Alsup, Virginia etal (fka Alsup, Virginia Rau)	Virginia Rau Alsup	PO Box 23	Warrensburg	IL	62573	(217) 674-3575	
112	Declaration of Trust dated 9/2/93 (Edwin Lawrence Sr Trustee)	Edwin Lawrence, Sr. Trust	11242 N Kenney Rd	Warrensburg	IL	62573	(217) 672-8049	
113	Declaration of Trust Dated 9/2/93 (Mary Lou Lawrence, Trustee)	Mary Lou Lawrence	11242 N Kenney Rd	Warrensburg	IL	62573	(217) 672-8049	(309) 360-4569
114	Helen Post Hospital Trust	Helen Post Hospital Trust	1401 Koester Dr, Suite 100	Forsyth	IL	62535	(217) 620-3131	(217) 876-7700
115	Robert W. Griffith Family Trust	Robert W. Griffith Family Trust	1401 Koester Dr, Suite 100	Forsyth	IL	62535	(217) 620-3131	(217) 876-7700
116	Lawrence, Barbara	Barbara Lawrence	10090 N Kenney Rd	Warrensburg	IL	62573	(217) 674-3534	
117	Brelsfoard, Richard E.	Richard Brelsfoard	12388 Janvrin Rd	Maroa	IL	61756	(217) 794-3757	(217) 519-1428
118	Finrock, Jr., Marvin and Shelley R. II	Marvin & Shelley Finrock	4086 Baptist Rd	Clinton	IL	61727	(217) 944-2457	

Appendix B1: Project Owner Information

119	Trust #2339 (Busey Bank, Trustee fbo Joy F. McGorray)	Trust #2339 (Busey Bank, Trustee fbo Joy F. McGorray)	130 N Water St	Decatur	IL	62523	(217) 424-1111	(217) 425-8292
120	Zelhart, John A. et al	John A. & Jill M. Zelhart	1422 W Washington St Rd	Maroa	IL	61756	(217) 794-5124	(217) 794-3888
120	Zelhart, John A. et al	John A. & Jill M. Zelhart	1422 W Washington St Rd	Maroa	IL	61756	(217) 794-5124	(217) 794-3888
120	Zelhart, John A. et al	David E. & Cynthia K. Zelhart	6106 W Duroc Rd	Maroa	IL	61756	(217) 794-5124	(217) 794-3476
120	Zelhart, John A. et al	James D. & Andrea D. Zelhart	6725 W Duroc Rd	Maroa	IL	61756	(217) 794-3811	
120	Zelhart, John A. et al	James D. & Andrea D. Zelhart	6725 W Duroc Rd	Maroa	IL	61756	(217) 794-3811	
121	McGuire, Williams J & Carol (fka McGuire, William J.)	William J. & Carol McGuire	12201 N Wyckles Rd	Warrensburg	IL	62573	(217) 794-5270	
122	Hibner, Gregory C. & Kimberly M.	Gregory C. & Kimberly M. Hibner	1325 NE 47th St	Ankeny	IA	50021	(515) 289-9464	(217) 853-1401
123	Rohrscheib, Randall Gene	Randall Gene Rohrscheib	12216 N Wyckles Rd	Warrensburg	IL	62573	(217) 794-5940	
125	Cullison, James & Denise	James & Denise Cullison	1424 E 450 N	Atwood	IL	61913	(217) 578-3125	
126	Mary L. Rohrscheib Revocable Trust (FKA Rohrscheib, Merle Gene & Mary Louise)	Mary L. Rohrscheib Revocable Trust	PO Box 72	Kenney	IL	61749	(217) 796-3537	
127	Wikoff, Roger & Sheila	Roger & Sheila Wikoff	12392 N Bearsdale Rd	Maroa	IL	61756	(217) 794-3429	
128	Wikoff, Ruth Helen & the Virgil C. and Helen M. Living Trust (f/k/a Estate of Virgil C. Wikoff, (fka Wikoff, Virgil C.))	Ruth Helen Wikoff	401 Burwash Ave	Savoy	IL	61874	(217) 352-3592	
128	Wikoff, Ruth Helen & the Virgil C. and Helen M. Living Trust (f/k/a Estate of Virgil C. Wikoff, (fka Wikoff, Virgil C.))	The Virgil C. and Helen M. Wikoff Living Trust	401 Burwash Ave	Savoy	IL	61874	(217) 352-3592	
129	Elmer Brelsfoard Trust	Elmer Brelsfoard Trust	130 N Water St	Decatur	IL	62523	(217) 424-1111	(217) 425-8292
130	Brelsfoard, Richard & Nancy	Nancy L. & Richard Brelsfoard	12388 Janvrin Rd	Maroa	IL	61756	(217) 794-3757	
131	Brelsfoard, Gary R. & Sharon	Gary R. & Sharon L. Brelsfoard	1557 W School Rd	Maroa	IL	61756	(217) 794-3757	
132	Brelsfoard, Nancy L.	Nancy L. Brelsfoard	12388 Janvrin Rd	Maroa	IL	61756	(217) 794-3757	
133	Cullison, Dennis Lee (fka Everett C. Cullison Residuary Trust)	Dennis Lee Cullison	17919 Myrica Ln	San Diego	CA	92127	(858) 487-9439	
134	McGuire, William J. & Carol (2)	William J. & Carol McGuire	12201 N Wyckles Rd	Warrensburg	IL	62573	(217) 794-5270	
135	McGuire, William J. & Carol L. (1)	William J. & Carol McGuire	12201 N Wyckles Rd	Warrensburg	IL	62573	(217) 794-5270	
136	Decatur Memorial Health Foundation	Decatur Memorial Health Foundation	2300 N Edward St	Decatur	IL	62526	(217) 876-2104	
137	Declaration of Trust 5/5/92 (Frances J. Stengel Trustee)	Frances J. Stengel Trust	1401 Koester Dr, Suite 100	Forsyth	IL	62535	(217) 620-3131	(217) 876-7700
138	Sharen R. Hudson Trust, et al (fka Hudson, Sharen R., et al)	LAG Trust (POC - Larry Groves)	1080 E School Rd	Maroa	IL	61756	(217) 794-5093	(217) 620-9774
138	Sharen R. Hudson Trust, et al (fka Hudson, Sharen R., et al)	MAS and KRS Trust (POC Larry Groves)	1322 W Gayman Dr	Decatur	IL	62526	(217) 794-5093	(217) 620-9774
138	Sharen R. Hudson Trust, et al (fka Hudson, Sharen R., et al)	Evelyn F. Fishel Trust	170 Jack Lane	Forsythe	IL	62535	(217) 875-3838	
138	Sharen R. Hudson Trust, et al (fka Hudson, Sharen R., et al)	Sharen R. Hudson Trust	536A Park Place Dr	Forsyth	IL	62535	(217) 875-3838	
139	Hurt - Burdine	William O. Burdine	2132 E Mill Stone Rd	Decatur	IL	62526	(217) 877-9417	(217) 855-0070
139	Hurt - Burdine	Janice E. Hurt	PO Box 236	Warrensburg	IL	62573	(217) 672-3215	(217) 521-0844
140	Hanes, Richard A. & Cinda L.	Richard A. & Cinda L. Hanes	10457 Bearsdale Rd	Maroa	IL	61756	(217) 794-5081	
141	Hanes, Richard, et al	Jane B. Queary	10278 Janvrin Rd	Maroa	IL	61756	(217) 972-4304	(217) 791-2808
141	Hanes, Richard, et al	Richard A. Hanes	10457 Bearsdale Rd	Maroa	IL	61756	(217) 794-5081	
141	Hanes, Richard, et al	Diane L. England	19646 SW Lebeau Rd	Sherwood	OR	97140	(217) 625-2506	(503) 355-8586
142	Trust B, Shoemaker, Willard D, Trustee (fka Shoemaker, Willard D.)	Trust B, Shoemaker, Willard D, Trustee (fka Shoemaker, Willard D.)	501 E Madison St	Maroa	IL	61756	(217) 794-2260	
143	Lehn - Pronk	Richard Lehn	3136 W Illiniwick Rd	Decatur	IL	62526	(217) 433-0600	
143	Lehn - Pronk	Adolf Pronk	4310 Foxfire Ln N	Wilson	NC	27896	(252) 237-6373	
144	Cullison - Stelzriede (fka Estate of Mary E. Cullison)(fka Cullison, Mary E.)	James Cullison	1424 E 450 N	Atwood	IL	61913	(217) 578-3125	
144	Cullison - Stelzriede (fka Estate of Mary E. Cullison)(fka Cullison, Mary E.)	Marsha K. Stelzriede	759 Schroll Ct.	Forsyth	IL	62535	(217) 877-5418	
145	Pronk, Lois Gene	Lois Gene Pronk	4310 Foxfire Ln N	Wilson	NC	27896	(252) 237-6373	
146	Robert L. Grissom Partnership, Ltd.	Robert L. Grissom Partnership, Ltd.	9804 Nicholas St, Apt 226	Omaha	NE	68114	(402) 551-4062	
147	McClure, Patrick (fka McClure Trust - McClure LE)	Patrick McClure	723 Stevens Creek Blvd	Forsyth	IL	62535	(217) 620-6016	
148	Bird, Rebecca A.	Rebecca Alyce Bird	7314 Hackney Rd	Warrensburg	IL	62573	(217) 672-3788	
149	Bird, John Edel & Arlene P.	John Edel & Arlene P. Bird	10988 Drummer Rd	Warrensburg	IL	62573	(217) 672-8201	
150	Carara, Beulah	Beulah C. Carara	12201 Cypress Dr SW	Fort Myers	FL	33908	(217) 672-6364	
152	Kimmons, Robert & Judith	Robert W. & Judith Kimmons	11242 N Kenney Rd	Warrensburg	IL	62573	(217) 672-3666	
153	George P. Turner Revocable Trust	George P. Turner Revocable Trust	2580 Foxfield Rd #201	St. Charles	IL	60174	(630) 879-0382	(630) 207-5275
154	Carara - Williams (1)	Beulah C. Carara	12201 Cypress Dr SW	Fort Myers	FL	33908	(217) 672-6364	
154	Carara - Williams (1)	Kent & Edythe Anne Williams	3883 Parkcrest Dr NE	Atlanta	GA	30319	(770) 451-9547	(770) 827-3487
156	MFS Residual Bypass Trust (fka George W. Baker Testamentary Trust - Marguerite K. Baker Residuary Trust)	MFS Residual Bypass Trust	904 Smith Lane	Hillsboro	IL	62049	(217) 532-2794	
158	M & E Steinman Trust	M & E Steinman Trust	16358 E Jacklin Dr	Fountain Hills	AZ	85268	(480) 396-8218	(480) 241-8854
159	Buth, Ellis and Karen	Ellis & Karen Buth	10955 Strawn Road	Warrensburg	IL	62573	(217) 674-3536	
160	Joan Wells Family Farmland Limited Partnership	Joan Wells Family Farmland Limited Partnership	1401 Koester Dr, Suite 100	Forsyth	IL	62535	(217) 620-3131	(217) 876-7700
161	John L. Rotz Revocable Trust	John L. Rotz Revocable Trust	8794 W Wise Rd	Warrensburg	IL	62573	(217) 672-8331	
162	Alsup, Allen & Pamela	Allen R. & Pamela J. Alsup	10090 N Kenney Rd	Warrensburg	IL	62573	(217) 672-8374	(217) 454-1551
163	George P. Turner Children's Trust	George P. Turner Children's Trust	50 S Lasalle St	Chicago	IL	60603	(630) 879-0382	(630) 207-5275

Appendix B1: Project Owner Information

164	Carara LE - Williams LE (2)	Beulah C. Carara	12201 Cypress Dr SW	Fort Myers	FL	33908	(217) 672-6364	
164	Carara LE - Williams LE (2)	Edythe Anne Williams	3883 Parkcrest Dr NE	Atlanta	GA	30319	(770) 451-9547	(770) 827-3487
165	Wentworth, Janice	Janice Wentworth	940 Hope Dr	Forsyth	IL	62535	(217) 875-0737	
166	Wentworth, David G. & Lory A.	David Gregory & Lory Aleen Wentworth	10441 N Glasgow Rd	Warrensburg	IL	62573	(217) 672-3763	
168	Bankson, Kim A.	Kim A. Bankson	6616 W Wise Rd	Warrensburg	IL	62573	(217) 672-8228	
169	Williams, Edythe Anne	Edythe Anne Williams	3883 Parkcrest Dr NE	Atlanta	GA	30319	(770) 451-9547	(770) 827-3487
170	Keller Family Trust	Dianne V. Keller	8 Kendall St	Laguna Niguel	CA	92677	(949) 240-9757	
170	Keller Family Trust	William G. Keller	8 Kendall St	Laguna Niguel	CA	92677	(949) 240-9757	(949) 842-3043
171	Lehn, Martha Jean & Stanley	Martha Jean & Stanley D. Lehn	4103 N Wyckles Rd	Warrensburg	IL	62573	(217) 877-3569	
172	Sharon L. Larson Trust	Sharon L. Larson Trust	7340 Province Way, Apt 3202	Naples	FL	34104	(239) 348-3174	
173	Riebock/Riebock Trust-Reibock	Thomas W. Riebock	2377 Murietta Way	Sierra Vista	AZ	83550	(520) 378-9356	(520) 730-0108
173	Riebock/Riebock Trust-Reibock	James M. Riebock Trust	919 W Mound Road	Decatur	IL	62526	(217) 877-3393	(217) 201-4330
173	Riebock/Riebock Trust-Reibock	Pamela T. Riebock Trust	919 W Mound Road	Decatur	IL	62526	(217) 877-3393	(217) 855-5815
175	Janet S. Brewer Trust (fka Brewer, Janet S.)	Janet S. Brewer Trust Agreement dated 2/18/2011	2 Woodchuck Hill Rd	Canton	CT	06019	(860) 651-7879	(860) 651-3126
176	Penhallegon, William, et al II (fka Estate of Barbara Patton Penhallegon)	William E. Penhallegon	407 Woodhill Dr	Decatur	IL	62521	(217) 433-7582	
176	Penhallegon, William, et al II (fka Estate of Barbara Patton Penhallegon)	Barbara McKay	408 Southmoreland Pl	Decatur	IL	62521	(217) 428-5677	(702) 837-1849
176	Penhallegon, William, et al II (fka Estate of Barbara Patton Penhallegon)	G. Patton Penhallegon	7206 Sefton Rd	Dalton City	IL	61925	(217) 433-5883	
177	Penhallegon, William, et al IV (fka Penhallegon Family Trust)	William E. Penhallegon	407 Woodhill Dr	Decatur	IL	62521	(217) 433-7582	
177	Penhallegon, William, et al IV (fka Penhallegon Family Trust)	Barbara McKay	408 Southmoreland Pl	Decatur	IL	62521	(217) 428-5677	(702) 837-1849
177	Penhallegon, William, et al IV (fka Penhallegon Family Trust)	G. Patton Penhallegon	7206 Sefton Rd	Dalton City	IL	61925	(217) 433-5883	
178	Penhallegon, William,et al, I	William E. Penhallegon	407 Woodhill Dr	Decatur	IL	62521	(217) 433-7582	
178	Penhallegon, William,et al, I	Barbara McKay	408 Southmoreland Pl	Decatur	IL	62521	(217) 428-5677	(702) 837-1849
178	Penhallegon, William,et al, I	G. Patton Penhallegon	7206 Sefton Rd	Dalton City	IL	61925	(217) 433-5883	
179	England - England	Philip Courtney England	306 Holland Dr	Fuquay Varina	NC	27526	(919) 552-0301	(919) 971-2460
179	England - England	Leland Stanford England	5796 Gateway Dr	Mt. Zion	IL	62549	(423) 626-5179	(217) 945-2345
180	Brame, Robert E. Trust dated 8/6/14 (fka Brame, Robert E.)	Robert E. Brame Trust	12263 N Kenney Rd	Warrensburg	IL	62573	(217) 672-3258	
182	England, Leland Stanford, et al	Christy Spielberg	1611 Englebrook Ct	Ballwin	MO	63011	(636) 821-1636	
182	England, Leland Stanford, et al	Leland Stanford England	5796 Gateway Dr	Mt. Zion	IL	62549	(423) 626-5179	(217) 945-2345
182	England, Leland Stanford, et al	Valerie England	8224 Niles Center Rd, Apt 6C	Skokie	IL	60077	(217) 944-2345	
183	Penhallegon, William, et al III (fka E. England Penhallegon Trust)	William E. Penhallegon	407 Woodhill Dr	Decatur	IL	62521	(217) 433-7582	
183	Penhallegon, William, et al III (fka E. England Penhallegon Trust)	Barbara McKay	408 Southmoreland Pl	Decatur	IL	62521	(217) 428-5677	(702) 837-1849
183	Penhallegon, William, et al III (fka E. England Penhallegon Trust)	G. Patton Penhallegon	7206 Sefton Rd	Dalton City	IL	61925	(217) 433-5883	
184	Alsup, Allen R.	Allen R. Alsup	10090 N Kenney Rd	Warrensburg	IL	62573	(217) 672-8374	(217) 454-1551
185	Chandler Deanna K. and Duane F. (fka Chandler Deanna) (fka Mary J. Montgomery),	Deanna Kay & Duane F. Chandler	2762 W Washington St Rd	Maroa	IL	61756	(217) 794-3473	
186	Chandler, Deanna Kay and Duane F.	Deanna Kay & Duane F. Chandler	2762 W Washington St Rd	Maroa	IL	61756	(217) 794-3473	
187	Dutcher, Thomas & Bridget	Bridget & Thomas Dutcher	11823 Glasgow Rd	Warrensburg	IL	62573	(607) 563-3164	(217) 672-3230
188	Finrock, Jr., Marvin and Shelley R. II	Marvin & Shelley Finrock	4086 Baptist Rd	Clinton	IL	61727	(217) 944-2457	
189	Justison - Thomas and Doyle Family Trust (fka George W. Baker Testamentary Trust)	Thomas Frederick Justison	15075 IL N Rt 127	Butler	IL	62015	(217) 876-7700	(217) 620-3131
189	Justison - Thomas and Doyle Family Trust (fka George W. Baker Testamentary Trust)	Doyle Family Trust	540 Park Place	Forsyth	IL	62535	(217) 876-7700	(217) 620-3131
190	Hoffman, H. Gene & M. Eleanor	H. Gene & M. Eleanor Hoffman	12205 Middle Creek Rd	Clinton	IL	61727	(217) 935-9646	
193	White, Lynette (fka Mary J. Montgomery Estate)	Lynette White	2800 W Washington	Maroa	IL	61756	(217) 794-5028	
194	Zelhart, Dave and Cynthia	David E. & Cynthia K. Zelhart	6106 W Duroc Rd	Maroa	IL	61756	(217) 794-5124	(217) 794-3476
195	Lula Parker Trust	Lula M. Parker Estate	130 N Water St	Decatur	IL	62523	(217) 424-1111	(217) 425-8292
196	Johnson, Richard H., et al.	Margo Ann Mosley	120 Riley Dr	Taylorsville	NC	28681	(828) 495-7494	(828) 320-8380
196	Johnson, Richard H., et al.	Richard H. Johnson	1415 W Mound Rd # 400	Decatur	IL	62526	(815) 579-5070	
196	Johnson, Richard H., et al.	Stephen Richard Johnson	2054 E Main St	Decatur	IL	62521	(815) 579-5070	(815) 579-5070
196	Johnson, Richard H., et al.	Louis Ivan Johnson	46 Country Club Estates	Sullivan	IL	61951	(217) 728-8917	
197	Robert Jay Weltman Revocable Trust (fka Trust No. 6046)	Robert Jay Weltman Revocable Trust	2100 Vallejo St	San Francisco	CA	94123	(415) 923-1284	
198	Dukes, Kristen W.	Kristen W. Dukes	23 E. Dover St	Easton	MD	21601	(415) 923-1284	
199	Ruggeri Life Estate - Carson Life Estate	Harriet F. Ruggeri	10355 Cape Roman Rd	Bonita Springs	FL	34135	(239) 992-3463	(239) 450-1128
199	Ruggeri Life Estate - Carson Life Estate	Susan H. Carson	10950 Salerno Bay Rd	Bonita Spring	FL	34135	(239) 498-1978	(231) 869-8808
200	Queary, Jane	Jane B. Queary	10278 Janvrin Rd	Maroa	IL	61756	(217) 972-4304	(217) 791-2808
201	Shoemaker Family Trust, et al (fka Shoemaker Family Trust)	Willard D. Shoemaker Irrevocable Trust	2833 E School Rd	Maroa	IL	61756	(217) 794-3848	
201	Shoemaker Family Trust, et al (fka Shoemaker Family Trust)	Shoemaker Family Trust	501 E Madison St	Maroa	IL	61756	(217) 519-0333	
202	Jordan, Betty Leone (fka Jordan, Betty Leone & William Joseph)	Betty Leone Jordan	8367 Klamath Rd	Argenta	IL	62501	(217) 795-4485	(217) 454-8811

Appendix B1: Project Owner Information

203	Trust #144 (Gerber State Bank)	Pulliam Farm	4030 Graces Ln	Decatur	IL	62521	(217) 876-8761	
204	Trust #56 (Gerber State Bank, Trustee)	Willard D. Shoemaker	501 E Madison St	Maroa	IL	61756	(217) 794-2260	
205	Lienhart, Terrell & Molly	Terrell Lynn & Molly S. Lienhart	12060 Sawyer Rd	Maroa	IL	61756	(217) 794-3410	
206	Emily Rohrscheib Declaration of Trust	Emily Rohrscheib Declaration of Trust	12 Liberty Ln	Clinton	IL	61727	(217) 935-6972	
207	Billy Franklin Rohrscheib Declaration of Trust	Billy Franklin Rohrscheib Declaration of Trust	12 Liberty Ln	Clinton	IL	61727	(217) 935-6972	
208	Buth, Martin	Martin Buth	709 Santa Fe Dr	Freeport	IL	61032	(815) 232-1341	(815) 238-7047
209	Buth, Victor (3)	Victor Buth	220 North Macon St	Latham	IL	62543	(217) 674-3579	
210	Trust No. JHB-062891 (John H. Butterfield, Trustee)	Trust No. JHB-062891	302 N Sycamore St	Maroa	IL	61756	(217) 794-5025	(217) 450-1295
104A	Twin Forks Wind Farm, LLC (SUB STATION)	Twin Forks Wind Farm, LLC	701 Brazos Street	Austin	TX	78701	(512) 477-7024	
34A	Montgomery, Kevin (fka Mary J. Montgomery Estate)	Kevin Montgomery	28 Kirkwood Dr	Clinton	IL	61727	(217) 855-1401	
75	Westerman, Verniel	Verniel Westerman (POC Don Westerman)	782 E Hickory Point Rd	Decatur	IL	62526	(217) 877-3125	(217) 620-4958
76	Westerman, Evelyn	Evelyn Westerman (POC Don Westerman)	782 E Hickory Point Rd	Decatur	IL	62526	(217) 877-3125	(217) 620-4958
77	Westerman, Verniel & Evelyn	Verniel & Evelyn Westerman (POC Don Westerman)	782 E Hickory Point Rd	Decatur	IL	62526	(217) 877-3125	(217) 620-4958
75	Westerman, Verniel	Verniel Westerman (POC Don Westerman)	782 E Hickory Point Rd	Decatur	IL	62526	(217) 877-3125	(217) 620-4958
76	Westerman, Evelyn	Evelyn Westerman (POC Don Westerman)	782 E Hickory Point Rd	Decatur	IL	62526	(217) 877-3125	(217) 620-4958
75	Westerman, Verniel	Verniel Westerman (POC Don Westerman)	782 E Hickory Point Rd	Decatur	IL	62526	(217) 877-3125	(217) 620-4958

Appendix B2: All Parcel Owner Information

Appendix B2: All Parcel & Owner Information

Lease #	Entity Name	Legal Description	PIN	Approx. Acreage	Section	Township	Range	Meridian
4	H. Gene Hoffman Trust - M. Eleanor Hoffman Trust	East 80 Acres of the NE 1/4 of Section 7, Township 18 N, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-18-400-003	80.00	10	18	2	3
4	H. Gene Hoffman Trust - M. Eleanor Hoffman Trust	The East 1/2 of the Southeast 1/4 of Section 18, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-18-400-003	80.00	18	18	2	3
4	H. Gene Hoffman Trust - M. Eleanor Hoffman Trust	The South 1/2, of the Northeast 1/4 of Section 18, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-18-200-006	80.00	18	18	2	3
4	H. Gene Hoffman Trust - M. Eleanor Hoffman Trust	The Southwest 1/4 of the Southeast 1/4 of Section 18, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-18-400-002	40.00	18	18	2	3
9	Sue Rogers Trust	All that part of the East 1/2 of the Southwest 1/4 of Section 10, Township 18 North, Range 1 East of the 3rd P.M., lying North of the Lake Fork Drainage Ditch. Situated in Macon County, Illinois.	01-01-10-300-005	32.13	10	18	1	3
9	Sue Rogers Trust	Part of the West 1/2 of the Southwest 1/4 of Section 10, Township 18 North, Range 1 East of the 3rd P.M., described as Beginning at the Southwest corner of said Section 10, running thence South 89 deg 57'27" East for 1310.25 feet; thence North 0 deg 6'55" East for 2649.59 feet; thence North 89 deg 42'50" West for 1315.60 feet; thence South 0 deg 00'00" West for 2655.18 feet to the point of beginning; EXCEPT Beginning at a point on the West line of the Southwest 1/4 of Section 10, Township 18 North, Range 1 East of the 3rd P.M., with the said point being 765.18 feet South of the West 1/4 corner of said Section 10 running thence South for 477.37 feet; thence East for 365.00 feet; thence North for 477.37 feet; thence West for 365.00 feet; EXCEPT the West 25 feet thereof. Situated in Macon County, Illinois.	01-01-10-300-003	76.00	10	18	1	3
14	92131, LLC	Southwest Quarter (SW 1/4) of the Southwest Quarter (SW 1/4) of Section 17, Township 18 North, Range 2 East of the 3rd P.M. in Macon County, Illinois. Situated in Macon County, Illinois, containing 40 acres, more or less.	10-02-17-300-002	40.00	17	18	2	3
14	92131, LLC	The East 120 feet of even width of the North 1/2, of the Northeast 1/4, of Section 11, Township 18 North, Range 1 East of the Third Principal Meridian, Macon County, Illinois, being more particularly described as follows: beginning at an existing iron pin marking the Northeast corner of said Section 11; thence S. 0 degrees 32 minutes 37 seconds E. 1330.32 feet along the East line of the Northeast 1/4, of Section 11 to an iron pin found marking the Southeast corner of the North 1/2, of the Northeast 1/4, of said Section 11; thence S 87 degrees 11 minutes 21 seconds W. 120.09 feet along the South line of the North 1/2, of the Northeast 1/4, of said Section 11 to an iron pin set, thence N 0 degrees 32 minutes 37 seconds W. 1330.19 feet to a P.K. Nail set on the North line of the Northeast 1/4, of said Section 11; thence N. 87 degrees 07 minutes 36 seconds E. 120.10 feet along said North line to the point of beginning, containing 3.66 acres more or less, as shown on Plat of Survey dated November 9, 2011 by Robert L. Cox, Illinois Professional Land Surveyor No. 2442. Situated in Macon County, Illinois, containing 3.6 acres, more or less.	01-01-11-200-001	3.60	11	18	1	3
14	92131, LLC	The East Half (E 1/2) of the following described property, to-wit: The Southeast Quarter (SE 1/4) of the Northeast Quarter (NE 1/4); the East Half (E 1/2) of the Southwest Quarter (SW 1/4) of the Northeast Quarter (NE 1/4); the East Half (E 1/2) of the Southeast Quarter (SE 1/4) and the East Half (E 1/2) of the West Half (W 1/2) of the Southeast Quarter (SE 1/4) all in Section 11, Township 18 North, Range 1 East of the 3rd Principal Meridian, Macon County, Illinois, with said tract being more particularly described as follows: Beginning at the Southeast corner of Section 11, T1 8N, R1E of the 3rd P.M., thence South 87 degrees 40 minutes 00 seconds W a distance of 1997.84 ft.; thence North 0 degrees 02 minutes 44 seconds E a distance of 3995.8 ft.; thence North 87 degrees 52 minutes 49 seconds E a distance of 1991.34 ft. to the East line of said Section 11, thence South a distance of 3993.70 ft. to the place of beginning, except the following described tract, to-wit: Beginning at a point 516.12 ft. South 87 degrees 46 minutes 00 seconds W of the Southeast corner of said Section 11, running thence South 87 degrees 46 minutes 00 seconds W for 482.80 ft.; thence North 0 degrees 02 minutes 44 seconds E for 1332.55 ft.; thence North 87 degrees 53 minutes 57 seconds E for 997.78 ft.; thence South 0 degrees 00 minutes 00 seconds W for 583.80 ft.; thence North 88 degrees 58 seconds 28 minutes W for 583.69 ft.; thence South 1 degree 14 minutes 00 seconds E for 629.45 ft.; thence North 87 degrees 46 minutes 00 seconds E for 48.50 ft.; thence South 2 degrees 14 minutes 00 seconds E for 150.00 ft. to the point of beginning; and the following easement for ingress and egress to property to the North of the property described as an exception above as follows: An easement 30.00 ft. wide, being 15.00 ft. on either side of the parallel to the following described centerline, being 501.12 ft. South 87 degrees 46 minutes 00 seconds W of the Southeast corner of Section 11, T18N, R1E of the 3rd P.M.; thence North 2 degrees 14 minutes 00 seconds W a distance of 165 ft., thence South 87 degrees 46 minutes 00 seconds W a distance of 78.50 ft.; thence North 1 degree 14 minutes 00 seconds W a distance of 615.03 ft.; thence North 36 degrees 37 minutes 23 seconds ' W a distance of 668.04 ft. ALSO EXCEPT Beginning at the Southeast corner of Section 11, Township 18 North, Range 1 East of the 3rd Principal Meridian in Macon County, Illinois; thence S 87 degrees 46 minutes 00 seconds West 516.12 feet; thence North 2 degrees 14 minutes 00 seconds West 150 feet; thence South 87 degrees 46 minutes 00 seconds West 48.50 feet; thence North 1 degree.14 minutes 00 seconds West 629.45 feet; thence South 88 degrees 56 minutes 28 seconds East 583.69 feet; thence South along the East line of section 11, 746.40 feet to the point of beginning. Subject to an easement for ingress and egress for farming purposes only reserved by the seller, her heirs and assigns, as an exemption as follows: An easement 30 feet in width, being 15 feet on either side of and parallel to the following described centerline, being 501.12 feet South 87 degrees 46 minutes 00 seconds West of the Southeast corner of Section 11, Township 18 North, Range 1 East of the 3rd P.M.; then North 2 degrees 14 minutes 00 seconds West a distance of 165 feet; thence South 87 degrees 46 minutes 00 seconds West a distance of 63.5 feet to the West line of the above described tract. Situated in Macon County, Illinois, containing 60 acres, more or less.	01-01-11-400-007	60.00	11	18	1	3
14	92131, LLC	The East Half (E 1/2) of the Northeast Quarter (NE 1/4) of Section Twelve (12), Township Eighteen (18) North, Range Three (3) East of the Third Principal Meridian, EXCEPT that part of the following described parcel lying North of the South line of the East Half (E 1/2) of the Northeast Quarter (NE 1/4) of said Section 12, described as follows: Beginning at the Southeast corner of the East Half (E 1/2) of the Northeast Quarter (NE 1/4) of said Section 12; running thence North 00 degrees 12 minutes East for 185.00 feet; thence South 88 degrees 31 minutes West for 341.00 feet; thence South 0 degrees 08 minutes 28 seconds West for 273.81 feet; thence North 88 degrees 48 minutes East for 341.00 feet; thence North for 90.00 feet to the point of beginning. Situated in Macon County, Illinois, containing 80 acres, more or less.	05-03-12-200-007	80.00	12	18	3	3
14	92131, LLC	The East Half of the Northeast Quarter of Section 23, Township 18 North, Range 2 East of the 3rd P.M. Situated in Macon County, Illinois, containing 80 acres, more or less.	10-02-23-200-002	80.00	23	18	2	3

Appendix B2: All Parcel Owner Information

14	92131, LLC	The North 1/2 of the SW 1/4 and the NW 1/4, EXCEPT 1.85 acres described as follows: That part of the NW 1/4 of the NW 1/4 beginning at a point lying 480.83 feet South of the Northwest corner of said Section 21, thence South 89 degrees 53 minutes 33 seconds East 259.35 feet; thence South 0 degrees 03 minutes 21 seconds East 310.20 feet; thence North 89 degrees 53 minutes 33 seconds West 259.35 feet to a point on the West line of said Section 21; thence North 0 degrees 03 minutes 21 seconds West 310.20 feet along said West line to the point of beginning, containing 1.85 acres, more or less, in Section 21, T 18 N R 2 E of the 3rd P.M., Macon County, Illinois, containing 158.15 acres more or less; and The W 1/2 of the NE 1/4 EXCEPT 6.97 acres described as follows: beginning at a point on the North line of the NE 1/4 of said Section 21; lying 217.90 feet East of the Northwest corner of the NE 1/4 of said Section 21; thence North 89 degrees 58 minutes 54 seconds East 406.03 feet along said North line; thence South 1 degree 30 minutes 17 seconds West 784.87 feet; thence South 89 degrees 58 minutes 54 seconds West 211.60 feet; thence North 51 degrees 11 minutes 18 seconds West 244.36 feet; thence North 1 degree 30 minutes 18 seconds East 631.60 feet to the point of beginning, containing 6.97 acres more or less, in Section 21, T 18 N, R 2 E of the 3rd P.M., Macon County, Illinois, containing 153.05 acres more or less.	10-02-21-100-003	311.00	21	18	2	3
14	92131, LLC	The North Half of Section 34, Township 18 North, Range 2 East of the 3rd PM lying North and West of Stevens Creek. Situated in Macon County, Illinois, containing 215 acres, more or less.	10-02-34-100-001	215.00	34	18	2	3
14	92131, LLC	The Northeast Quarter (1/4) and also the North Half (N 1/2) of the Southeast Quarter (1/4) of Section Thirty-Three (33), Township Eighteen (18) North, Range Two (2) East of the Third Principal Meridian, containing 240 acres more or less. Situated in Macon County, Illinois.	10-02-33-200-002	240.00	33	18	2	3
14	92131, LLC	The Northwest Quarter (NW 1/4) of Section Thirty-One (31), Township Eighteen (18) North, Range Three (3) East of the Third Principal Meridian, and a tract of land described as: Beginning at a stone 1331 feet West of the Northeast Corner of the Southeast Quarter (SE 1/4) of Section Thirty-One (31), Township Eighteen (18) North, Range Three (3) East of the Third Principal Meridian, thence West 1360.7 feet, along the North line of the Southeast Quarter of said Section and said line extended Westerly to a stone, thence South 1340 feet, thence East 1356.2 feet to a stone, which is 1332.8 feet West of the East line of said Quarter Section, thence North 1338.35 feet to the place of beginning, subject to right of way for drainage ditch as shown by deed recorded in Book 145, Page 206 of the records in the Recorder's Office of Macon County, Illinois; together with the right of way for roadway purposes over the North 16 feet of the Northeast Quarter of the Southeast Quarter of said Section Thirty-One (31). Situated in Macon County, Illinois.	05-03-31-100-002	229.00	31	18	3	3
14	92131, LLC	The Southwest 1/4 of Section 12, Township 18 North, Range 2 East of the Third Principal Meridian. Situated in Macon County, Illinois, containing 160 acres, more or less.	10-02-12-300-001	160.00	12	18	2	3
14	92131, LLC	The West Half (W 1/2) of the Southeast Quarter (SE 1/4) of Section Twenty-Three (23), Township Eighteen (18) North, Range Two (2) East of the 3rd P.M. Situated in Macon County, Illinois, containing 80 acres, more or less.	10-02-23-400-001	80.00	23	18	2	3
14	92131, LLC	West Half (1/2) of the Northwest (1/4) of Section Twenty-four (24), Township Eighteen (18) North, Range One (1) East of the 3rd P.M., EXCEPT Beginning at a point on the North line of the Northwest 1/4 of said Section 24, 760.00 feet East of the Northwest corner of said Section 24, running thence East for 410.00 feet; thence South for 535.00 feet; thence West for 410.00 feet; thence North 535.00 feet to the point of beginning. Situated in Macon County, Illinois, containing 75 acres, more or less.	01-01-24-100-004	75.00	24	18	1	3
14	92131, LLC	West Half (W 1/2) of the East Half (E 1/2) of the Southwest Quarter (SW 1/4) of Section 17, Township 18 North, Range 2 East of the 3rd P.M. in Macon County, Illinois. Situated in Macon County, Illinois, containing 40 acres, more or less.	10-02-17-300-003	40.00	17	18	2	3
22	Delores Ilene Clark Living Trust	The North 1/2 of the following described tract: beginning 39.71 3/4 chains North of the Southwest corner of Section 6, Township 17 North, Range 2 East of the 3rd P.M., thence North 39.71 3/4 chains to the North line of said Section; thence East 39.67 1/2 chains; thence South 40.14 1/4 chains; thence West 40.31 chains to the place of beginning. (Except coal and all other minerals underlying the surface of said land and all other rights and casements in favor of the estate of said coal and other minerals). Situated in Macon County, Illinois. AND The South 1/2, of the following described tract: beginning 39.71 3/4 chains North of the Southwest corner of Section 6, Township 17 North, Range 2 East of the 3rd P.M., thence North 39.71 1/4 chains to the North line of said Section; thence East 39.67 1/2 chains; thence South 40.14 1/4 chains; thence West 40.31 chains to the place of beginning. (Except coal and all other minerals underlying the surface of said land and all other rights and easements in favor of the estate of said coal and other minerals). Situated in Macon County, Illinois.	07-07-06-100-003	159.69	6	17	2	3
22	Delores Ilene Clark Living Trust	The South 162.22 acres of the West 321.91 acres of Section 6, Township 17 North, Range 2 East of the 3rd P.M., being more particularly described as follows: Beginning at the Southwest corner of said Section 6, thence East 40.94 1/2, chains, thence North 40.14 1/2, chains, thence West 40.31 chains, thence South 39.71 3/4 chains to the place of beginning, as shown in Plat thereof recorded in Book 335, Page 473 of the Records in the Records Office of Macon County, Illinois situated in Macon County, Illinois.	07-07-06-300-001	162.22	6	17	2	3
22	Delores Ilene Clark Living Trust	The Southwest 1/4 of Section 36, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT the North 300 feet of the South 825 feet, of the West 660 feet thereof. (Except coal and all other minerals underlying the surface of said land and all other rights and easements in favor of the estate of said coal and other minerals) situated in Macon County, Illinois.	01-01-36-300-002	155.45	36	18	1	3
24	Don Westerman, Inc. I	The North 1/2, of the North 1/2, of the Southeast 1/4 of Section 9, Township 18 North, Range 2 East of the 3rd P.M., EXCEPT beginning at the Northeast corner of the Southeast 1/4 of Section 9, Township 18 North, Range 2 East of the 3rd P.M., thence South along the East line of said Southeast 1/4 a distance of 300 feet, thence West parallel with the North line of said Southeast 1/4 a distance of 435 feet, thence North parallel with the East line of said Southeast 1/4 a distance of 300 feet, thence East along the North line of said Southeast 1/4 a distance of 435 feet to the point of beginning. (Subject to coal and all other minerals underlying the surface of said land and all rights and easements in favor of the estate of said coal and other minerals) Situated in Macon County, Illinois.	10-02-09-400-001	37.00	9	18	2	3
24	Don Westerman, Inc. I	The North 80 acres of the South 1/2, of the E 1/2, of fractional Section 1, Township 18 North, Range 1 east of the 3rd P.M., Situated in Macon County, Illinois.	01-01-01-400-001	80.00	1	18	1	3
24	Don Westerman, Inc. I	The Northeast 1/4 of Section 4, Township 18 North, Range 2 East of the 3rd P.M., AND All that part of the Railroad Right-of-Way 100 feet in width, which lies within the Northeast 1/4 of Section 4, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-04-200-002	158.95	4	18	2	3

Appendix B2: All Parcel Owner Information

24	Don Westerman, Inc. I	The Northeast 1/4 of the Southwest 1/4 of Section 32, Township 18 North, Range 2 East of the 3rd P.M., AND the Southeast 1/4 of Section 32, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-32-400-002	200.00	32	18	2	3
24	Don Westerman, Inc. I	The South 1/2 of the Southeast 1/4 of Section 28, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-28-400-002	80.00	28	18	2	3
24	Don Westerman, Inc. I	The Southeast 1/4 of the Southwest 1/4 of Section 32, Township 18 North, Range 2 East of the 3rd P.M., (Except coal and all other minerals underlying the surface of said land and all rights and easements in favor of the estate of said coal and other minerals) Situated in Macon County, Illinois.	10-02-32-300-005	40.00	32	18	2	3
24	Don Westerman, Inc. I	The Southwest 1/4 of Section 2, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-02-300-001	160.00	2	18	1	3
24	Don Westerman, Inc. I	The West 1/2 of the Northwest 1/4 of Section 11, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois. AND The West 1/2 of the Southwest 1/4 of Section 11, Township 18 North, Range 1 East of the 3rd P.M. Situated in Macon County, Illinois. EXCEPT Beginning at the Southwest corner Section 11, thence Northeasterly 242.35 feet, thence Northeasterly 241.72 feet, thence Northeasterly 157.88 feet, thence Northeasterly 144.28 feet, thence Northeasterly 177.38 feet, thence Northeasterly 118.06 feet, thence Northeasterly 335.98 feet, thence Northeasterly 190.62 feet, thence Southeasterly 231.16 feet, thence South 800 feet, thence Southwesterly 1,337.03 feet to the point of beginning. Situated in Macon County, Illinois.	01-01-11-100-003	145.68	11	18	1	3
24	Don Westerman, Inc. I	The West 1/2, of the Northwest 1/4 of Section 27, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-27-100-001	80.00	27	18	2	3
27	Tirrell Jane Barnett Revocable Trust (FKA, Stoutenborough, James P., Jr.)	That part of the West 1/2 of the Northwest 1/4 of Section 3, Township 18 North, Range 2 East of the 3rd P.M., lying Northerly of the Northerly right of way line of the Peoria, Atlanta & Decatur Railroad Company, (now the Pennsylvania RR) and also the North 570 feet as measured on the East line and on the West line of the East 1/2 of the Southwest 1/4 of Section 3, all in Township 18 North 2 of the 3rd P.M., AND The East 1/2 of the Northwest 1/4 of Section 3, Township 18 North, Range 2 East of the 3rd P.M. EXCEPT a strip of land 100 feet in width across a portion of these premises which was denied to Peoria, Atlanta & Decatur Railroad Company for Railroad purposes; Situated in Macon County, Illinois, AND All that part of the Railroad right of way which lies within the Northwest 1/4 of Section 3, Township 18 North, Range 2 East of 3rd P.M., situated in Macon County, Illinois.	10-02-03-100-002	110.34	3	18	2	3
29	Smith, Patricia Ann	The East 1/2 of the Northwest 1/4 of Section 16, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-16-100-002	80.21	16	18	2	3
29	Smith, Patricia Ann	The Southeast 1/4 of Section 4, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-40-400-001	160.00	4	18	2	3
30	Stoutenborough - Stoutenborough	That part of the North 1/2 of the Southeast 1/4 of Section 19, Township 18 North, Range 2 East of the 3rd P.M., Also known as Lot 8 of Circuit Court Record 9, page 295 in the Office of the Circuit Clerk of Macon County, Illinois lying West of the Westerly right of way line of F.A. Route 412, Except that part conveyed for Highway purposes. Being 55 acres more or less. Situated in Macon County, Illinois. AND That part of the South 1/2 of the Northeast 1/4 of Section 10, Township 18 North, Range 2 East of the 3rd P.M., Also known as Lot 7 of Circuit Court Record 9, page 295 in the Office of the Circuit Clerk of Macon County, Illinois, lying West of the Westerly right of way line of F.A. Route 412, being 18 acres more or less. Situated in Macon County, Illinois.	10-02-10-400-001	73.00	19	18	2	3
30	Stoutenborough - Stoutenborough	The North 81.7585 acres, more or less of the Northwest 1/4 of Section 10, Township 18 North, Range 2 East of the 3rd P.M., as per Plat recorded August 26, 1998 in Plat Book 2824, page 142 of the Macon County Recorder's Office. Situated in Macon County, Illinois. AND The North 15.0535 acres, more or less of the South 81.7585 acres northwest 1/4 of Section 10, Township 18 North, Range 2 East of the 3rd P.M., as per Plat recorded August 26, 1998 in Plat Book 2824, page 142 of the Macon County Recorder's Office. Situated in Macon County, Illinois.	10-02-10-100-002	93.30	10	18	2	3
30	Stoutenborough - Stoutenborough	The Northeast 1/4 of Section 9, Township 18 North, Range 2 East of the 3rd P.M., EXCEPT the South 712.8 feet thereof. Situated in Macon County, Illinois.	10-02-09-200-002	116.80	9	18	2	3
30	Stoutenborough - Stoutenborough	The Southwest 1/4 of Section 4, Township 18 North, Range 3 East of the 3rd P.M., That lies north of the Public Highway, EXCEPT 3/4 of the oil, gas and other minerals in and under said land including the right of ingress and egress for purposes of removing said oil, gas and other minerals. Situated in Macon County, Illinois.	10-02-04-300-001	157.70	4	18	3	3
31	Marsh Heirs	The East 1/2 of the Northeast 1/4 of Section 5, Township 18 North, Range 2 East of the 3rd P.M., EXCEPTING therefrom the East 1/2 of the North 1/2 thereof. Situated in Macon County, Illinois.	10-02-05-200-004	60.00	5	18	2	3
31	Marsh Heirs	The South 1/2 of the Northwest 1/4 of Section 4, Township 18 North, Range 2 East of the 3rd P.M., EXCEPTING therefrom the North 1/2 of the West 1/2 thereof. Situated in Macon County, Illinois.	10-02-04-100-003	60.00	4	18	2	3
31	Marsh Heirs	The West 1/2 of the Southeast 1/4 AND the East 1/2 of the East 1/2 of the Southwest 1/4 of Section 17, Township 18 North, Range 2 East of the 3rd P.M., EXCEPTING a tract of land described as follows: Beginning at the South 1/4 corner of said Section 17, running thence West for 230.00 feet; thence North for 264.00 feet; thence North 89 degree 58' 47" East for 329.69 feet; thence South 0 degrees 04' 00" East for 264 feet; thence South 89 degrees 59' 00" West for 100.00 feet to the point of beginning, situated in Macon County, Illinois.	10-02-17-400-003	118.00	17	18	2	3
32	Marsh, H. Daniel & Kathy K.	Part of the West 1/2 of the Southeast 1/4 AND the East 1/2 of the East 1/2 of the Southwest 1/4 of Section 17, Township 18 North, Range 2 East of the 3rd P.M., said tract being more particularly described as follows: Beginning at the South 1/4 corner of said Section 17, running thence West for 230.00 feet; thence North for 264.00 feet; thence North 89 deg 58' 47" East for 329.69 feet; thence South 0 deg 04' 00" East for 264.00 feet; thence South 89 deg 56' 00" West for 100.00 feet to the point of beginning, containing 2.00 acres, more or less. Situated in Macon County, Illinois.	10-02-17-300-005	2.00	17	18	2	3
32	Marsh, H. Daniel & Kathy K.	The East 1/2 of the North 1/2 of the East 1/2 of the Northeast 1/4 of Section 5, Township 18 North, Range 2 East of the 3rd P.M. Situated in Macon County, Illinois.	10-02-05-200-003	20.00	5	18	2	3
32	Marsh, H. Daniel & Kathy K.	The North 1/2 of the West 1/2 of the South 1/2 of the Northwest 1/4 of Section 4, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-04-100-002	20.00	4	18	2	3

Appendix B2: All Parcel Owner Information

33	Montgomery, Kathleen (fka Mary J. Montgomery Estate)	Part of the southeast quarter of Section Five (5), Township Eighteen (18) North, Range Two (2) East of the Third Principal Meridian, Macon County, Illinois, and more particularly described as follows: commencing at a found railroad spike located at the southeast corner of the southeast quarter of said section five (5); thence north 00 degrees 00 minutes 00 seconds east, along the east line of the southeast quarter of said section five (5), 1656.53 feet to the point of beginning. From said point of beginning; thence south 88 degrees 27 minutes 53 seconds west, 60.00 feet; thence north 00 degrees 00 minutes 00 seconds east, 170.74 feet; thence north 51 degrees 01 minutes 36 seconds west, 303.48 feet; thence south 88 degrees 27 minutes 51 seconds west, 1022.11 feet to a point on the west line of the east half of the southeast quarter of said section five (5); thence south 00 degrees 05 minutes 23 seconds east, along the west line of the east half of the southeast quarter of said section five (5), 604.79 feet; thence south 88 degrees 17 minutes 22 seconds west, 1267.26 feet to a point on a line 50 feet and parallel to the west line of the west half of the southeast quarter of said section five (5); thence north 00 degrees 10 minutes 47 seconds west, along said line, 996.63 feet; thence north 88 degrees 17 minutes 22 seconds east 1268.83 feet to a point on the west line of the east half of the southeast quarter of said section five (5); thence north 00 degrees 05 minutes 23 seconds west, along the west line of the east half of the southeast quarter of said section five (5), 218.08 feet; thence north 88 degrees 17 minutes 22 seconds east, 1244.20 feet; thence south 00 degrees 00 minutes 00 seconds east, 159.99 feet; thence north 88 degrees 17 minutes 22 seconds east, 75.00 feet to a point on the east line of the southeast quarter of said section five (5); thence south 00 degrees 00 minutes 00 seconds east, 821.96 feet to the point of beginning, containing 48.286 acres, more or less.	10-02-05-400-011	48.29	5	18	2	3
34	Montgomery, Daniel C. (fka Mary J. Montgomery)	Part of the Southeast Quarter of Section Five (5), Township Eighteen (18) North, Range Two (2) East of the Third Principal Meridian, Macon County, Illinois, and more particularly described as follows: 'beginning at a found iron pin located at the Northeast corner of the Southeast Quarter of said Section Five (5); thence South 00 degrees 00 minutes 00 seconds East, along the East line of the Southeast Quarter of said Section Five (5), 190.00 feet; thence South 88 degrees 17 minutes 22 seconds West, 75.00 feet; thence North 00 degrees 00 minutes 00 seconds East, 159.99 feet; thence South 88 degrees 17 minutes 22 seconds West 1244.20 feet to a point on the West line of the East Half of the Southeast Quarter of said Section Five (5); thence South 00 degrees 05 minutes 23 seconds East, along the West line of the East Half of the Southeast Quarter of said Section Five (5), 218.08 feet; thence South 88 degrees 17 minutes 22 seconds West, 1318.85 feet to a point on the West line of the West half of the Southeast Quarter of said Section Five (5); thence North 00 degrees 10 minutes 47 seconds West, along the West line of the West half of the Southeast Quarter of said Section Five (5), 248.08 feet to the Northwest corner of the Southeast Quarter of said Section Five (5); thence North 00 degrees 10 minutes 47 seconds West, along the West line of the Northeast Quarter of said Section Five (5), 1325.08 feet to the Northwest corner of the Southwest Quarter of the Northeast Quarter of said Section Five (5); thence North 88 degrees 12 minutes 09 seconds East, 1321.38 feet to the Northeast corner of the Southwest Quarter of the Northeast Quarter of said Section Five (5); thence South 00 degrees 05 minutes 24 seconds East, 1327.14 feet to the Southeast corner of the Southwest Quarter of the Northeast Quarter of said Section Five (5); thence North 88 degrees 17 minutes 22 seconds East, 1319.25 feet to the point of beginning.	10-02-05-200-007	48.87	5	18	2	3
35	Montgomery - White (fka Mary J. Montgomery Estate)	Part of the southeast quarter of Section 5, Township 18 North, Range 2 East of the 3rd P.M., and more particularly described as follows: Commencing at a found railroad spike located at the southeast corner of the southeast quarter of said Section 5; thence south 88 degrees 27 minutes 51 seconds west, along the south line of the Southeast Quarter of said Section 5, 985.52 feet to the point of beginning. From said point of beginning; thence continue south 88 degrees 27 minutes 51 seconds west, 895.54 feet; thence north 00 degrees 05 minutes 23 seconds west, 486.98 feet; thence north 88 degrees 27 minutes 51 seconds east, 895.54 feet; thence south 00 degrees 05 minutes 23 seconds east, 486.98 feet to the point of beginning, containing 10.009 acres, more or less. Situated in Macon County, Illinois.	10-02-05-400-013	10.01	5	18	2	3
37	Wiles Family Partnership Ltd	The North 120 acres of the Northwest 1/4 of Section 26, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois. AND Beginning at a point 1,993 feet North of the Southeast corner of the Southwest 1/4 of Section 26, Township 18 North, Range 1 East of the 3rd P.M., thence West 1,991.38 feet, thence South 988 feet to the center line of a drainage ditch, thence Northeasterly along the center line of said drainage ditch to the East line of the said Southwest 1/4, thence North 727 feet to the point of beginning. Situated in Macon County, Illinois.	01-01-26-100-001	159.20	26	18	1	3
37	Wiles Family Partnership Ltd	The North 53 acres of the North 161.9 acres of the West 1/2 of Fractional Section 6, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-06-100-001	53.00	6	18	2	3
38	Trust No. 406-007 United Community Bank (fka Trust No. 406-407 (United Community Bank))	The North 161.9 acres of the West Half (W 1/2) of Fractional Section Six (6), Township Eighteen (18) North, Range Two (2) East of the 3rd P.M., EXCEPT the North 53 acres thereof AND the South 61.176 acres of the West Half (W 1/2) of Fractional Section Six (6), Township Eighteen (18) North, Range Two (2) East of the 3rd P.M., more particularly described as follows: Beginning at the Southeast corner of the West Half (W 1/2) of said Section Six (6); thence North 1420.255 feet; thence Westerly 1916.18 feet; thence Southerly 1330.555 feet; thence Easterly 1954.8 feet to the point of beginning, except for a cemetery lot in the Southeast corner thereof of approximately 2 acres. Situated in Macon County, Illinois.	10-02-06-300-005	170.08	6	18	2	3
38	Trust No. 406-007 United Community Bank (fka Trust No. 406-407 (United Community Bank))	The South 79.089 acres of the South 1/2 of the East 1/2 of Fractional Section 1, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-01-400-002	79.90	1	18	1	3
39	Finrock, Jr., Marvin & Shelley R. I	The North 83 acres of the Northeast 1/4 of Section 1, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-01-200-001	83.00	1	18	1	3
40	Farmshare Holdings, LLC	The North 1/2 of the West 1/2 of Section 1. Township 18 North, Range 1 East of the 3rd PM, EXCEPTING therefrom the following described property: A Tract of land out of the following described property to wit: Part of the Northwest 1/4 of Section 1, Township 18 North, Range 1 East of the 3rd PM., said tract being more particularly described as follows: Beginning at a point on the East line of the Northwest 1/4 of said section 1, said point being 707.63 feet Northerly of the center of Section 1, running thence Northerly for 358.52 feet, thence Westerly for 243.00 feet; thence Southerly for 358.52 feet; thence Easterly for 243.00 feet to the point of beginning. Situated in Macon County, Illinois.	01-01-01-100-002	154.00	1	18	1	3
41	Estate of Marshall H. England (fka England, Marshall H.)	All of Section 3, Township 17 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	08-06-03-100-001	640.00	3	17	1	3
41	Estate of Marshall H. England (fka England, Marshall H.)	All of the West 1/2 of the West 1/2 of Section 11, Township 17 North, Range 1 East of the 3rd P.M., EXCEPT those parts described in Deeds recorded as Document Nos. 1396898 and 1520134. Situated in Macon County, Illinois.	08-06-11-100-008	103.65	11	17	1	3
41	Estate of Marshall H. England (fka England, Marshall H.)	The East 1/2 of Lots One and Two of the West 1/2, of Section 12, Township 18 North, Range 1 East of the 3rd P.M., as Per Plat recorded in the Circuit Clerk's Office of Macon County, Illinois in Book 15, Page 121, Situated in Macon County, Illinois.	01-01-12-100-002	63.49	12	18	1	3

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41	Estate of Marshall H. England (fka England, Marshall H.)	The East 1/2 of the East 1/2 of Section 10, Township 17 North, Range 1 East of the 3rd P.M., EXCEPT that part South of the Illinois Central Railroad Company right of way and EXCEPT 2.37 acres more or less as described on Plat of survey attached to deed as Exhibit A and made part hereof, and also EXCEPT those parts described in Deeds recorded as Document Nos. 1396898 and 1520134. Situated in Macon County, Illinois	08-06-10-200-007	108.76	10	17	1	3
41	Estate of Marshall H. England (fka England, Marshall H.)	The Southwest 1/4 of Section 1, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-01-300-001	155.67	1	18	1	3
42	CH Moore Farms LP	The East 1/2 of the Northeast 1/4 of Section 2, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-02-200-004	76.30	2	18	1	3
42	CH Moore Farms LP	The East 1/2 of the Southeast 1/4 of Section 2, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT the South 20 acres more or less. Situated in Macon County, Illinois.	01-01-02-400-005	60.00	2	18	1	3
42	CH Moore Farms LP	The North 1/2 of the Northeast 1/4 of Section 11, Township 18 North, Range 1 East of the 3rd P.M., situated in Macon County, Illinois.	01-01-11-200-001	80.00	11	18	1	3
42	CH Moore Farms LP	The West 1/2 of the Southeast 1/4 of Section 2, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-02-400-001	80.00	2	18	1	3
43	Harris, Kenneth R. & Cynthia S.	Part of the Southeast 1/4 of Section 2, Township 18 North, Range 1 East of the 3rd P.M., described as follows: Beginning at the point on the south line of the Southeast 1/4 of said Section 2, said point being 725.00 feet Westerly of the Southeast corner of said Section 2, running thence Northerly at right angles to the South line of the Southeast 1/4 for 309.00 feet; thence Westerly for 285.00 feet; thence Southerly for 324.36 feet; thence Easterly for 301.59 feet to the point of beginning. Situated in Macon County, Illinois.	01-01-02-400-004	2.13	2	18	1	3
43	Harris, Kenneth R. & Cynthia S.	The South 20 acres of the East 1/2, of the Southeast 1/4 of Section 2, Township 18 North, Range 1 East of the 3rd P.M., EXCEPTING therefrom the land previously conveyed to said Grantees containing 3.75 acres described as follows: Beginning at a point 500.00 feet West of the Southeast corner of said Southeast 1/4; thence Westerly along the South line of said Southeast 1/4 a distance of 526.59 feet on an iron pin; thence Northerly a distance of 324.36 feet to an iron pin; thence Easterly a distance of 525.86 feet; thence Southerly a distance 296.80 feet to the point of beginning. Situated in Macon County, Illinois, AND Part of the Southeast 1/4 of Section 2, Township 18 North, Range 1 East of the 3rd P.M., described as follows: Beginning at a point on the South line of the Southeast 1/4 of said Section 2; said point being 725.00 feet Westerly of the Southeast corner of said Section 2; running thence Northerly at right angles to the South line of the Southeast 1/4 for 309.00 feet; thence Easterly 240.86 feet; thence Southerly for 296.80 feet; thence Westerly 225.00 feet to the point of beginning. Situated in Macon County, Illinois.	01-01-02-400-006	17.87	2	18	1	3
44	Logan Marital Trust and Logan Family Trust (fka Logan, Robert L.)	The West 1/2 of the Northeast 1/4 of Section 2, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-02-200-001	77.31	2	18	1	3
45	Logan Enterprises, Inc.	The Northeast 1/4 of Section 3, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-03-200-001	161.50	3	18	1	3
45	Logan Enterprises, Inc.	The Northwest 1/4 of Section 2, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT Beginning at a point on the North line of said Section 2, said point being 1111.90 feet Westerly of the North 1/4 corner of said Section 2, running thence Westerly for 352.50 feet, thence Southerly for 291.08 feet; thence Easterly for 352.50 feet; thence Northerly for 291.08 feet to the point of beginning. Situated in Macon County, Illinois.	01-01-02-100-003	154.77	2	18	1	3
46	Don Westerman, Inc. III	The North 1/2; of the East 1/2; of the Southeast 1/4; of Section 10, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT beginning at the Southeast corner of the Northeast 1/4; of the Southeast 1/4; of Section 10, running thence Northerly 387.20 feet; thence Westerly for 225.00 feet; thence Southerly for 387.20 feet; thence Easterly for 225.00 feet to the point of beginning. EXCEPT that part deeded to Kenneth Cunningham and Mary Cunningham in deed recorded May 28, 2010, in Book 4065, Page 843 as Document No. 1794785. Situated in Macon County, Illinois, for a total of 38 acres, more or less.	01-01-10-400-007	38.00	10	18	1	3
46	Don Westerman, Inc. III	The Southeast 1/4; of Section 3, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT the East 69.56 acres of the Southeast 1/4; of Section 3, Township 18 North, Range 1 East of the 3rd P.M., Further EXCEPTING that portion conveyed to the People of Macon County for a public highway on April 22, 1935 in Book 683, page 275 as Document No. 271000 and described as follows: A Strip of land 5 feet in width in the Southeast 1/4; of Section 3, Township 18 North, Range 1 East of the 3rd P.M., more particularly described as follows: Beginning at a point 30 feet North of the Southwest corner of said Southeast 1/4; Section 3, thence East on a line parallel to and 30 feet North of the South line of Section 3, 2231.5 feet, thence North 5 feet, thence West 2231.5 feet, thence South 5 feet to the point of beginning. Situated in Macon County, Illinois, for a total of 90 acres, more or less.	01-01-03-400-002	90.00	3	18	1	3
47	Hamm Family Farms LLC	The Northeast Quarter of Section 4, and the Northwest Quarter of Section 3, and the North Half of the Southwest Quarter of Section 3, all in Township 18 North, Range 1 East of the Third Principal Meridian, Macon County, Illinois.	01-01-04-200-001 01-01-03-100-001	393.87	3	18	1	3
48	Montgomery, Agnes	The North Half of the Southeast Quarter of Section Four (4), Township Eighteen (18) North, Range One (1) East of the Third Principal Meridian, Macon County, Illinois. Situated in Macon County, Illinois.	01-01-04-400-001	80.00	4	18	1	3
52	Montgomery - Montgomery	The North Half of the Southeast Quarter of Section 5, Township 18 North, Range 1 East of the Third Principal Meridian, Macon County, Illinois.	01-01-05-400-001	80.00	5	18	1	3
52	Montgomery - Montgomery	The South Half of the Southeast Quarter of Section 5, Township 18 North, Range 1 East of the Third Principal Meridian, Macon County, Illinois, except beginning at a point on the South line of said Section 5, 945.60 feet West of the Southeast corner of said Section 5, running thence West along the South line of the Southeast Quarter of said Section 5 for 463.40 feet; thence North at right angles for 376.00 feet; thence East along a line parallel to and 376.00 feet North of the South line of the Southeast Quarter of said Section 5 for 463.40 feet thence South for 376.00 feet to the point of beginning.	01-01-05-400-006	76.00	5	18	1	3

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53	Laurie L. Rau Living Trust	The North 1/2 of the Northwest 1/4 of Section 5, Township 18 North, Range 1 East of the 3rd P.M. EXCEPT that part deeded to John C. Tate by Deed recorded in Book 2894, Page 851 as Document No. 1516088, more particularly described as follows: A tract of land out of the following described property to wit: Part of the Northwest Quarter (NW 1/4) of Section 5, Township 18 North, Range 1 East of the Third (3rd) Principal Meridian, Macon County, Illinois, with the said tract being more particularly described as follows: Beginning at a point on the West line of the Northwest Quarter (NW 1/4) of Section 5, Township 18 North, Range 1 East of the Third (3rd) Principal Meridian, Macon County, Illinois, with the said point being 381.00 feet S. 0 degrees 00 minutes 00 seconds W. of the Northwest corner of said Section 5, running thence N 89 degrees 42 minutes 41 seconds E for 414.72 feet; thence N 67 degrees 15 minutes 39 seconds E for 95.35 feet; thence S 89 degrees 35 minutes 05 seconds E for 228.60 feet; thence S 1 degree 14 minutes 33 seconds E for 301.17 feet; thence N 89 degrees 31 minutes 16 seconds W for 224.82 feet; thence N 10 degrees 19 minutes 46 seconds W for 222.89 feet; thence N 89 degrees 55 minutes 12 seconds W for 473.00 feet; thence N 0 degrees 00 minutes 00 seconds E for 42.00 feet to the point of beginning; as per Plat of Survey dated April 24, 1999 by William C. Faulkner, Illinois Land Surveyor #1940. Situated in Macon County, Illinois.	01-01-05-100-007	70.31	5	18	1	3
53	Laurie L. Rau Living Trust	The Southeast 1/4 of the Northwest 1/4 of Section 5, Township 18 North, Range 1 East of the 3rd P.M. Situated in Macon County, Illinois.	01-01-05-100-004	40.00	5	18	1	3
54	Simkins Brothers, LLC	120 acres off of the East side of the Northwest 1/4 of Section 6, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT a part of the Northwest 1/4 of Section 6, Township 18 North, Range 1 East of the 3rd P.M., and being more particularly described as follows: Beginning at a point on the North line of the Northwest 1/4 of said Section 6, said point being 535.03 feet West of the North 1/4 corner of said Section 6, thence Westerly along the North line of the Northwest 1/4 of said Section 6 on an assumed bearing of North 90°00'00" West for 401.29 feet, thence Southerly on a bearing of South 0°47'29" West for 353.56 feet, thence Easterly on a bearing of South 89°12'31" East, for 296.92 feet, thence Northerly on a bearing of North 0°47'27" East, for 116.51 feet, thence Easterly on a bearing of South 89°12'46" East, for 104.34 feet, thence Northerly on a bearing of North 0°47'17" East, for 242.58 feet to the place of beginning. Containing in all 3.00 acres more or less. Situated in Macon County, Illinois, AND The North 1/2 of the Northeast 1/4 of Section 6, Township 18 North, Range 1 East of the 3rd P.M., EXCEPTING the North 290 feet of the East 230 feet of the said Northeast 1/4 of Section 6, containing, less said exception, 75 acres, more or less.	01-01-06-100-003	192.00	6	18	1	3
54	Simkins Brothers, LLC	The Northeast 1/4 of the Southwest 1/4 of Section 5, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-05-300-004	40.00	5	18	1	3
55	Buth, Victor (2)	The Southeast quarter (SE1/4) of the Southwest quarter (SW1/4) of Section 5, Township 18 N, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-05-300-005	40.00	5	18	3	3
57	Heft, Paul B. & Sonia Sue	The West 600.00 feet of the North 435.6 feet of the Northwest fractional 1/4 of Section 6, Township 18 North, Range 1 East of the 3rd P.M., Except the West 318.00 feet thereof. Situated in Macon County, Illinois.	01-01-06-100-005	2.82	6	18	1	3
60	England, et al (fka Marshall H. England Life Estate)	The Southeast 1/4 of Section 8, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-08-400-001	160.00	8	18	1	3
61	Robert E. Brame Trust & the Marital Trust (fka Robert E. Brame Life Estate)	Part of the Northwest 1/4 of Section 9, Township 18 North, Range 1 East of the 3rd P.M., described as follows: Beginning at a point 290.40 feet West of the Northeast corner of the Northwest 1/4 of said Section 9, running thence South 600 feet; thence East 290.40 feet; thence South 2049.50 feet; thence West 892.97 feet; thence North 2652.00 feet; thence East 614.97 feet of the point of beginning. Situated in Macon County, Illinois.	01-01-09-100-003	50.89	9	18	1	3
61	Robert E. Brame Trust & the Marital Trust (fka Robert E. Brame Life Estate)	The North 60 acres of the Northwest 1/4 of Section 22, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-22-100-001	60.00	22	18	1	3
61	Robert E. Brame Trust & the Marital Trust (fka Robert E. Brame Life Estate)	The South 20 acres of the West 1/2, of the Northwest 1/4 AND the Northwest 1/4 of the Southwest 1/4 of Section 22, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-22-300-001	60.00	22	18	1	3
62	Leland Stanford England Life Estate	The Southwest 1/4 of Section 9, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-09-300-001	160.00	9	17	1	3
63	Zelhart, Imogene	That part of the Northwest 1/4 of the Southeast 1/4 Section 9, Township 18 North, Range 1 East of the 3rd P.M., lying South of the centerline of the existing drainage ditch. Containing 39.845 acres more or less. Situated in Macon County, Illinois. AND The West 18.655 acres, more or less, of the Southwest 1/4 of the Southeast 1/4 of Section 9, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-09-400-010	58.10	9	18	1	3
63	Zelhart, Imogene	The East 1/2 of the Southeast 1/4 of Section 26, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois. AND All that part of the West 1/2 of the Southeast 1/2 of said Section 26, lying North of the center of the drainage ditch of Minor Subdistrict No. 1 of Subdistrict No. 9 of Illini Special Drainage District. Situated in Macon County, Illinois.	01-01-26-400-002	124.00	26	18	1	3
63	Zelhart, Imogene	The Northwest 1/4 of the Northwest 1/4 of Section 23, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-23-100-001	40.00	23	18	1	3
64	Edgecombe, Roger & Karen	Part of the East 1/2 of the Southwest 1/4 of Section 10, Township 18 North, Range 1 East of the 3rd P.M., lying South of the meandering centerline of Lake Fork Creek described as beginning at a point on the South line of said Section 10, with the said point being 307.25 feet North 89 deg 57'27" West of the South 1/4 corner of said Section 10, running thence North 0 deg 06'55" East for 1516.00 feet, more or less, to a point on the centerline of Lake Fork Creek; thence Northerly along the centerline of Lake Fork Creek to the point of intersection with the West line of the East 1/2 of the Southwest 1/4 of said Section 10, thence South 0 deg 06'55" West for 1733.00 feet, more or less, to the Southwest corner of the East Half of the Southwest Quarter of Said Section 10; thence South 89 deg 57'27" East for 983.25 feet to the point of beginning, as per Plat of Survey by William C. Faulkner, Illinois Land Surveyor No. 1940 dated December 23, 2008. (except coal and other minerals underlying the surface of said land and all rights and easements in favor of the estate of said coal and other minerals). Situated in Macon County, Illinois.	01-01-10-300-007	36.32	10	18	1	3

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64	Edgecombe, Roger & Karen	Part of the fractional Northwest 1/4 of Section 7, Township 18 North, Range 2 East of the 3rd P.M., said Tract being particularly described as follows: Beginning at a point on the North line of the fractional Northwest 1/4 of said Section 7, said point being 401.92 feet North 90 deg; 00'00" West of the North 1/4 corner of said Section 7, running thence South 0 deg 37'35" East for 2654.60 feet; thence South 89 deg 44'50" West for 1579.30 feet; thence North 0 deg 02'54" West for 217.00 feet; thence North 23 deg 50'52" East for 267.12 feet; thence North 45 deg 08'12" East for 393.31 feet; thence North 52 deg 22'53" East for 316.12 feet; thence North 58 deg 30'50" East for 614.72 feet; thence North 42 deg 28'19" East for 480.39 feet; thence North 0 deg 32'14" West for 141.21 feet; thence North 65 deg 13'40" West for 360.73 feet; thence North 49 deg 46'31" West for 144.35 feet; thence North 40 deg 48'12" West for 222.09 feet; thence North 26 deg 09'17" West for 399.26 feet; thence North 9 deg 39'08" West for 104.03 feet; thence North 0 deg 00'00" East for 39.64 feet ; thence North 90 deg 00'00" East for 842.34 feet to the point of beginning. Situated in Macon County, Illinois. EXCEPT the following described tract of land: Part of the fractional Northwest 1/4 of Section 7, Township 18 North, Range 2 East of the 3rd P.M., described as beginning at a point on the north line of the fractional Northwest Quarter of said Section 7, said point being 654.92 feet North 90 deg 00'00" West of the North Quarter corner of said Section 7, running thence North 90 deg 00'00" West for 589.34 feet; thence South 0 deg 00'00" East for 39.64 feet; thence South 9 deg 39'08" East for 104.03 feet; thence South 26 deg 09'17" East for 399.26 feet; thence South 40 deg 48'12" East for 222.09 feet; thence South 49 deg 46'31" East for 144.35 feet; thence South 65 deg 13'40" East for 332.52 feet; thence North 0 deg 37'35" West for 748.54 feet; thence North 71 deg 00'00" West for 162.00 feet; thence North 0 deg 00'00" West for 100.00 feet to the point of beginning.	10-02-07-100-010	39.10	7	18	2	3
65	Don Westerman, Inc. II	The South 1/2 of the East 1/2 of the Southeast 1/4 of Section 10, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-10-400-004	40.00	10	18	1	3
65	Don Westerman, Inc. II	The West 1/2 of the Southeast 1/4 of Section 10, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-10-400-001	80.00	10	18	1	3
66	Morthland, Carmen Sue	The Northeast of the Northwest of Section 11, Township 18 North, Range 1 East of the 3rd P.M., situated in Macon County, Illinois EXCEPT An exclusion area in the Southwest corner of the parcel measuring 10 feet x 70 feet. Beginning at the Southwest corner of the property line; thence West 10 feet; thence North 70 feet; thence East 10 feet; thence South 70 feet to the point of beginning as outlined by the following map, measuring 0.016 acres.	01-01-11-100-002	40.00	11	18	1	3
66	Morthland, Carmen Sue	The South 20 1/6 acres of the North 1/2; of the Southeast of Section 22, Township 18 North, Range 1 East of the 3rd P.M., situated in Macon County, Illinois.	01-01-22-400-003	20.16	22	18	1	3
67	Zelhart, John and Imogene	Part of the Northeast 1/4 of Section 23, Township 18 North, Range 1 East of the 3rd P.M., said tracts being more particularly described as follows: Tract "A" Beginning at a point 279.00 feet South of the Northeast corner of said Section 23, running thence South for 297.50 feet; thence Westerly for 191.00 feet; thence North for 303.10 feet; thence Easterly for 191.00 feet to the point of beginning, containing 1.317 acres, more or less. Tract "B" Beginning at a point 394.20 feet South and 191.00 feet West of the Northeast corner of said Section 23, running thence South for 102.00 feet; thence Westerly for 134.40 feet; thence North for 102.00 feet; thence Easterly for 134.40 feet to the point of beginning, containing 0.315 acres more or less. The Northeast 1/4 of the Northwest 1/4 of Section 23, Township 18 North, Range 1 East of the 3rd P.M., And Also the North 1/2 of the Northeast 1/4 of said Section 23, EXCEPT the following (1) 5 Acres described as: Commencing at the Southeast corner of the said North 1/2 of the Northeast 1/4 of said Section 23; thence North 40 rods, thence West 20 rods; thence South 40 rods, thence East 20 rods to the place of beginning; And Also EXCEPT (2) that part of the said North 1/2 of the Northeast 1/2 of Section 23, described as follows: Tract a. Beginning at a point 279.00 feet South of the Northeast corner of said Section 23, running thence South for 297.50 feet; thence Westerly for 191.00 feet; thence North for 303.10 feet; thence Easterly for 191.00 feet to the point of beginning, containing 1.317 acres more or less. Tract B. Beginning at a point 394.20 feet South and 191.00 feet West of the Northeast corner of said Section 23, running thence South for 102.00 feet; thence Westerly for 134.40 feet, thence North for 102.00 feet; thence Easterly for 134.40 feet to the point of beginning, containing 0.315 acres more or less. All Situated in Macon County, Illinois.	01-01-23-200-001	115.00	23	18	1	3
67	Zelhart, John and Imogene	The North 1/4 of the Southwest 1/4 of Section 14, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-14-300-001	80.00	14	18	1	3
67	Zelhart, John and Imogene	The Southeast 1/4 of the Northwest 1/4; The East 1/2; of the Southwest 1/4; The West 1/4 of the South 1/2 of the Northeast 1/4; and the West 1/4 of the Southeast 1/4 of Section 11, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT A part of the East 1/2 of the Southwest 1/4 of Section 11, Township 18 North, Range 1 East of the 3rd P.M., which part is more particularly described as follows: Beginning at the Southwest corner of the East 1/2 of the Southwest 1/4 of said Section 11 and running thence North 2 deg 21'00" East for 1327.92 feet, thence North 89 deg 58'47" East for 990.46 feet, thence South 1 deg 47'14" West for 1327.80 feet, and thence North 90 deg 00'00" West for 1003.50 feet to the point of beginning. Situated in Macon County, Illinois.	01-01-11-300-006	139.62	11	18	1	3
67	Zelhart, John and Imogene	The West 1/2; of the following described property: The Southeast 1/4 of the Northeast 1/4; the East 1/2; of the Southwest 1/4 of the Northeast 1/4; the East 1/2; of the Southeast 1/4 and the East 1/2; of the West 1/2; of the Southeast 1/4, all in Section 11, Township 18 North, Range 1 East of the 3rd P.M., Macon County, Illinois with said tract being more particularly described as follows: Beginning at the Southeast corner of Section 11, Township 18 North, Range 1 East, of the 3rd P.M., thence South 87 deg 46'00" West, a distance of 1997.84 feet; thence North 0 deg 02'44" East, a distance of 3995.8 feet; thence North 87 deg 52'49" East, a distance of 1991.34 feet to the East line of said Section 11, thence South a distance of 3993.70 feet to the place of beginning, together with an easement for ingress and egress over a parcel of land described as follows: An easement 30.00 feet wide, being 15.00 feet on either side of and parallel to the following described centerline, being 501.12 feet South 87 deg 46'00" West of the Southeast corner of Section 11, Township 18 North, Range 1 East of the 3rd P.M.; thence North 2 deg 14'00" West a distance of 165 feet, thence South 87 deg 46'00" West a distance of 78.50 feet; thence North 1 deg 14'00" West a distance of 615.03 feet, thence North 36 deg 37'23" West a distance of 668.04 feet. Situated in Macon County, Illinois.	01-01-11-400-004	90.00	11	18	1	3
68	Moore, Ramona K. & Gary R.	A part of the East 1/4 of the following described real estate, to-wit: The Southeast 1/4 of the Northeast 1/4; The East 1/2 of the Southwest 1/4 of the Northeast 1/4 of the East 1/2 of the Southeast 1/4 and the East 1/2 of the West 1/2 of the Southeast 1/4 all in Section 11, Township 18 North, Range 1 East of the 3rd P.M., which is described as follows: Beginning at a point 516.12 feet, South 87°46'00" West of the Southeast corner of said Section 11, running thence South 87°46'00" West for 482.80 feet; thence North 0°02'44" East for 1332.55 feet; thence North 87°53'57" East for 997.78 feet; thence South 0°00'00" West for 583.80 feet; thence North 88°56'28" West for 583.69 feet; thence South 1°14'00" East for 629.45 feet; thence North 87°46'00" East for 48.50 feet; thence South 2°14'00" East for 150.00 feet to the point of beginning. Situated in Macon County, Illinois.	01-01-11-400-003	20.59	11	18	1	3

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69	Crosier, Dale W.	The West 1/2 of Lot 1 and the West 1/2 of Lot 2 in the West 1/2 of Section 12, Township 18 North, Range 1 East of the 3rd P.M. situated in Macon County, Illinois.	01-01-12-100-001	63.47	12	18	1	3
70	Deer Meadow Farms, Inc	Lot Three (3) containing 146.37 acres and 7.86 acres off the North side of Lot Four (4) in the West 1/2 of Section 12, Township 18 North, Range 1 East of the 3rd P.M., as shown by Plat in the Commissioner's Report in the partition of the Estate of Peter Bennett, deceased; ALSO The South 40 acres of the West 1/2 of the Southwest 1/4 of Section 12, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT those parts conveyed by Warranty Deeds recorded in Book 2975, page 861, Book 2975, page 872 and in Book 3010, page 597. Situated in Macon County, Illinois.	01-01-12-300-005	164.13	12	18	1	3
71	Ruwe, Chad	A part of the West 1/2 of Section 12, Township 18 North, Range 1 East of the 3rd P.M., more particularly described as follows: Commencing as a point of reference at a stone marking the Southeast corner of the Southwest 1/4 of said Section 12, thence North 0°05'46" East, (assumed bearing) 2,800.66 feet along the East line of said West 1/2 Section 12 to the point of beginning. From said point of beginning thence North 89°26'51" West 50.00 feet, thence North 0°05'46" East 57.69 feet, thence South 87°36'50" West 1,125.19 feet, thence North 0°05'46" East 400.00 feet to the South line of Lot 2 in the West 1/2 of Section 12, Township 18 North, Range 1 East of the 3'd P.M., in Circuit Court Record 15, Page 125 and said South line of Lot 2 as surveyed in Book 11 of Plats, Page 2 in the Macon County Recorder of Deeds; thence South 89°26'51" East 1,174.17 feet along said South line of Lot 2 to a point on the East line of the West 1/2 of said Section 12, 2,115.0 feet South of a found iron rod at the Northeast corner of the Northwest 1/4 of said Section 12; thence South 0°05'46" West 400.00 feet along the East line of said West 1/2 of Section 12 to the point of beginning, as per Plat of Survey dated April 17, 2000 by Kenneth A. Lyddon, IPLS #035-003344. Situated in Macon County, Illinois. Commencing as a point of reference at a stone marking the Southeast corner of the Southwest 1/4 of said Section 12, thence North 0°05'46" East, (assumed bearing) 2,800.66 feet along the East line of said West 1/2 Section 12 to the point of beginning. From said point of beginning thence North 89°26'51" West 50.00 feet, thence North 0°05'46" East 57.69 feet, thence South 87°36'50" West 1,125.19 feet, thence North 0°05'46" East 400.00 feet to the South line of Lot 2 in the West 1/2 of Section 12, Township 18 North, Range 1 East of the 3'd P.M., in Circuit Court Record 15, Page 125 and said South line of Lot 2 as surveyed in Book 11 of Plats, Page 2 in the Macon County Recorder of Deeds; thence South 89°26'51" East 1,174.17 feet along said South line of Lot 2 to a point on the East line of the West 1/2 of said Section 12, 2,115.0 feet South of a found iron rod at the Northeast corner of the Northwest 1/4 of said Section 12; thence South 0°05'46" West 400.00 feet along the East line of said West 1/2 of Section 12 to the point of beginning, as per Plat of Survey dated April 17, 2000 by Kenneth A. Lyddon, IPLS #035-003344. Situated in Macon County, Illinois.	01-01-12-300-002	10.04	12	18	1	3
72	Shull, Gregory L. & Donna	A 38.74 acres off of the full west side of the Southwest Quarter of Section 7 Township 18 North, Range 2 East of the Third P.M., all situation in Macon County, Illinois. And the Southeast Quarter of Section 12, Township 18 North, Range 1 East P.M. Which are situated in the county of Macon, State of Illinois.	10-02-07-300-001	38.74	7	18	2	3
72	Shull, Gregory L. & Donna	The Southeast Quarter of Section 12, Township 18 North, Range 1 East of the Third P.M. situated in Macon County, Illinois.	01-01-12-400-001	160.00	12	18	1	3
73	Sherleen Scheibly Trust	The East 1/2 of the Northeast 1/4 of Section 19, Township 18 North, Range 2 East of the 3rd P.M., EXCEPT the following: Beginning at a point on the North line of the Northeast 1/4 of Section 19, 385.0 feet West of the Northeast corner of Section 19, running thence South for 198.0 feet; thence West for 220.0 feet; thence North for 198.0 feet; thence East for 220.0 feet to the point of beginning. Situated in Macon County, Illinois.	10-02-19-200-004	77.95	19	18	2	3
73	Sherleen Scheibly Trust	The East 1/2 of the Southwest 1/4 of Section 7, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-07-300-002	80.00	7	18	2	3
73	Sherleen Scheibly Trust	The North 1/2 of the Southeast 1/4 of Section 8, Township 18 North, Range 2 East of the 3rd P.M., EXCEPT the following: Beginning at a point on the East line of the Southeast 1/4 of Section 8, 874.0 feet Southerly of the Northeast corner of said Southeast 1/4 of Section 8, running thence Westerly for 181.50 feet; thence Southerly for 455.3 feet to the South line of the North 1/2 of the Southeast 1/4 of Section 8; thence Easterly along the said South line of the North 1/2 of the Southeast 1/4 of Section 8 for 181.5 feet to the Southeast corner of the North 1/2 of the Southeast 1/4 of Section 8; thence Northerly 455.3 feet to the point of beginning. Situated in Macon County, Illinois.	10-02-08-400-003	78.09	8	18	2	3
74	Killough, Linda S.	The Northeast 1/4 EXCEPT the East 80 acres thereof; and commencing at the Northeast corner of the Northwest 1/4, thence south to the Southeast corner of said Northwest 1/4, thence West 373 feet, thence North to the North line of said Northwest 1/4 to a point 402 feet West of said Northeast corner, thence East to the place of beginning. All in Section 7, Township 18 North, Range 2 East of the 3rd P.M., containing 99.30 acres. Situated in Macon County, Illinois.	10-02-07-200-001	99.30	7	18	2	3
78	Langley, Donald A.	The Southwest 1/4 of the Northwest 1/4 of Section 8, Township 18 North, Range 2 East of the 3rd P.M., situated in Macon County, Illinois.	10-02-08-100-003	40.00	8	18	2	3
79	Voorhees, Georgene	The Southwest 1/4 of Section 8, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-08-300-001	160.00	8	18	2	3
80	Stemler Trust LE and WAWA Dairy Farm (fka Stemler-WAWA Dairy Farm, Inc)	The South 1/2 of the Southeast 1/4 of Section 8, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-08-400-002	80.00	8	18	2	3
81	Beverly Jean Spangler Revocable Trust - Alan P. Spangler Trust	The North 1/2 of the Southwest 1/4, EXCEPT the North 8 acres and the South 2/3 of the Northwest 1/4 of the Southeast 1/4 of Section 4, Township 17 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	08-06-04-300-008	98.16	4	17	1	3
81	Beverly Jean Spangler Revocable Trust - Alan P. Spangler Trust	The North 8 acres of the Northwest 1/4 of the Southwest 1/4 of Section 4, Township 17 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	08-06-04-300-007	8.00	4	17	1	3
81	Beverly Jean Spangler Revocable Trust - Alan P. Spangler Trust	The Northwest 1/4 of the Northeast 1/4 and the West 1/4 of the Southwest 1/4 of the Northeast 1/4 of Section 29, Township 18 North, Range 2 East of the 3rd P.M., situated in Macon County, Illinois.	10-02-29-200-008	60.00	29	18	2	3
81	Beverly Jean Spangler Revocable Trust - Alan P. Spangler Trust	The Southwest 1/4 of the Northwest 1/4 of Section 9, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-09-100-002	40.00	9	18	2	3
82	Crosier, Vickie L.	The East 1/2 of Northwest 1/4, Section 9 Township 18 North, Range 2 East of the 3rd PM, situated in Macon County, Illinois.	10-02-09-100-003	81.15	9	18	2	3
83	Kenneth Smith LE - Patricia Smith LE	The South 712.8 feet of the Northeast 1/4 of Section 9, Township 18 North, Range 2 East of the 3rd P.M. Situated in Macon County, Illinois.	10-02-09-200-003	42.30	9	18	2	3
84	IRA 78-D-0747 (Hickory Point Bank, Trustee) (FKA Berry, John M.)	The South 1/2 of the Southeast 1/4 of Section 9, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-09-400-006	80.00	9	18	2	3

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85	Stoutenborough LE - Stoutenborough LE	All of the part of the Northwest 1/4 of the Northeast 1/4 of Section 10, Township 18 North, Range 2 East of the 3rd P.M., lying South and West of the Right of Way of U.S. Route 51 (F.A. 412) containing 3.06 acres, more or less as further set forth in Plat of Survey dated 11/25/09 by Robert L. Cox, Illinois Professional Land Surveyor No. 2442 which was recorded on 12/4/09 in Book 4035, page 579 of Macon County Recorder's Office. Situated in Macon County, Illinois, AND The South 66.705 acres, more or less, of the South 81.7585 Acres, more or less, of the Northwest 1/4 of Section 10, Township 18 North, Range 2 east of the 3rd P.M., as per Plat of Survey recorded August 26, 1998 in Plat Book 2824, page 142 of the Macon County Recorder's Office. Situated in Macon County Illinois. Tract 3: The Southwest 1/4 of Section 10, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-10-100-003	232.87	10	18	2	3
86	Moyer, Sandra K.	The East 32 acres of the East One-Half of the Northwest Quarter of Section 15, Township 18 North, Range 2 East of the 3rd P.M. Situated in Macon County, Illinois	10-02-15-100-003	32.00	15	18	2	3
87	Roberts Edinger (fka Roberts, Sharon J.)	The West Half of the Northeast Quarter of Section 15, Township 18 North, Range 2 East of the 3rd P.M. Situated in Macon County, Illinois.	10-02-15-200-005	80.00	15	18	2	3
88	Wilson, Donald D. & Thelma M.	Part of the East 1/2 of the Northeast 1/4 and Part of the Northeast 1/4 of the Southeast 1/4 of Section 15, Township 18 North, Range 2 East of the 3rd P.M., more particularly described as follows: Beginning at the Northeast corner of said Section 15, thence West 1336.6 feet to the Northwest corner of the East 1/2 of the Northeast 1/4 of said Section 15; thence South 3038.35 feet, to a point 375.7 feet South of the Northwest corner of the Northeast 1/4 of the Southeast 1/4 of said Section 15, thence East 1335.72 feet to the East line of said section 15 at a point 375.7 feet South of the Northeast corner of the Northeast 1/4 of the southeast 1/4 of said Section 15, thence North along the Section line 3035.95 feet to the place of beginning, EXCEPT: Beginning at a point 30 feet East and 592 feet South of the Northeast corner of the Northeast 1/4 of said Section 15, thence running West 562 feet, thence North 101.95 feet, thence West 275 feet, thence South 436.95 feet, thence East 275 feet, thence North 315 feet, thence East 562 feet, thence North 20 feet to the point of beginning, containing 3 acres, more or less, EXCEPT undivided one-half of the coal, oil, gas and other minerals underlying the premises. Situated in Macon County, Illinois.	10-02-15-200-006	85.89	15	18	2	3
89	Stahl, Kenneth C. & Sharon Ann	The West 60 acres of the following described real estate: Part of the South 1/2 of the Southeast 1/4 AND the Southeast 1/4 of the Southwest 1/4 of Section 15, Township 18 North, Range 2 East of the 3rd P.M., described as follows: Beginning at an iron pin at the Southeast corner of Section 15, thence North along the East line of said Section 15 for 1245.98 feet (to a cross (x) in concrete road slab), thence West 3227.286 feet to an iron pin, thence South 1267.464 feet to a point in the South line of said Section 15, 557.118 feet West of the Southeast corner of the Southwest 1/4 of said Section 15, thence East along said Section line 3226.618 feet to the place of beginning. Situated in Macon County, Illinois.	10-02-15-400-002	60.00	15	18	2	3
90	Leach, Trevor & Janice	Beginning at a point 1057.19 West from a stone at the Southwest corner of Section Fifteen (15), Township Eighteen (18) North, Range Two (2) East of the 3rd P.M., then East from that point 1057.19 feet to a point; thence North 799.678 feet; thence West 1057/19 feet to a point; thence South 799.678 feet to the place of beginning. Situated in Macon County, Illinois.	10-02-15-300-004	19.41	15	18	2	3
91	Leach, Trevor	Beginning at a stone at the Southwest corner of Section 15, Township 18 North, Range 2 East of the 3rd P.M., thence East along the South line of said Section 15, a distance of 2114.382 feet; thence North 799.678 feet; thence West 2114.382 feet; thence South 799.678 feet to the place of beginning. EXCEPT Beginning at a point 1057.19 feet East from a stone at the Southwest corner of Section 15, Township 18 North, Range 2 East of the 3rd P.M., thence East from that point 1057.19 feet to a point; thence North 799.678 feet; thence West 1057.19 feet to a point; thence South 799.678 feet to the place of beginning. Situated in Macon County, Illinois.	10-02-15-300-003	19.40	15	18	2	3
93	Smith, Kenneth & Patricia	The Northeast 1/4 of the Northeast 1/4 AND The East 1/2 of the Northwest 1/4 of the Northeast 1/4 Section 14, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT 1 acre in the East 3/4 of the North 1/2 of the Northeast 1/4. Situated in Macon County, Illinois.	01-14-14-200-001	59.00	14	18	1	3
93	Smith, Kenneth & Patricia	The West 1/2, of the Northwest 1/4 of Section 16, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-16-100-001	80.21	16	18	2	3
93	Smith, Kenneth & Patricia	The West 32 Acres of the Northwest 1/4 of the Northeast 1/4 of Section 16, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-16-200-001	32.00	16	18	2	3
94	Stemler, Kenneth LE et al (fka Estate of Luann Stemler (fka Stemler, Luann))	South 1/2 of the South 1/2 of the Northwest 1/4 of Section 17, Township 18 North, Range 2 East of the 3rd P.M.; containing 39.87 acres more or less, located in Macon County, Illinois.	10-02-17-100-002	39.87	17	18	2	3
94	Stemler, Kenneth LE et al (fka Estate of Luann Stemler (fka Stemler, Luann))	The East 1/2 of the Northwest 1/4 of Section 20, Township, 18, Range 2 East of the 3rd P.M., containing 80 acres more or less, Located in Macon County, Illinois.	10-02-20-100-002	80.00	20	18	2	3
94	Stemler, Kenneth LE et al (fka Estate of Luann Stemler (fka Stemler, Luann))	The North 1/2 of the Northeast 1/4 of Section 17, Township 18 North, Range 2 East of the 3rd P.M., EXCEPT the North 358 feet of the East 557 feet of the Northeast 1/4 of Section 17, Township 18 North, Range 2 East of the 3rd P.M., situated in Macon County, Illinois.	10-02-17-200-006	75.42	17	18	2	3
94	Stemler, Kenneth LE et al (fka Estate of Luann Stemler (fka Stemler, Luann))	The North 1/2 of the South 1/2 of the Northeast 1/4 of Section 17, Township 18 North, Range 2 East of the 3rd P.M., described as beginning at a point on the East line of the northeast 1/4 of said Section 17, said point being 1329.80 feet South 0 deg 10' 03" East of the Northeast corner of said Section 17, running thence South 0 deg 10' 03" East for 664.90 feet; thence North 89 deg 57' 42" West for 2614.16 feet; thence North 0 deg 02'36" West for 666.75 feet; thence South 89 deg 55' 23" East for 2612.62 feet to the point of beginning. Situated in Macon County, Illinois.	10-02-17-200-009	39.94	17	18	2	3
94	Stemler, Kenneth LE et al (fka Estate of Luann Stemler (fka Stemler, Luann))	The South 1/2 of the Southeast 1/4 of Section 16, Township 18 North, Range 2 East of the 3rd P.M., EXCEPT a tract commencing on the Southeast corner of said Section 16; thence North 10 rods; thence West 16 rods; thence South 10 rods; thence East 16 rods to the point of beginning, and EXCEPT a tract commencing at the Northeast corner of said South 1/2 of the Southeast 1/4 of Section 16; thence North 453 feet to the point of beginning, situated in Macon County, Illinois.	10-02-16-400-003	74.00	16	18	2	3
94	Stemler, Kenneth LE et al (fka Estate of Luann Stemler (fka Stemler, Luann))	The South 9.959 acres more or less of the North 1/2 of the South 1/2 of the Northwest 1/4 of Section 17, Township 18N, Range 2 East of the 3rd P.M., described as beginning at a point on the West line of the of the Northwest 1/4 of said Section 17, said point being 664.75 feet North 0 deg 00' 00" East of the West 1/4 corner of said Section 17, running thence North 89' 57'30" East for 2615.00 feet; thence North 0 deg 02' 36" West for 165.90 feet, thence South 89 deg 57' 30" West for 2614.87 feet, thence South 0 deg 00'00" West for 165.90 feet to the point of beginning. Situated in Macon County, Illinois.	10-02-17-100-007	9.96	17	18	2	3
94	Stemler, Kenneth LE et al (fka Estate of Luann Stemler (fka Stemler, Luann))	The Southwest 1/4 of the Northeast 1/4 of Section 17, Township 18 North, Range 2 East of the 3rd P.M., situated in Macon County, Illinois.	10-02-17-200-002	40.00	17	18	2	3

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95	Wikoff, Kenneth E.	The Northwest 1/4 of the Northwest 1/4 of Section 17, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-17-100-004	40.00	17	18	2	3
96	Bair, Nancy K.	The Northeast 1/4 of the Northwest 1/4 of Section 17, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-17-100-005	40.00	17	18	2	3
99	Wickline, Barbara J.	The Northwest 1/4 of the Southeast 1/4 of Section 18, Township 18 North, Range 2 East of the 3rd P.M., in Macon County, Illinois, and the East 9.15 acres of the following described property: The South 110.46 acres of the fractional Southwest 1/4 of Section 18, Township 18 North, Range 2 East of the 3rd P.M., in Macon County, Illinois. Situated in Macon County, Illinois.	10-02-18-400-004	49.15	18	18	2	3
100	Pense, Marcia K.	Beginning at the Southwest Corner of Section 18, Township 18 North, Range 2 East of the 3rd P.M., thence North along the West line of said Section 18, 450 feet; thence East 968 feet; thence South 450 feet to the South line of said Section 18, thence West along the South line of said Section 18, to the point of beginning. Situated in Macon County, Illinois.	10-02-18-300-004	10.00	18	18	2	3
100	Pense, Marcia K.	The West 101.31 acres of the South 110.46 acres of the fractional Southwest 1/4 of Section 18, Township 18 North, Range 2 East of the 3rd P.M., in Macon County, Illinois, Except beginning at the Southwest Corner of Section 18, Township 18 North, Range 2 East of the 3rd P.M., thence North along the West line of said Section 18, 450 feet; thence East 968 feet; thence South 450 feet to the South line of said Section 18, thence West along the South line of said Section 18, to the point of beginning, said exception containing 10 acres more or less. Situated in Macon County, Illinois.	10-02-18-300-006	91.31	18	18	2	3
101	Trichel, James O.	That part of the Southeast 1/4, of Section 13, Township 18 North, Range 1 East of the Third Principal Meridian, Macon County, Illinois, described as follows: beginning at an existing iron pin on the South line of the Southeast 1/4, of said Section 13, said iron pin lying 1256.96 feet (1257' records) West of the Southeast corner of said Section 13; thence N. 0 deg 33' 41" E.-20.00 feet (20.00' record); thence N. 9 deg 34'22" E -122.63 feet (122.92' record) to an existing iron pin; thence N. 34 deg 03'53" E.-46.64 feet (46.50' record) to an existing iron pin; thence N. 69 deg 44'22" E.-56.14 feet (56' record) to an existing iron pin; thence S. 89 deg 26'05" E.-197.75 feet (197.70' record) to an existing iron pin; thence N. 0 deg 33' 41"; E.-208.50 feet; thence S. 89 deg 26' 46"; E.-960.58 feet to a point on the East line of the Southeast 1/4; of said Section 13; thence N. 0 deg 23 32; E.-177.00 feet along said East line to a point on the approximate center line of an existing drainage ditch; thence N. 77 deg 05'00"; W.-835.00 feet along said center line; thence N. 79 deg 18' 00"; W.-150.00 feet along said center line; thence N. 70 deg 15' 00"; W.-210.00 feet along said centerline; thence N. 57 deg 44' 00"; W.-90.00 feet along said center line; thence N. 67 deg 05' 23"; W.-131.20 feet along said center line; thence S. 4 deg 56' 11"E.-460.00 feet to an iron pin set: thence S. 32 deg 25' 00"W.-370.00 feet to an iron pin set; thence S. 3 deg 48' 00"; W.-185.00 feet to a mag nail set on the South line of the southwest 1/4, of said Section 13; thence S. 89 deg 26' 19" E.-266.00 Feet along said South line to the point of beginning, containing 13.78 acres, more or less.	01-01-13-400-007	13.73	13	18	1	3
102	E&E Pork Ranch	A part of the East 1/2 of the SW 1/4 of Section 13, Township 18 North, Range 1 East of the 3rd P.M., more particularly described as follows: Beginning at a point on the East line of the E 1/2 of the SW 1/4 of Section 13, 1,513 feet South of the Northeast corner of said East 1/2 of the Southwest 1/4 of Section 13, thence South along said East line a distance of 150 feet, thence West at a right angle from said East line a distance of 375 feet, thence North parallel with said East line to a point which is 375 feet West at a right angle from the point of beginning, thence East at a right angle to the point of beginning. Macon County, Illinois.	01-01-13-300-003	5.07	13	18	1	3
103	Estate of Mildred E. Baldwin (fka Mildred E. Edgecombe)	The East 1/2 of the Southwest 1/4 of Section 13, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT a part of the East 1/2 of the Southwest 1/4 of Section 13, Township 18 North, Range 1 East of the 3rd P.M., beginning at a point on the East line 888 feet South of the Northeast corner of the Southwest 1/4 of said Section 13; thence continue South 625.0 feet; thence West at right angles 260.0 feet; thence North parallel with the said East line, 500.0 feet; thence West 465.0 feet; thence North 125.0 feet, thence East 725.0 feet to the point of beginning. AND ALSO EXCEPT: a part of the East 1/2 of the Southwest 1/4 of Section 13, Township 18 North, Range 1 east of the 3rd P.M., more particularly described as follows: beginning at a point on the East line of the East 1/2 of the Southwest 1/4 of Section 13, 1,513 feet South of the Northeast corner of said East 1/2 of the Southwest 1/4 of Section 13, thence South along the said East line a distance of 150 feet, thence West at a right angle from said East line a distance of 375 feet, thence North parallel with said East line to a point which is 375 feet West at a right angle from the point of beginning, thence East at a right angle to the point of beginning. All situated in Macon County, Illinois.	10-02-13-400-002	74.93	13	18	1	3
104	Buth, Victor	The following real property located in Macon County, Illinois. The Northeast 1/4 of the Northwest 1/4 AND the West 1/4 of the Northwest 1/4 of the Northeast 1/4 of Section 14, Township 18 North, Range 1 East of the 3rd P.M. Situated in Macon County, Illinois.	01-01-14-100-002	60.00	14	18	1	3
104	Buth, Victor	The Southeast 1/4 of the Southwest 1/4 of Section 34, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-34-300-003	40.00	34	18	1	3
104	Buth, Victor	The West 1/4 of Section 13, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois. Save and except: that part of the West Half of the Southwest Quarter of Section 13, Township 18 North, Range 1 East of the 3rd Principal Meridian, Macon County, Illinois, more particularly described as follows: Commencing at the West Quarter corner of said Section 13; thence South 00 deg 39" 06" West 751.34 feet along the West line of said Section 13 to the point of beginning; thence South 89 deg 20' 54"; East 433.00 feet; thence South 00 deg 39'; 06"; West 503.00 feet; thence North 89 deg 20' 54"; West 433.00 feet to the West line of said Section 13; thence North 00 deg 39'; 06"; West 503.00 feet along the West line of said Section 13 to the point of beginning, containing 5.00 acres of land, more or less.	01-01-13-300-001	75.00	13	18	1	3
105	Zelhart, John M.	The following real property located in Macon County, Illinois. The North 60 acres of the West 1/2 of the Northwest 1/4 in Section 14, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois. AND The West 1/2 of the Northwest 1/4, EXCEPT the North 60 acres thereof And the Southeast 1/4 of the Northwest 1/4, all in Section 14, Township 18 North, Range 1 East of the 3rd P.M., situated in Macon County, Illinois.	01-01-14-100-001	120.00	14	18	1	3
105	Zelhart, John M.	The South 1/2 of the Northeast 1/4 of Section 14, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-14-200-003	80.00	14	18	1	3
106	Millikin University	The Northeast 1/4 of Section 25, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County Illinois. AND The Northwest 1/4 of Section 25, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-25-100-001	320.00	25	18	1	3
106	Millikin University	The South 1/2, of the Southwest 1/4 of Section 28, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, IL and The Northwest 1/4 of the Southwest 1/4 of Section 28, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County Illinois.	10-02-28-300-004	120.00	28	18	2	3
106	Millikin University	The Southeast 1/4 of Section 14, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-14-400-001	161.00	14	18	1	3

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106	Millikin University	The West 1/2, of the Southeast 1/4 of Section 29, Township 18 North, Range 2 East of the 3rd P.M., EXCEPT 20.07 acres off of the North end thereof. Situated in Macon County, Illinois AND The East 1/2 of the Southeast 1/4 of Section 29, Township 18 North, Range 2 east of the 3rd P.M., Situated in Macon County, Illinois.	10-02-29-400-004	140.21	29	18	2	3
107	Samuel D. Jarvis Family Trust	The South 1/2, of the Southwest 1/4 in Section 14, Township 18 North, Range 1 East of the 3rd P.M., situated in Macon County, Illinois.	01-01-14-300-002	80.00	14	18	1	3
108	Perkinson, Russell E. (fka Charles D. Perkinson Trust)	The South 1/2 of Section 15, Township 18 North, Range 1 East of the 3rd P.M., containing 320 acres more or less, located in Macon County, Illinois.	01-01-15-300-001	320.00	15	18	1	3
109	County Board of School Trustees of Macon County, Illinois	The Northeast 1/4 of Section 16, Township 18 North, Range 1 East of the 3rd P.M. Situated in Macon County, Illinois.	01-01-16-200-001	160.00	16	18	1	3
109	County Board of School Trustees of Macon County, Illinois	The Northwest 1/4 of Section 16, Township 18 North, Range 1 East of the 3rd P.M. Situated in Macon County, Illinois.	01-01-16-100-001	160.00	16	18	1	3
109	County Board of School Trustees of Macon County, Illinois	The Southeast 1/4 of Section 16, Township 18 North, Range 1 East of the 3rd P.M. Situated in Macon County, Illinois.	01-01-16-400-001	160.00	16	18	1	3
109	County Board of School Trustees of Macon County, Illinois	The Southwest 1/4 of Section 16, Township 18 North, Range 1 East of the 3rd P.M. Situated in Macon County, Illinois.	01-01-16-300-001	160.00	16	18	1	3
111	Alsup, Virginia etal (fka Alsup, Virginia Rau)	The East 1/2 of the Southeast 1/4 of Section 17, Township 18 North, Range 1 East of the 3rd P.M. Situated in Macon County, Illinois.	01-01-17-400-003	77.23	17	18	1	3
111	Alsup, Virginia etal (fka Alsup, Virginia Rau)	The East Half of the Northeast Quarter of Section 20, in Township 18 North, Range 1 East of the Third Principal meridian. SAVE AND EXCEPT the South 33 feet of the Southeast Quarter (3/4) of the Northeast Quarter (1/4) of Section Twenty (20), in Township Eighteen (18) North, Range One (1) East of the 3rd P.M. Situated in Macon County, Illinois.	01-01-20-200-003	138.98	20	18	1	3
111	Alsup, Virginia etal (fka Alsup, Virginia Rau)	The Southeast Quarter of the Northwest Quarter of Section 20, Township 18 North, Range 1 East of the 3rd principal Meridian in Macon County, Illinois.	01-01-20-100-002	39.37	20	18	1	3
111	Alsup, Virginia etal (fka Alsup, Virginia Rau)	The Southwest Quarter of the Northwest Quarter of Section 20, Township 18 North, Range 1 East of the 3rd Principal Meridian, Macon County, Illinois.	01-01-20-400-012	40.00	20	18	1	3
111	Alsup, Virginia etal (fka Alsup, Virginia Rau)	The West Half of the South Half of the Southwest Quarter of Section 34, Township 18 North, Range 1 East of the Third Principal Meridian in Macon County, Illinois.	01-01-34-300-002	37.83	34	18	1	3
112	Edwin Lawrence Sr Trust	The East 1/2 of the Southwest 1/4 AND the East 1/2 of the Southwest 1/4 of the Southwest 1/4 AND the Southeast 1/4 of the Northwest 1/4 of Section 22, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-22-300-003	140.00	22	18	1	3
112	Edwin Lawrence Sr Trust	The Northwest 1/4 of the Northwest 1/4 of Section 20, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-20-100-003	40.00	20	18	1	3
112	Edwin Lawrence Sr Trust	The West 1/2 of the Southwest 1/4 of Section 22, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-22-300-002	20.00	22	18	1	3
113	Declaration of Trust Dated 9/2/93 (Mary Lou Lawrence, Trustee)	The North 39 2/3 acres of the North Half of the Southeast Quarter of Section 22, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-22-400-001	39.66	22	18	1	3
113	Declaration of Trust Dated 9/2/93 (Mary Lou Lawrence, Trustee)	The North Quarter of the Southeast Quarter AND the East 350 feet of the North 124.46 feet of the South Half of the Southeast Quarter of Section 28, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-28-400-004	81.00	28	18	1	3
113	Declaration of Trust Dated 9/2/93 (Mary Lou Lawrence, Trustee)	The Northeast Quarter of the Northwest Quarter of Section 22, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-22-100-002	40.00	22	18	1	3
113	Declaration of Trust Dated 9/2/93 (Mary Lou Lawrence, Trustee)	The Northwest Quarter of the Northeast Quarter AND the Northeast Quarter of the Northwest Quarter of Section 20, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-20-100-004	80.00	20	18	1	3
114	Helen Post Hospital Trust	Beginning at the Southwest corner of Section 21, Township 18 North, Range 1 East of the 3rd P.M., thence North 3319.2 feet; thence East 2717.3 feet to the East line of the West 1/2 of said Section 21; thence South 3311 feet to the south line of said Section 21; thence West 2711.7 feet to the point of beginning, situated in Macon County, Illinois.	01-01-21-300-001	206.00	21	18	1	3
115	Robert W. Griffith Family Trust	The Northeast 1/4 of Section 21, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT Beginning at a point 1119.5 feet South and 30.0 feet West of the Northeast corner of said Northeast 1/4, thence South along the West right of way line of County Highway Route 21, a distance of 208.8 feet, thence West at right angles to said right of way line 208.8 feet to a point, thence North parallel to said right of way line, 208.8 feet thence East 208.8 feet to the point of beginning, AND EXCEPT that part of the Northeast 1/4 of Section 21, Township 18 North, Range 1 East of the 3rd P.M., described as follows: Beginning at a point 1119.50 feet South and 30.00 feet West of the Northeast corner of the Northeast 1/4 of said Section 21 thence North 0°00'00" West 48.20 feet along the existing West right of way line of County highway No. 21; Thence South 90°00'00" West 293.35 feet; Thence South 0°00'00" East 297.00 feet; Thence North 90°00'00" East 293.35 feet to a point on the West right of way line of County Highway No. 21; Thence North 0°00'00" West 40.00 feet along said West right of way line; Thence South 90°00'00" West 208.80 feet; Thence North 0°00'00" West 208.80 feet; Thence North 90°00'00" East 208.80 feet to the point of beginning, situated in Macon County, Illinois.	01-01-21-200-001	238.00	21	18	1	3
116	Lawrence, Barbara	The North 20 1/6 acres of the South 40 2/6 of the North 1/2 of the4 Southeast 1/4 of Section 22, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-22-400-002	20.17	22	18	1	3
116	Lawrence, Barbara	The South Half of the Southeast Quarter of Section 21, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-21-300-001	80.00	21	18	1	3
117	Brelsfoard, Richard E.	The Northeast Quarter (NE 1/4) of the Northeast Quarter (NE 1/4) and the North three Acres of the Southeast Quarter (SE 1/4) of the Northeast Quarter (NE 1/4) all in Section Twenty-Two (22) Township Eighteen (18) North, Range One (1) East of the 3rd P.M.. situated in Macon County, Illinois.	01-01-22-200-002	43.00	22	18	1	3
118	Finrock, Jr., Marvin and Shelley R. II	The Southeast Quarter of Section 13, Township 18 North, Range 1 East of the 3rd P.M. EXCEPT beginning at a point on the South line of said Section 13, said point being 849 feet West of the Southeast corner of said Section 13, running thence Westerly along said South line of said Section 13 for 363 feet; thence Northerly for 180 feet; thence Easterly for 363 feet; thence Southerly for 180 feet to the point of beginning, situated in Macon County, Illinois.	01-01-13-400-004	6.00	13	18	1	3

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119	Trust #2339 (Busey Bank, Trustee fbo Joy F. McGorray)	The East 1/2 of the Southwest 1/4 AND the Southeast 1/4 of Section 23, Township 18 North Range 1 East of the 3rd P.M., Subject to the rights, if any, of Panhandle Illinois Pipe Line Company, an Illinois Corporation, or its successors, to maintain a transmission line pursuant to agreement of August 3, 1931 recorded in Book 680, page 597, EXCEPT that part of the Southeast 1/4 of Section 23, Township 18 North Range 1 East of the 3rd P.M., described as follows: Beginning at a point on the East line of the Southeast 1/4 of said Section 23, said point lying 717.00 feet South of the Northeast corner of the Southeast 1/4 of said Section 23; thence North 89 degrees 44 minutes 26 seconds West 394.00 feet; thence South 0 degrees 15 minutes 34 seconds West, 440.00 feet; thence South 89 degrees 44 minutes 26 seconds East, 394.00 feet to a point on the East line of the Southeast 1/4 of Section 23; thence North 0 degrees 15 minutes 34 seconds East 440.00 feet along said East line to the point of beginning, as per Plat of Survey dated December 18, 2006 by Robert L. Cox, IPLS No. 2442. Situated in Macon County, Illinois.	01-01-23-400-001	240.00	23	18	1	3
119	Trust #2339 (Busey Bank, Trustee fbo Joy F. McGorray)	The South 1/2 of the Southwest 1/4 of Section 24, Township 18 North, Range 1 East of the 3rd P.M., Subject to the rights, if any, of Panhandle Illinois Pipe Line Company, an Illinois Corporation, or its successors, to maintain a transmission line pursuant to Agreement of August 3, 1931 recorded in Book 680, page 597. Situated in Macon County, Illinois.	01-01-24-300-002	80.00	24	18	1	3
120	Zelhart, John A. et al	The North 1/2 of the Southwest 1/4 of Section 24, EXCEPT that part previously conveyed to William Hauffe and Jean Hauffe by Warranty Deed recorded in Book 2075, page 388 as Document No. 1120874 and The East 1/2 of the Northwest 1/4 of said Section 24, all in Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-24-100-002	158.44	24	18	1	3
121	McGuire, Williams J & Carol (fka McGuire, William J.)	The Northeast Quarter of Section 24, Township 18 North, Range 1 East of the Third Principal Meridian. Situated in Macon County, Illinois.	01-01-24-200-004	160.00	24	18	1	3
121	McGuire, Williams J & Carol (fka McGuire, William J.)	The Northeast Quarter of the Northeast Quarter of Section 22 in Township 18 North and in Range 2 East of the 3rd Principal Meridian. Situated in Macon County, Illinois.	10-02-22-200-005	34.89	22	18	2	3
122	Hibner, Gregory C. & Kimberly M.	The Southeast 1/4 of Section 24, Township 18 North, Range 1 East of the 3rd P.M., situated in Macon County, Illinois.	01-01-24-400-001	160.00	24	18	1	3
123	Rohrscheib, Randall Gene	The West 553 feet of the North 315 feet of the South 1/2 of the Northwest 1/4 in Section 19, Township 18 North, Range 2 East of the 3rd P.M, Situated in Macon County, Illinois.	10-02-19-100-006	4.00	19	18	2	3
125	Cullison, James & Denise	The Northeast 1/4 of the Northwest 1/4, AND the Northwest 1/4 of the Northeast 1/4 of Section 19, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois	10-02-19-200-001	67.67	19	18	2	3
126	Mary L. Rohrscheib Revocable Trust (FKA Rohrscheib, Merle Gene & Mary Louise)	All of the South 1/2 of the Northwest 1/4, EXCEPT the South 455.4 feet thereof and Also EXCEPT the West 553 feet of the North 315 feet thereof, and the Southwest 1/4 of the Northeast 1/4, EXCEPT the South 455.4 feet thereof; All in Section 19, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-19-100-007	61.98	19	18	2	3
126	Mary L. Rohrscheib Revocable Trust (FKA Rohrscheib, Merle Gene & Mary Louise)	The West 1/2 of the West 1/2 of the Northeast 1/4 of Section 20, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-20-200-005	40.00	20	18	2	3
127	Wikoff, Roger & Sheila	That part of the Northwest 1/4 of Section 20, Township 18 North, Range 2 East of the 3rd P.M., described as follows: Beginning at a point on the West line of the Northwest 1/4 of said Section 20, lying 498 feet South of the Northwest corner of the Northwest 1/4 of said Section 20; thence East 265 feet; thence South 125.5 feet; thence West 53 feet; thence South 36 deg 12' 28" West 233.62 feet; thence West 74 feet, to a point on the West line of the Northwest 1/4 of said Section 20; thence North 314 feet on the said West line, to the point of beginning. Containing 1.4 acres, more or less. Subject to an easement for ingress and egress over all that part of the premises lying South of a line 30 feet North of and parallel to the South line of the premises. Situated in Macon County, Illinois.	10-02-20-100-003	1.40	20	18	2	3
128	Wikoff, Ruth Helen & the Virgil C. and Helen M. Living Trust (f/k/a Estate of Virgil C. Wikoff, (fka Wikoff, Virgil C.))	The East Half (E 1/2) of the Southeast Quarter (SE 1/4) of Section Nineteen (19), Township Eighteen (18) North, Range Two (2) East of the Third Principal Meridian. Situated in Macon County, Illinois.	10-02-19-400-001	78.58	19	19	2	3
128	Wikoff, Ruth Helen & the Virgil C. and Helen M. Living Trust (f/k/a Estate of Virgil C. Wikoff, (fka Wikoff, Virgil C.))	The North Half of the Southwest Quarter of Section 20, Township 18 North, Range 2 East of the 3rd Principal Meridian, Macon County, Illinois. Except beginning at a point on the West line of the said Southwest Quarter, a distance of 626.27 feet South of the stone at the Northwest corner of the said Southwest Quarter, thence Easterly at right angles a distance of 260.0 feet, thence Southerly at right angles 335.08 feet, thence Westerly at right angles 260.0 feet, to a point on the said West line, thence Northerly 335.08 feet to the point of beginning, situated in Macon County, Illinois.	10-02-20-100-005	76.60	20	18	2	3
128	Wikoff, Ruth Helen & the Virgil C. and Helen M. Living Trust (f/k/a Estate of Virgil C. Wikoff, (fka Wikoff, Virgil C.))	The SW/4 of the NW/4 of Section 20, Township 18 North, Range 2 East of the 3rd Principal Meridian, situated in Macon County, Illinois.	01-01-20-200-003	80.00	20	18	2	3
129	Elmer Brelsfoard Trust	The East 1/2, of the Northeast 1/4 AND the North 1/2, of the Southeast 1/4, all in Section 20, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois	10-02-20-400-003	160.00	20	18	2	3
130	Brelsfoard, Richard & Nancy	That part of Northwest 1/4 of the Northwest 1/4 of Section 21, Township 18 North, Range 2 east of the 3rd PM, described as follows; Beginning at a point lying 480.83 feet south of the Northwest corner of said Section 21; thence South 89 deg 53' 33" east - 259.35 feet; thence South 0 deg 03' 21" East - 310.20 feet; thence North 90 deg 53' 33" West - 253.35 feet to a point on the West line of said Section 21; thence North 0 deg 03' 21" West - 310 feet along said West line to the point of beginning. Containing 1.85 acres, more or less. Situated in Macon County, Illinois.	10-02-21-100-004	1.85	21	18	2	3
131	Brelsfoard, Gary R. & Sharon	That part of the West 1/2 of the Northeast 1/4 of Section 21, Township 18 North, Range 2 East of the 3rd Macon County, Illinois, described as follows: Beginning at a point on the North line of the Northeast 1/4 of said Section 21 lying 217.90 feet East of the Northwest corner of the Northeast 1/4, of said Section 21; thence North 89 deg 58' 54" E 406.03 feet along said North line; thence South 1 deg 30' 17" W 784.87 feet; thence South 89 deg 58' 54" W 211.60 feet; thence North 51 deg 11' 18" W 244.36 feet; thence North 1 deg 30' 18" E 631.60 feet to the point of beginning. Situated in Macon County, Illinois.	10-02-21-100-002	6.97	21	18	2	3
131	Brelsfoard, Gary R. & Sharon	The East 1/2 of the Northeast 1/4 of Section 28, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-28-200-002	80.00	28	18	2	3
132	Brelsfoard, Nancy L.	The South 1/2 of the South 1/2 of the Northwest 1/4 of Section Twenty-two (22), Township Eighteen (18)North, Range Two (2) East of the 3rd P.M. Situated in Macon County, Illinois.	10-02-22-100-003	40.00	22	18	2	3
133	Cullison, Dennis Lee (fka Everett C. Cullison Residuary Trust)	The West 1/2 of the Northeast 1/4 of Section 22, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-22-200-007	80.00	22	18	2	3

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134	McGuire, William J. & Carol (2)	The Southeast 1/2 of the Northeast 1/4 of Section Twenty-two (22), Township Eighteen (18) North, Range Two (2) East of the 3rd P.M., except that part taken for highway purposes by Order of the Circuit Court of Macon County, Illinois in Case No. 81-ED-6. Situated in Macon County, Illinois. Excepting therefrom: A PART OF THE SOUTHEAST HALF OF THE NORTHEAST QUARTER OF SECTION TWENTY TWO (22), TOWNSHIP EIGHTEEN (18) NORTH, RANGE TWO (2) EAST OF THE THIRD PRINCIPAL MERIDIAN, MACON COUNTY, ILLINOIS, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION TWENTY TWO (22); THENCE SOUTH 88 DEGREES 05 MINUTES 43 SECONDS WEST, ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION TWENTY TWO (22), A DISTANCE OF 284.13 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY LINE OF F.A. ROUTE 412 (U.S. ROUTE 50 AS SHOWN ON THE RIGHT OF WAY PLAT RECORDED IN BOOK 208.3 ON PAGE 773 IN THE RECORDS OF THE RECORDER'S OFFICE OF MACON COUNTY, ILLINOIS, SAID POINT BEING THE POINT OF BEGINNING. FROM SAID POINT OF BEGINNING; THENCE SOUTH 88 DEGREES 05 MINUTES 43 SECONDS WEST, ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION TWENTY TWO (22) A DISTANCE OF 369.46 FEET; THENCE SOUTH 05 DEGREES 54 MINUTES 32 SECONDS WEST, A DISTANCE OF 204.38 FEET; THENCE SOUTH 88 DEGREES 05 MINUTES 43 SECONDS WEST, A DISTANCE OF 33.74 FEET; THENCE SOUTH 00 DEGREES 36 MINUTES 41 SECONDS EAST, A DISTANCE OF 203.41 FEET; THENCE SOUTH 89 DEGREES 11 MINUTES 04 SECONDS EAST, A DISTANCE OF 572.52 FEET TO A POINT ON SAID WESTERLY RIGHT OF WAY LINE; THENCE NORTH 00 DEGREES 15 MINUTES 31 SECONDS EAST, ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 405.00 FEET; THENCE SOUTH 89 DEGREES 19 MINUTES 51 SECONDS WEST, ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 153.01 FEET; THENCE NORTH 01 DEGREES 15 MINUTES 28 SECONDS EAST, ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 25.04 FEET TO THE POINT OF BEGINNING, CONTAINING 5.241 ACRES, MORE OR LESS.	10-02-22-200-004	34.76	22	18	2	3
135	McGuire, William J. & Carol L. (1)	Part of the Northeast Quarter (NE 1/4) of Section 22, Township 18 North, Range 2 East of the Third (3rd) Principal Meridian, Macon County, Illinois, said tract being more particularly described as follows: Beginning at a point on the North line of the North east Quarter (NE 1/4) of said Section 22, 442.51 feet Westerly of the Northeast corner of said Section 22, running thence Westerly for 210.65 feet; thence Southerly for 408.65 feet; thence Easterly for 210.66 feet; thence Northerly for 418.65 feet to the point of beginning, containing 2.00 acres, more or less, situated in the County of Macon, State of Illinois.	10-02-22-200-006	2.00	22	18	2	3
136	Decatur Memorial Health Foundation	Beginning at a point on the West right-of-way line of S.B.1. Route 2 (U.S. Route 51) 858.1 feet South of the North line of the Southeast 1/4 of Section 27, Township 18 North, Range 2 East of the 3rd P.M.; thence West perpendicular to said right-of-way line 615 feet; thence South parallel with said right-of-way line 711.5 feet; thence East perpendicular to aforesaid line 585 feet to its intersection with the West right-of-way line of said S.B.1. Route 2; thence North along said right-of-way line 696.6 feet; thence East along said right-of-way line 30 feet; thence North along said right-of-way line, 14.9 feet to the point of beginning, Excepting therefrom that part taken in eminent domain proceedings, Case No. 81-ED-6, EXCEPT Part of the Southeast 1/4 of Section 27, Township 18 North, Range 2 East of the 3rd P.M., described as beginning at a point on the West right-of-way line of US Route 51 with its point of beginning being 110.00 feet left of Highway Station 424 83.00 and/or 1500.87 feet North and 103.90 feet West of the southeast corner of said Section 27; running thence North 0 deg 11' 43" East along the West right-of-way line for 92.00 feet; thence North 44 deg 58' 23" East along the West right-of-way line for 35.50 feet; thence North 0 deg 17' 18" East along the West right-of-way line for 200.00 feet; thence North 5 deg 25' 20" west along the West right-of-way line for 201.00 feet; thence North 2 deg 34' 26" West along the West right-of-way line for 12 feet; thence North 90 deg 00' 00" West for 441 feet; thence South 0 deg 00' 00" West for 262.57 feet; thence North 90 deg 00' 00" East for 250 feet; thence South 0 deg 05' 17" East for 208 feet; thence South 89 deg 47' 17" East for 36 feet; thence South 0 deg 11' 43" West for 58 feet; thence South 89 deg 48' 17" East for 148 feet to the point of beginning, containing 3.90 acres, more or less, Situated in Macon County Illinois.	10-02-27-400-002	9.57	27	18	2	3
136	Decatur Memorial Health Foundation	The East 1/2 of the Southwest 1/4 of Section 22, Township 18 North, Range 2 East of the 3rd P.M., situated in Macon County, Illinois.	10-02-22-300-002	80.00	22	18	2	3
136	Decatur Memorial Health Foundation	The South 1/2 of Section 27, Township 18 North, Range 2 East of the 3rd P.M., EXCEPT the right-of-way of S.B.1. Route No.2 (U.S. Route #51) and EXCEPT beginning at a point of the West right-of-way line of S.B.1. Route 2 (U.S. Route 51) 858.1 feet South of the North line of the Southeast 1/4 of Section 27, Township 18 North, Range 2 East of the 3rd P.M.; thence West perpendicular to said right-of-way line 615 feet; thence South parallel with said right-of-way line, 711.5 feet; thence East perpendicular to aforesaid line 585 feet to its intersection with the west right-of-way line of said S.B.1. Route No.2; thence North along said right-of-way line 696.6 feet; thence East along said right-of-way line, 30 feet; thence North along said right-of-way line, 14.9 feet to the point of beginning, Excepting therefrom that part taken in eminent domain proceedings, Case No. 81-ED-06, situated in Macon County, Illinois.	10-02-27-300-004	299.74	27	18	2	3
136	Decatur Memorial Health Foundation	The Southeast 1/4 of Section 22, Township 18 North, Range 2 East of the P.M., EXCEPT part of the Southeast 1/4 of the Southeast 1/4 of Section 22, Township 18 North, Range 2 East of the 3rd P.M., described as follows: Commencing on the South line of the Southeast 1/4 of the Southeast 1/4 of said Section 22 at a point 360.25 feet South 89 deg 13' 00" West of the Southeast corner of said Section 22; thence North 1 deg 20' 00" East for 25 feet to the place of beginning; thence continue the last described course for 458.29 feet; thence South 88 deg 40' 00" East for 224 feet; thence South 1 deg 20' 00" West Parallel with the centerline of FAP route 412 for 433 feet; thence South 73 deg 33' 30" West for 63.01 feet; thence South 89 deg 13' 10" West for 164.11 feet to the place of beginning, and also EXCEPT property described in Warranty Deed recorded on April 14, 2004 in Book 347, Page 237 as Doc # 1655163, Situated in Macon County, Illinois.	10-02-22-400-003	139.44	22	18	2	3
136	Decatur Memorial Health Foundation	The West 1/2 of the Southwest 1/4 of Section 22, Township 18 North, Range 2 East of the 3rd P.M., EXCEPT the South 350 feet of the East 210 feet of the West 1/2 of the Southwest 1/4, said exception containing 1.687 acres more or less. Situated in Macon County, Illinois.	10-02-22-300-003	78.31	22	18	2	3
137	Declaration of Trust 5/5/92 (Frances J. Stengel Trustee)	The East 1/2, of the Northwest 1/4 of Section 27, Township 18 North, Range 2 East of the 3rd P.M., EXCEPT a 10 acre tract beginning at the Northeast corner of said Northwest 1/4 of Section 27, Township 18 North, Range 2 East of the 3rd P.M., thence South 660 feet, thence West 660 feet, thence North 660 feet, thence East 660 feet to the point of beginning, Situated in Macon County, Illinois.	10-02-27-100-005	71.30	27	18	2	3
138	Sharen R. Hudson Trust, et al (fka Hudson, Sharen R., et al)	The East 1/2 of the Northwest 1/4 of Section 28, Township 18 North, Range 2 East of the 3rd P.M. EXCEPT beginning at a point 375.20 feet West of the North 1/4 corner of said Section 18; thence West 275 feet; thence South 295 feet; thence East 275 feet; thence North 295 feet to the point of beginning, Situated in Macon County, Illinois,	10-02-28-100-005	78.14	28	18	2	3
139	Hurttt - Burdine	The North 1/2 of the Northwest 1/4 of Section 29, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-29-100-001	80.00	29	18	2	3

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140	Hanes, Richard A. & Cinda L.	A square tract of land in the Northeast corner of the Northeast 1/4, of Section 31, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-31-200-002	2.53	31	18	2	3
140	Hanes, Richard A. & Cinda L.	The Northeast 1/4 of the Northeast 1/4 of Section 29, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois, AND Part of the Northeast 1/4 of Section 29, Township 18 North, Range 2 East of the 3rd P.M., which part is more particularly described as follows: Beginning at a point 598.49 feet North of the Southeast corner of the Northeast 1/4 of said Section 29 and running thence South 88 deg 35' 00" West 1964.76 feet, thence North 0 deg 11' 26" East 221.84 thence North 88 deg 35' 00" East 1964.02 feet, and thence South 221.82 feet to the point of beginning. Situated in Macon County, Illinois.	10-02-29-200-007	50.00	29	18	2	3
141	Hanes, Richard, et al	An 108.56 acres of equal width from North to South off of the North end of the East 1/2 of Section 31, Township 18 North, Range 2 East of the 3rd P.M., EXCEPTING there from a tract being more particularly described as follows: A square tract of land in the Northeast corner of the Northeast 1/4, of Section 31, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-29-300-003	106.03	31	18	2	3
141	Hanes, Richard, et al	Part of the Northeast 1/4 of Section 29, Township 18 North, Range 2 East of the 3rd P.M., which part is more particularly described as follows, to-wit: Beginning at the Northeast corner of tile Southeast 1/4 of the Northeast 1/4 of said Section 29, and running thence South 512.34 feet, thence South 88 deg 35' 00" West 1964.02 feet, thence North 0 deg 11' 26" East 504.12 feet, and thence North 88 deg 20' 32" East 1962.50 feet to the point of beginning. Situated in Macon County, Illinois.	10-02-29-200-004	22.89	29	18	2	3
141	Hanes, Richard, et al	Part of the Northeast 1/4 of Section 29, Township 18 North, Range 2 East of the 3rd P.M., which part is more particularly described as follows, to-wit: Beginning at the Southeast corner of the Northeast 1/4 of said Section 29, and running thence South 88 deg 35' 00" West 1966.75 feet, thence North 0 deg 11' 26" East 598.54 feet, thence North 88 deg 35' 00" East 1964.76 feet, thence South 598.49 feet to the point of beginning. Situated in Macon County, Illinois. AND The North 10.11 chains of the East 112 of the Southwest 114 of Section 29, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois. AND The North 10.10 chains of the West 1/2 of the Southeast 1/4 of Section 29, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-29-200-009	67.16	29	18	2	3
141	Hanes, Richard, et al	The Northwest 1/4 of Section 33, Township 18 North, Range 2 East of the 3rd P.M., EXCEPTING there from a tract being more particularly described as follows: Beginning at a point on the West line of the Northwest 1/4 of Section 33, Township 18 North, Range 2 East of the 3rd P.M., said point being 1059.90 feet, South 0 deg 00' 00" West of the Northwest corner of said Section 33, running thence North 89 deg 29' 09" East for 166.40 feet, thence South 0 deg 30' 51" East for 62.00 feet, thence North 89 deg 29' 09" East for 46.00 feet, thence South 1 deg 29' 09" West for 185.00 feet, thence South 87 deg 21' 13" West for 208.37 feet, thence North 0 deg 00' 00" East for 254.65 feet to the point of beginning. Situated in Macon County, Illinois.	10-02-33-100-003	158.85	33	18	2	3
141	Hanes, Richard, et al	The West 1/2 of the Southwest 1/4 of Section 29, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-29-300-001	80.00	29	18	2	3
142	Trust B, Shoemaker, Willard D, Trustee (fka Shoemaker, Willard D.)	The Southeast 1/4 of the Southwest 1/4 AND the South 1/2, of the Northeast 1/4 of the Southwest 1/4 all in Section 29, Township 18 North, Range 2 East of the 3rd P.M., situated in Macon County, Illinois.	10-02-29-300-003	60.28	29	18	2	3
143	Lehn - Pronk	The East 1/2 of the Northwest 1/4 of Section 30, Township 18 North, Range 2 East of the 3rd P.M., EXCEPT the East 33 feet thereof; Situated in Macon County, Illinois.	10-02-30-100-001	60.50	30	18	2	3
143	Lehn - Pronk	The West 1/2 of the Northwest 1/4 of Section 30, Township 18 North, Range 2 East of the 3rd PM, Situated in Macon County, Illinois.	10-02-30-100-001	60.50	30	18	2	3
144	Cullison - Stelzriede (fka Estate of Mary E. Cullison)(fka Cullison, Mary E.)	East 80 Acres of the NE 1/4 of Section 7, Township 18 N, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-30-200-001	81.00	7	18	2	3
144	Cullison - Stelzriede (fka Estate of Mary E. Cullison)(fka Cullison, Mary E.)	The North Half of the following described land: The Northeast 1/4 of Section 30 and 33 feet of even width off of the East side of the northwest 1/4 of said Section 30, bounded by a certain hedge fence on the West; All in Township 18 North, Range 2 East of the 3rd PM, situated in Macon County, Illinois.	10-02-30-200-001	81.00	30	18	2	3
145	Pronk, Lois Gene	28.68 acres of equal width from North to South off the North side of the Northwest fractional 1/4 of Section 31, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-31-100-001	28.68	31	18	2	3
145	Pronk, Lois Gene	Fractional Southwest 1/4, EXCEPT the South 939.84 feet and the Southeast 1/4, EXCEPT the South 939.84 feet of the West 1/2 thereof, all situated in Section 30, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	05-03-30-300-006	211.15	30	18	2	3
145	Pronk, Lois Gene	The South 939.84 feet of the fractional Southwest 1/4 AND the South 939.84 feet of the West 1/2 of the Southeast 1/4 all in Section 30, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-30-300-003	71.29	30	18	2	3
146	Robert L. Grissom Partnership, Ltd.	The following real property located in Macon County, Illinois. The Southwest 1/4 of Section 25, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-25-300-001	160.00	25	18	1	3
147	McClure, Patrick (fka McClure Trust - McClure LE)	The Southeast 1/4 of Section 25, Township 18 North, Range 1 East of the 3rd P.M., situated in Macon County, Illinois.	01-01-25-400-001	160.00	25	18	1	3
148	Bird, Rebecca A.	The Northwest Quarter of Section 26, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT the North 120 acres thereof. Situated in Macon County, Illinois.	01-01-26-100-002	40.00	26	18	1	3
148	Bird, Rebecca A.	The South Half of the North Half of the North Half of the Southwest Quarter of Section 26, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-26-300-005	20.00	26	18	1	3
149	Bird, John Edel & Arlene P.	The North 1/2 of the North 1/2 of the North 1/2 of the Southwest 1/4 of Section 26, Township 18 North, Range 1 East of the 3rd P.M., situated in Macon County, Illinois.	01-01-26-300-004	20.00	26	18	1	3
150	Carara, Beulah	All that part of the Southwest 1/4 of Section 26, Township 18 North, Range 1 East of the 3rd P.M., more particularly described as follows: Beginning at the Southeast corner of the Southwest 1/4; thence North 1266 feet to the centerline of the Drainage Ditch, then Southwesterly along the centerline of said Drainage Ditch to the West line of said Southwest 1/4; thence South 901.6 feet to the Southwest corner of said Southwest 1/4; thence East 2650.26 feet to the point of the beginning. Situated in Macon County, Illinois.	01-01-26-300-003	66.00	26	18	1	3
150	Carara, Beulah	All that part of the West 1/2 of the Southeast 1/4 of Section 26, Township 18 North, Range 1 East of the 3rd P.M., Lying South of the center of the drainage ditch of Minor Subdistrict 1 of Subdistrict 9 of Illinois Special Drainage District, containing 36 acres more or less. Situated in Macon County, Illinois.	01-01-26-400-001	36.00	26	18	1	3

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152	Kimmons, Robert & Judith	That part of the Northwest 1/4 of Section 27, Township 18 North, Range 1 East of the 3rd P.M., described as follows: Beginning at a point on the West line of the Northwest 1/4 of said Section 27 lying 635.24 feet North of the Southwest corner of the Northwest 1/4 of said Section 27; thence North 0 deg 18' 27"W West, West, 348.00 feet along said West line; thence North 88 deg 29' 23"E East 890.00 feet; thence South 0 deg 18' 27"E East 348.00 feet; thence South 88 deg 29' 23" West 890.00 feet to the point of beginning, as per Plat of Survey dated May 23, 2002 by Robert L. Cox, Illinois Professional Land Surveyor No. 2442. Situated in Macon County, Illinois.	01-01-27-100-003	7.11	27	18	1	3
152	Kimmons, Robert & Judith	That part of the Northwest 1/4 of Section 27, Township 18 North, Range 1 East of the 3rd P.M., described as follows: Beginning at the Southwest corner of the Northwest 1/4 of said Section 27; thence North 0 deg 18' 27"W West 635.24 feet along the West line of the Northwest 1/4 of said Section 27; thence North 88 deg 29' 23"E East 890.00 feet; thence South 0 deg 18' 27"E East 635.69 feet to a point on the South line of the Northwest 1/4 of said Section 27; thence South 88 deg 31' 05"W West 890.00 feet along said South line to the point of beginning, as per Survey by Robert L. Cox, Illinois Professional Land Surveyor No. 2442 dated January 16, 2004, Situated in Macon County, Illinois.	01-01-27-100-005	12.98	27	18	1	3
153	George P. Turner Revocable Trust	The North 1/2 of the Northeast 1/4 AND the North 1/2 of the South 1/2 of the Northeast 1/4 of Section 34, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County Illinois.	01-01-34-200-002	120.00	34	18	1	3
153	George P. Turner Revocable Trust	The South 1/2 of the Northeast 1/4 of Section 33, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-33-200-002	80.00	33	18	1	3
153	George P. Turner Revocable Trust	The Southwest 1/4 of Section 27, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-27-300-001	160.00	27	18	1	3
154	Carara - Williams (1)	The South 1/2 of the Southeast 1/4 of Section 27, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT a tract more particularly bounded and described as follows: Beginning at a point on the East line of said Southeast 1/4 1,014.96 feet North of the Southeast corner of said Section 27; thence North along said East line, 183 feet; thence 90 deg 00' 00" West, 273 feet; thence 90 deg 00' 00" South, 183 feet; thence 90 deg 00' 00" East, 273 feet to the point of beginning and Also EXCEPT the property described in Warranty Deed recorded on November 25, 1981 in Book 2082, page 700 as Document no 1126876. Situated in Macon County, Illinois.	01-01-27-400-004	77.87	27	18	1	3
156	MFS Residual Bypass Trust (fka George W. Baker Testamentary Trust - Marguerite K. Baker Residuary Trust)	The Southwest 1/4 of Section 28, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-28-300-001	160.00	28	18	1	3
158	M & E Steinman Trust	The Southeast 1/4 of Section 29, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT The West 40 acres thereof and EXCEPT a one acre tract described as follows: Beginning at a point on the South line of said Section 29, 430.75 feet West of the Southeast corner of said Section 29; thence North 200 feet along a line parallel with the East line of said Section 29; thence West 217.8 feet; thence South 200 feet to the South line of said Section 29; thence East 217.8 feet to the point of beginning; and further EXCEPT Beginning at a point on the South line of said Section 29, lying 400.75 feet West of the Southeast corner of said Section 29, thence North 1 deg 10' 10" East, 329.66 feet; thence North 89 deg 49' 25" West, 155.21 feet; thence South 1 deg 10' 10" West, 115.66 feet; thence North 89 deg 49' 25" West, 132.60 feet; thence South 1 deg 10' 10" West, 214.00 feet to a point on the South line of said Section 29; thence South 89 deg 49' 23" East, 40 feet along said South line; thence North 1 deg 07' 32" East, 200.07 feet to an existing iron pin; thence South 89 deg 48' 33" East, 217.94 feet to an existing iron pin; thence South 1 deg 10' 08" West, 200.02 feet to a point on the South line of said Section 29; thence South 89 deg 49' 23" East, 30 feet along said South line to the point of beginning. Situated in Macon County, Illinois.	01-01-29-400-003	118.17	29	18	1	3
158	M & E Steinman Trust	The West 40 acres of the Southeast 1/4 of Section 29, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-29-400-001	40.00	29	18	1	3
159	Buth, Ellis and Karen	The N1/2 of the SE1/4 of Section 30, Township 18 North, Range 1 East of the 3rd P.M.; Situated in Macon County, Illinois.	01-01-30-400-002	80.00	30	18	1	3
160	Joan Wells Family Farmland Limited Partnership	The Northwest 1/4 of Section 33, Township 18 North, Range 1 East of the 3rd P.M., situated in Macon County, Illinois.	01-01-33-100-001	160.00	33	18	1	3
161	John L. Rotz Revocable Trust	That part of the South 1/2 of the Northwest 1/4 of Section 34, Township 18 North, Range 1 East of the 3rd P.M., lying South of the drainage ditch. Situated in Macon County, Illinois.	01-01-34-100-005	41.07	34	18	1	3
161	John L. Rotz Revocable Trust	The North 1/2 of the Southwest 1/4 of Section 34, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT Beginning at a point on the West line of the Southwest 1/4 of said Section 34, said point being 322.52 feet South of the West 1/4 corner of said Section 34, running thence Easterly for 348.56 feet; thence Southerly for 376.96 feet; thence Northerly for 376.96 feet to the point of beginning. Situated in Macon County, Illinois.	01-01-34-100-006	76.98	34	18	1	3
161	John L. Rotz Revocable Trust	The Southwest 1/4 of Section 33, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-33-300-001	160.00	33	18	1	3
162	Alsop, Allen & Pamela	Part of the North 1/2, of the Northwest 1/4 of Section 34, Township 18 North, Range 1 East of the 3rd P.M., Macon County, Illinois, said tracts being more particularly describes as follows: The East 10.00 acres, more or less, of the North 1/2, of the Northwest 1/4 of Section 34, Township 18 North, Range 1 East of the 3rd P.M., Macon County Illinois, describes as beginning at the North 1/4 Corner of said Section 34, running thence South 1 deg 08' 52" West for 1321.65 feet; thence South 89 deg 57' 13" West for 329.61 feet; thence North 1 deg 08' 52" East for 1321.98 feet; thence North 89 deg 59' 21" East for 329.61 feet to the point of beginning. Situated in Macon County, Illinois.	01-01-34-100-015	10.00	34	18	1	3
162	Alsop, Allen & Pamela	Part of the North Half (N 1/2) of the Northwest Quarter (NW 1/4) of Section 34, Township 18 North, Range 1 East of the Third (3rd) Principal Meridian, Macon County, Illinois, described as beginning at a point on the North line of the Northwest Quarter (NW 1/4) of said Section 34, with the said point being 1976.52 feet North 89 deg 59' 21" W of the North Quarter (N 1/4) corner of said Section 34; running thence South 1 deg 08' 52" W for 1323.50 feet; thence South 89 deg 57' 13" W for 131.66 feet; thence North 1 deg 08' 52" E for 1323.75 feet; thence South 89 deg 59' 21" E for 131.66 feet to the point of beginning, containing 4.00 acres, more or less, situated in the County of Macon, State of Illinois.	01-01-34-100-011	4.00	34	18	1	3
162	Alsop, Allen & Pamela	That part of the South 1/2, of the Northwest 1/4 of Section Thirty-four (34), Township Eighteen (18) North, Range One (1) East of the 3rd P.M., lying North of the drainage ditch, except the South 25 acres thereof. situated in the County of Macon, State of Illinois.	01-01-34-100-016	40.00	34	18	1	3

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162	Alsop, Allen & Pamela	<p>The West 10.00 acres, more or less, of the East 20.00 acres, more or less, of the North 1/2 of the Northwest 1/2 of the Northwest 1/4 of Section 34, Township 18 North, Range 1 East of the 3rd P.M., Macon County, Illinois, describes as beginning at a point on the North line of the Northwest 1/4 of said Section 34, said point being 329.61 feet North 89 deg 59' 21" West of the North 1/4 corner of said Section 34, running thence South 1 deg 08' 52" West for 1321.98 feet; thence South 89 deg 57' 13" West for 329.53 feet; thence North 1 deg 08' 52" East for 1322.21 feet; thence South 89 deg 59' 21" East for 329.53 feet to the point of beginning. Situated in Macon County, Illinois.</p> <p>The West 5.00 acres, more or less, of the East 25.00 acres, more or less, of the North Half (N 1/2) of the Northwest Quarter (NW 1/4) of Section 34, Township 18 North, Range 1 East of the Third (3rd) P.M., Macon County, Illinois, described as beginning at a point on the North line of the Northwest Quarter (NW 1/4) of said Section 34, said point being 659.14 feet North 89 deg 59' 21" W of the North Quarter (N 1/4) corner of said Section 34, running thence South 1 deg 08' 52" West for 1321.98 feet; thence South 89 deg 57' 13" West for 164.74 feet; thence North 1 deg 08' 52" East for 1322.47 feet; thence South 89 deg 59' 21" East for 164.73 feet to the point of beginning.</p> <p>The West 5.00 acres, more or less, of the East 30.00 acres, more or less, of the North Half (N 1/2) of the Northwest Quarter (NW 1/4) of Section 34, Township 18 North, Range 1 East of the Third (3rd) P.M., Macon County, Illinois, described as beginning at a point on the North line of the Northwest Quarter (NW 1/4) of said Section 34, said point being 823.87 feet North 89 deg 59' 21" W of the North Quarter (N 1/4) corner of said Section 34, running thence South 1 deg 08' 52" West for 1322.47 feet; thence South 89 deg 57' 13" West for 164.74 feet; thence North 1 deg 08' 52" East for 1322.64 feet; thence South 89 deg 59' 21" East for 164.71 feet to the point of beginning.</p> <p>The West 10.00 acres, more or less, of the East 40.00 acres, more or less, of the North Half (N 1/2) of the Northwest Quarter (NW 1/4) of Section 34, Township 18 North, Range 1 East of the Third (3rd) P.M., Macon County, Illinois, described as beginning at a point on the North line of the Northwest Quarter (NW 1/4) of said Section 34, said point being 988.58 feet North 89 deg 59' 21" W of the North Quarter (N 1/4) corner of said Section 34, running thence South 1 deg 08' 52" West for 1322.64 feet; thence South 89 deg 57' 13" West for 329.39 feet; thence North 1 deg 08' 52" East for 1322.84 feet; thence South 89 deg 59' 21" East for 329.38 feet to the point of beginning, situated in the County of Macon, State of Illinois.</p> <p>The West 10.00 acres, more or less, of the East 50.00 acres, more or less, of the North Half (N 1/2) of the Northwest Quarter (NW 1/4) of Section 34, Township 18 North, Range 1 East of the Third (3rd) P.M., Macon County, Illinois, described as beginning at a point on the North line of the Northwest Quarter (NW 1/4) of said Section 34, said point being 1317.96 feet North 89 deg 59' 21" W of the North Quarter (N 1/4) corner of said Section 34, running thence South 1 deg 08' 52" West for 1322.84 feet; thence South 89 deg 57' 13" West for 329.21 feet; thence North 1 deg 08' 52" East for 1322.17 feet; thence South 89 deg 59' 21" East for 329.22 feet to the point of beginning, situated in the County of Macon, State of Illinois.</p>	01-01-34-100-009	40.00	34	18	1	3
163	George P. Turner Children's Trust	The South 200 acres of the East 1/2 of Section 34, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-34-400-001	200.00	34	18	1	3
164	Carara LE - Williams LE (2)	The Northwest 1/4 of Section 35, Township 18 North, Range 1 East of the 3rd P.M., EXCEPT commencing at a point 300 feet South of the Northwest corner of said Section 35; thence East 300 feet; thence South 435.6 feet; thence West 300 feet; thence North 435.6 feet to the point of beginning. Situated in Macon County, Illinois.	01-01-35-100-002	157.00	35	18	1	3
165	Wentworth, Janice	The North 53.46 acres of the West Half (W1/2) of the East Half (E1/2) of Section 35, Township 18 North, Range 1 East of the 3rd P.M., situated in Macon County, Illinois.	01-01-35-200-004	53.46	35	18	1	3
166	Wentworth, David G. & Lory A.	The Northeast 1/4 of the Northeast 1/4 of Section 35, Township 18 North, Range 1 East of the 3rd P.M., Containing 40 acres more or less. Situated in Macon County, Illinois.	01-01-35-200-003	40.00	35	18	1	3
168	Bankson, Kim A.	All of the East 1/2 of the Southwest 1/4 of Section 35, Township 18 North, Range 1 East of the 3rd P.M., lying North of the center line of Illinois Special Drainage District drainage ditch which crosses the premises; EXCEPT a tract described as: Beginning at a point on the East line of the Southwest 1/4 of Section 35, Township 18 North, Range 1 East of the 3rd P.M., a distance of 1,015.0 feet North of the Southeast corner of said Southwest 1/4; thence Northwesterly on a line forming an angle of 68 deg 45' 00" to the left with the said West line a distance of 278.97 feet; thence Northerly parallel to and 260.0 feet West of the said East line of the Southwest 1/4 a distance of 577.71 feet; thence East at right angles, 260.0 feet to a point on the said East line of the Southwest 1/4; thence South along the East line 678.82 feet to the point of beginning. Situated in Macon County, Illinois.	01-01-35-300-003	42.62	35	18	1	3
168	Bankson, Kim A.	Part of the East 1/2 of the Northeast 1/4 of Section 19, Township 18 North, Range 2 East of the 3rd P.M., Macon County, Illinois, said tract being more particularly described as follows: Beginning at a point on the North line of the Northeast 1/4 of said Section 19, 385.00 feet West of the Northeast corner of said Section 19, running thence Southerly for 198.00 feet; thence Westerly for 220.00 feet; thence Northerly for 198.00 feet; thence Easterly for 220.00 feet to the point of beginning. Situated in Macon County, Illinois.	10-02-19-200-003	1.00	19	18	2	3
168	Bankson, Kim A.	Part of the East 1/2 of the Southwest 1/4 of Section 35, Township 18 North, Range 1 East of the 3rd P.M., described as follows: Beginning at a point on the East line of the Southwest 1/4 of said Section 35, a distance of 1,015.0 feet North of the Southeast corner of said Southwest 1/4; thence Northwesterly on a line forming an angle of 68 deg 45' 00" to the left with the said West line, a distance of 278.97 feet; thence Northerly parallel to and 260.00 feet West of the said East line of the Southwest 1/4, a distance of 577.71 feet; thence East at right angles, 260.0 feet to a point on the said East line of the Southwest 1/4, thence South along the East line, 678.82 feet to the point of beginning. Situated in Macon County, Illinois, AND Easement for ingress and egress in favor of Parcel 1 created by Warranty Deed dated July 21, 1967 and recorded July 24, 1967 in Book 1595, page 191 as Document No. 838125 from Ruth E. Albin and Hubert A. Bankson and Marilyn N. Bankson, husband and wife, as Joint Tenants, over the following described property: West 25 feet of the East 45 feet of East 1/2 of the Southwest 1/4 of said Section 35, lying South of Parcel I and also over the triangular tract lying South of Parcel I as shown on Plat dated July 19, 1967 made by L. Dale Crowe and identified as Bankson 67249. Situated in Macon County, Illinois.	01-01-35-300-004	3.75	35	18	1	3
168	Bankson, Kim A.	The South 175 feet of the East 284 feet of the Southwest 1/4 of the Southwest 1/4 of Section 35, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois, AND The West 50 feet of the South 175 feet of the East 334 feet of the Southwest 1/4 of the Southwest 1/4 of Section 35, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-35-300-007	1.34	35	18	1	3
169	Williams, Edythe Anne	All that part of the West 1/2 of the Southwest 1/4 of Section 35, Township 18 North, Range 1 East of the 3rd P.M., lying North of the centerline of the drainage ditch. Situated in Macon County, Illinois, AND All that part of the West 1/2 of the Southwest 1/4 of Section 35, Township 18 North, Range 1 East of the 3rd P.M., lying South of the centerline of the drainage ditch, EXCEPT a tract commencing at the Southeast corner of the said above described real estate, thence North 175 feet, thence West 284 feet, thence South 175 feet, thence East 284 feet, to the point of beginning. Also EXCEPT the West 50 feet of the South 175 feet of the East 334 feet of the Southwest 1/4 of the Southwest 1/4 of Section 35, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-35-300-006	78.66	35	18	1	3
170	Keller Family Trust	The East 1/2 of the South 224.22 acres of the West 1/2 of Section 31, Township 18 North, Range 2 East of the 3rd P.M., situated in Macon County, Illinois.	10-02-31-300-003	112.22	31	18	2	3

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171	Lehn, Martha Jean & Stanley	The North 1/2 of the Northwest 1/4 of Section 32, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-32-100-001	80.00	32	18	2	3
172	Sharon L. Larson Trust	The Northeast 1/4 of Section 32, Township 18 North, Range 2 East of the 3rd P.M., containing 160 acres more or less, Situated in Macon County Illinois.	10-02-32-200-001	160.00	32	18	2	3
173	Riebock/Riebock Trust-Reibock	The Southwest Quarter (SW 1/4) of the Northwest Quarter (NW 1/4) and the Southeast Quarter (SE 1/4) of the Northwest Quarter (NW 1/4) and the North Half (N 1/2) of the North Half (N 1/2) of the Northwest Quarter (NW 1/4) of the Southwest Quarter (SW 1/4), all in Section 32, Township 18 North, Range 2 East of the Third Principal Meridian. All situated in Macon County, Illinois.	10-02-32-100-004	90.00	32	18	2	3
175	Janet S. Brewer Trust (fka Brewer, Janet S.)	The North 1/2 of the Southeast 1/4 of Section 4, Township 17 North, Range 2 East of the 3rd P.M., situated in Macon County, Illinois, AND The South 1/2 of the Southeast 1/4 of Section 4, Township 17 North, Range 2 East of the 3rd P.M., EXCEPT the West 5 acres of the Southwest 1/4 of the Southeast 1/4 of Section 4 and EXCEPT that part of the Southeast 1/4 of the Southeast 1/4 of Section 4, deeded to William Joseph Sullivan and Debra R. Sullivan in Warranty Deed recorded in Book 2137, page 237 as Document No. 1168056. Situated in Macon County, Illinois.	07-07-04-400-003	152.15	4	17	2	3
176	Penhallegon, William, et al II (fka Estate of Barbara Patton Penhallegon)	The West 1/2 of the Northwest 1/4 of Section 2, Township 17 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	08-06-02-100-002	80.00	2	17	1	3
177	Penhallegon, William, et al IV (fka Penhallegon Family Trust)	The North 1/2 of the Northeast 1/4 and the south 1/2 of the Northeast 1/4 and the East 1/2 of the Northwest 1/4 of Section 2, Township 17 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	08-06-02-100-003	237.26	2	17	1	3
178	Penhallegon, William, et al, I	The Southwest 1/4 of Section 2, Township 17 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois. AND The Southeast 1/4 of Section 2, Township 17 North, Range 1 East of the 3rd P.M., EXCEPT the North 128 feet of the East 355 thereof. Situated in Macon County, Illinois.	08-06-02-300-001	318.95	2	17	1	3
179	England - England	Lot Two (2) of the East 1/2 of Section 9, Township 17 North, Range 1 East of the 3rd P.M., as per Plat recorded in Book 22, page 102 of the Records in the Recorder's Office of Macon County, Illinois, EXCEPT the right-of-way of the Illinois Central Railroad, and EXCEPT the right-of-way for State Bond Issue Road. Situated in Macon County, Illinois.	08-06-09-200-005	75.20	9	17	1	3
179	England - England	The Southeast 1/4 of the Northeast 1/4 and the Northeast 1/4 of the Southeast 1/4 of Section 4, Township 17 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	08-06-04-200-005	80.00	4	17	1	3
180	Brame, Robert E. Trust dated 8/6/14 (fka Brame, Robert E.)	The South 1/2, of the Southeast 1/4 of Section 22, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-22-400-004	80.00	22	18	1	3
182	England, Leland Stanford, et al	The Northwest 1/4 of the Northwest 1/4 of Section 10, Township 17 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	08-06-10-100-006	40.00	10	17	1	3
183	Penhallegon, William, et al III (fka E. England Penhallegon Trust)	The Northeast 1/4 of Section 11, Township 17 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	08-06-11-200-001	160.00	11	17	1	3
184	Alsop, Allen R.	Part of the North 1/2, of the Northwest 1/4 of Section 34, Township 18 North, Range 1 East of the 3rd P.M., Macon County, Illinois, with the said tract being more particularly described as follows: The West 5.00 Acres, more or less, of the East 60.00 Acres, more or less, of the North 1/2 of the Northwest 1/4 of Section 34, Township 18 North, Range 1 East of the 3rd P.M., Macon County, Illinois, described as beginning at a point on the North line of the Northwest 1/4 of said Section 34, said point being 1811.91 feet North 89 deg 59' 21" West of the North 1/4 corner of said Section 34; running thence South 1 deg 08' 52" West for 1323.17 feet; thence South 89 deg 57' 13" West for 164.61 feet; thence North 1 deg 08' 52" East for 1323.50 feet; thence South 89 deg 59' 21" East for 163.61 feet to the point of beginning. Situated in Macon County, Illinois.	01-01-34-100-013	5.00	34	18	1	3
184	Alsop, Allen R.	The West 5.00 acres, more or less, of the East 55.00 acres, more or less, of the North 1/2 of the Northwest 1/4 of Section 34, Township 18 North, Range 1 East of the 3rd P.M., Macon County, Illinois, described as beginning at a point on the North line of the Northwest 1/4 of said Section 34, said point being 1647.28 feet North 89' deg 59' 21" West of the North 1/4 center of said Section 34, running thence South 1 deg 08' 52" West for 1323.17 feet, thence South 89 deg 57' 13" West for 164.63 feet; thence North 1 deg 08' 52" East for 1323.33 feet; thence South 89 deg 59' 21" East for 164.63 feet to the point of beginning, containing 5.00 acres, more or less. Situated in Macon County, Illinois.	01-01-34-100-012	5.00	34	18	1	3
185	Chandler Deanna K. and Duane F. (fka Chandler Deanna) (fka Mary J. Montgomery),	Part of the east half of the southeast quarter of Section Five (5), Township Eighteen (18) North, Range Two (2) east of the Third Principal Meridian, Macon County, Illinois, and more particularly described as follows: commencing at a found railroad spike located at the southeast corner of the Southeast Quarter of said Section Five (5): thence north 00 degrees 00 minutes 00 seconds east along the east line of the Southeast Quarter of said Section Five (5), 487.00 feet to the point of beginning. From said point of beginning: thence south 88 degrees 27 minutes 51 seconds west, 1315.72 feet to a point on the west line of the east half of the Southeast Quarter of said Section Five (5), 1315.72 feet; thence north 00 degrees 05 minutes 23 seconds west, along the west line of the east half of the Southeast Quarter of said Section Five (5), 1537.41 feet; thence north 88 degrees 27 minutes 51 seconds east, 1022.11 feet; thence south 51 degrees 01 minutes 36 seconds east, 303.48 feet; thence south 00 degrees 00 minutes 00 seconds east, 170.74 feet; thence north 88 degrees 27 minutes 53 seconds east, 60.00 feet to a point on the east line of the Southeast Quarter of said Section Five (5): thence south 00 degrees 00 minutes 00 seconds east along the east line of the Southeast Quarter of said Section Five (5), 1169.53 feet to the point of beginning, containing 45.424 acres, more or less.	10-02-05-400-010	45.42	5	18	2	3

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185	Chandler Deanna K. and Duane F. (fka Chandler Deanna) (fka Mary J. Montgomery),	Part of the Southwest Quarter of the Southeast Quarter of Section Five (5), Township Eighteen (18) North, Range Two (2) East of the Third Principal Meridian, Macon County, Illinois and more particularly described as follows: Commencing at a found railroad spike located at the Southeast corner of the Southeast Quarter of said Section Five (5): thence South 88 degrees 27 minutes 51 seconds West, along the south line of the Southeast Quarter of said Section Five (5), 2410.65 feet to a point on a line being 40 feet East and parallel to the East line of the South 209 feet of the East 105 feet of the West 179.25 feet of the Southwest Quarter of the Southeast Quarter of said Section 5, said point also being the Point of Beginning. From said Point of Beginning; thence North 00 degrees 10 minutes 47 seconds West, along the said parallel line, 316.01 feet; thence South 88 degrees 27 minutes 51 seconds West, 145.01 feet; thence South 00 degrees 10 minutes 47 seconds East, 19.01 feet to the Northeast corner of a tract of land designated as Parcel "1" as described in Quit Claim Deed recorded in Book 2401 on Page 310 in the Records of the Recorder's Office of Macon County, Illinois; thence South 00 degrees 10 minutes 47 seconds East, along the east line of said "Parcel 1", 88.00 feet to a point on the North line of the South 209 feet of the East 105 feet of the West 179.25 feet of the Southwest Quarter of the Southeast Quarter of said Section Five (5); thence North 88 degrees 27 minutes 51 seconds East, 105.00 feet to the Northeast corner of the South 209 feet of the East 105 feet of the West 179.25 feet of the Southwest Quarter of the Southeast Quarter of said Section Five (5); thence South 00 degrees 10 minutes 47 seconds East, 209.00 feet to the Southeast Corner of the South 209 feet of the East 105 feet of the West 179.25 feet of the Southwest Quarter of the Southeast Quarter of said Section Five (5); thence North 88 degrees 27 minutes 51 seconds East, 40.01 feet to the Point of Beginning, containing 0.548 acres, more or less.	10-02-05-400-015	0.55	5	18	2	3
186	Chandler, Deanna Kay and Duane F.	The South 209 feet of the East 105 feet of the West 179.25 feet of the Southwest 1/4 of the Southeast 1/4, of Section 5, Township 18 North, range 2 East of the 3rd P.M., (Except coal and all other minerals underlying the surface of said land and all rights and easements in favor of the estate of said coal and other minerals.) Situated in Macon County, Illinois.	10-02-05-400-007	0.50	5	18	2	3
187	Dutcher, Thomas & Bridget	That part of the Southeast 1/4 of Section 23, Township 18 North, Range 1 East of the Third Principal Meridian, Macon County, Illinois., described as follows: beginning at a point on the East lien of the Southeast 1/4 of said Section 23, said point lying 717.0 feet South of the Northeast corner of the Southeast 1/4, of said Section 23; thence N. 89 degrees 44 minutes 26 seconds W. 394.0 feet; thence S. 0 degrees 15 minutes 34 seconds W. 440.0 feet, thence S. 89 degrees 44 minutes 26 seconds E. 394.0 feet to a point on the East line of the Southeast 1/4, of said Section 23; thence N. 0 degrees 15 minutes 34 seconds E. 440.0 feet along said East line to the point of beginning, as per Plat of Survey dated December 18, 2006 by Robert L. Cox, Illinois Professional Land Surveyor No. 2442. Situated in Macon County, Illinois.	01-01-23-400-003	3.98	23	18	1	3
188	Finfrock, Jr., Marvin and Shelley R. II	The Southeast Quarter (SE 1/4) of Section 13, Township 18 North, Range 1 East of the Third Principal Meridian. EXCEPT beginning at a point on the South line of said Section 13, said point being 849 feet West of the Southeast corner of said Section 13, running thence Westerly along said South line of said Section 13 for 363 feet; thence Northerly for 180 feet; thence Easterly for 363 feet; thence Southerly for 180 feet to the point of beginning. Situated in Macon County, Illinois. EXCEPT: Part of the Southeast Quarter (SE 1/4) of Section 13, Township 18 North, Range 1 East of the Third (3rd) Principal Meridian, Macon County, Illinois, described as beginning at the Southeast corner of said Section 13, running thence N 90 degrees 00 minutes 00 seconds W for 1257.00 feet; thence N 0 degrees 00 minutes 00 seconds E for 20.00 feet; thence N. 8 degrees 53 minutes 47 seconds E for 122.92 feet; thence N 33 degrees 58 minutes 57 seconds E for 46.50 feet to an iron pin at the Northwest corner of a tract of land as covered by Warranty Deed recorded in Book 2311 Page 312 of the Records in the Recorder's Office of Macon County, Illinois; thence N 69 degrees 04 minutes 27 seconds E for 56.00 feet; thence N 90 degrees 00 minutes 00 seconds E for 197.70 feet; thence N 0 degrees 00 minutes 00 seconds E for 208.50 feet; thence N 90 degrees 00 minutes 00 seconds E for 962.00 feet, more or less, to a point on the East line of the Southeast Quarter (SE 1/4) of said Section 13; thence S 0 degrees 00 minutes 00 seconds W along the East line of the Southeast Quarter (SE 1/4) of said Section 13 for 408.50 feet to the point of beginning; EXCEPT those portions of such described property now being used for public roadway purposes along and across the South edge of the property as shown on the March 31, 2003 Plat of Survey (revised April 7, 2003) prepared by William C. Faulkner; ALSO EXCEPT the real estate described in the Warranty Deed recorded in Book 2311 Page 312 of the Records in the Recorder's Office of Macon County, Illinois. Situated in Macon County, Illinois. EXCEPT: That part of the Southeast 1/4, of Section 13, Township 18 North, Range 1 East of the Third Principal Meridian, Macon County, Illinois, described as follows: beginning at an existing iron pin on the South line of the Southeast 1/4, of said Section 13, said iron pin lying 1256.96 feet (1257' record) West of the Southeast corner of said Section 13; thence N. 0 degrees 33 minutes 41 seconds E. 20.00 (20.00' record); thence N. 9 degrees 34 minutes 22 seconds E. 122.63 feet (122.92' record) to an existing iron pin; thence N. 34 degrees 03 minutes 53 seconds E. 46.64 feet (46.50' record) to an existing iron pin; thence N. 69 degrees 44 minutes 22 seconds E. 56.14 feet (56.00' record) to an existing iron pin; thence S. 89 degrees 26 minutes 05 seconds E. 197.75 feet (197.70' record) to an existing iron pin; thence N. 0 degrees 33 minutes 41 seconds E. 208.50 feet (208.50' record); thence S. 89 degrees 26 minutes 46 seconds B. 960.58 feet (962' record) to a point on the East line of the Southeast 1/4, of said Section 13; thence N. 0 degrees 23 minutes 32 seconds E. 177.00 feet along said East line to a point of the approximate center line of an existing drainage ditch; thence N. 77 degrees 05 minutes 00 seconds W. 835.00 feet along said center line; thence N. 79 degrees 18 minutes 00 seconds W. 150.00 feet along said center line; thence N. 70 degrees 15 minutes 00 seconds W. 210.00 feet along said center line; thence N. 57 degrees 44 minutes 00 seconds W. 90.00 feet along said center line; thence N. 67 degrees 05 minutes 23 seconds W. 131.20 feet along said center line; thence S. 4 degrees 56 minutes 11 seconds E. 460.00 feet to an iron pin set; thence S. 32 degrees 25 minutes 00 seconds W. 370.00 feet to an iron pin set; thence S. 3 degrees 48 minutes 00 seconds W. 185.00 feet to a mag nail set an the South line of the Southeast 1/4, of said Section 13; thence S. 89 degrees 26 minutes 19 seconds E. 266.00 feet along said South line to the point of beginning, containing 13.73 acres, more or less.	01-01-13-400-006	135.77	13	18	1	3
189	Justison - Thomas and Doyle Family Trust (fka George W. Baker Testamentary Trust)	The East 1/3 of the West 1/2 of the Northeast 1/4 of Section 4, Township 17 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	08-06-04-200-002	26.60	4	17	1	3
189	Justison - Thomas and Doyle Family Trust (fka George W. Baker Testamentary Trust)	The South 1/2 of the Northwest 1/4 of the Southeast 1/4 of Section 15, Township 15 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	02-15-15-400-002	20.00	15	15	1	3
190	Hoffman, H. Gene & M. Eleanor	The Northwest 1/4 of the Southwest 1/4 of Section 17, Township 18 North, Range 2 East of the 3rd P.M., EXCEPT the West 316 feet of the South 348 feet thereof. Situated in Macon County, Illinois.	10-02-17-300-007	37.48	17	18	2	3

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193	White, Lynette (fka Mary J. Montgomery Estate)	Part of the west half of the southeast quarter of Section Five (5), Township Eighteen (18) North, Range Two (2) East of the Third Principal Meridian, Macon County, Illinois, and more particularly described as follows: Commencing at a found railroad spike located at the southeast corner of the southeast quarter of said Section Five (5); thence South 88 degrees 27 minutes 51 seconds West, along the South line of the Southeast Quarter of said Section Five (5), 2026.06 feet to the point of beginning. From said point of beginning; thence continue south 88 degrees 27 minutes 51 seconds West, along the South line of the Southeast Quarter of said Section Five (5), 384.59 feet; thence North 00 degrees 10 minutes 47 seconds West, 316.01 feet; thence South 88 degrees 27 minutes 51 seconds West, 145.01 feet; thence South 00 degrees 10 minutes 47 seconds East, 19.01 feet to the Northeast corner of "Parcel 1" as described in quit claim deed recorded in book 2401 on page 310 in the records of the recorder's office of Macon County, Illinois; thence south 88 degrees 27 minutes 51 seconds West, 74.25 feet to the Northwest Corner of said "Parcel 1", also being a point on the West line of the Southeast Quarter of said Section Five (5); thence North 00 degrees 10 minutes 47 seconds West, along the West line of the Southeast Quarter of said Section Five (5), 2115.16 feet; thence North 88 degrees 17 minutes 22 seconds East, 50.02 feet; thence South 00 degrees 10 minutes 47 seconds East, 996.63 feet; thence North 88 degrees 17 minutes 22 seconds East, 1267.26 feet to a point on the East line of the West Half of the Southeast Quarter of said Section Five (5); thence South 00 degrees 05 minutes 23 seconds East, along the East line of the West half of the Southeast Quarter of said Section Five (5), 932.62 feet; thence South 88 degrees 27 minutes 51 seconds West, 566.10 feet; thence South 00 degrees 05 minutes 23 seconds East, 16.98 feet; thence South 88 degrees 27 minutes 51 seconds West, 145.00 feet; thence South 00 degrees 05 minutes 23 seconds East, 470.00 feet to the point of beginning, containing 34.511 acres, more or less.	10-02-05-400-009	34.51	5	18	2	3
194	Zelhart, Dave and Cynthia	Part of the Southeast 1/4 of Section 11, Township 18 North, Range 1 East of the 3rd P.M., said tract being more particularly described as follows: Beginning at a point on the South line of the Southeast 1/4 of said Section 11, said point being 1997.84 feet South 87 deg 46'00" West of the Southeast corner of said Section 11, running thence South 87 deg 46'00" West for 400.00 feet; thence North 0 deg 05'27" East for 1089.00 feet; thence North 87 deg 46'00" East for 400.00 feet; thence South 0 deg 05'27" West for 1089.00 feet to the point of beginning. Situated in Macon County, Illinois.	01-01-11-400-006	10.00	11	18	1	3
195	Lula Parker Trust	The South 200 acres of the West 1/2, of Section 7, Township 18 North, Range 3 East of the 3'd P.M., Situated in Macon County, Illinois.	10-03-07-300-001	200.00	7	18	3	3
196	Johnson, Richard H., et al.	The West 1/2 of the Southeast 1/4 of Section 6, Township 18 North, Range 3 East of the 3rd P.M., Situated in Macon County, Illinois.	10-03-06-400-001	80.00	6	18	3	3
197	Robert Jay Weltman Revocable Trust (fka Trust No. 6046)	The Southwest 1/4 of the Northwest 1/4 of Section 5, Township 18 North, Range 2 East of the 3rd P.M., Also described as the West 1/2 of Lot One (I) of the Northwest 1/4 of Section 5, and the West 1/2 of the Southwest 1/4 of Section 5, Township 18 North, Range 2 East of the 3 rd P.M., EXCEPT the South 323 feet of the West 260 feet thereof. Situated in Macon County, Illinois	10-02-05-300-008	118.00	5	18	2	3
198	Dukes, Kristen W.	The East Half (E 1/2;) of the Northeast Quarter (NE 1/4;) of Section Eight (8), Township Eighteen (18) North, Range One (1) East of the Third P.M., situated in Macon County, Illinois.	01-01-08-200-003	80.00	8	18	1	3
198	Dukes, Kristen W.	The West 60 acres of the Northwest 1/4; of Section 9, Township 18 North, Range 1 East of the 3rd P.M. and beginning at a point 905.37 feet West of the Northeast corner of the Northwest 1/4; of Section 9, Township 18 North, Range 1 East of the 3rd P.M., running thence South 2652.00 feet; thence West 835.63 feet; thence North 2654.00 feet; thence East 835.63 feet to the point of beginning, situated in Macon County, Illinois.	01-01-09-100-001	110.89	9	18	1	3
198	Dukes, Kristen W.	The West Half (W 1/2) of the Northeast Quarter (NE 1/4) of Section Eight, Township Eighteen North, Range One East of the Third P.M., situated in the County of Macon, in the State of Illinois.	01-01-08-200-002	80.00	8	18	1	3
199	Ruggeri Life Estate - Carson Life Estate	The East 1/2 of the Southeast 1/4 AND the Southeast 1/4 of the Northeast 1/4 of Section 35, Township 18 North, Range 1 East of the 3 rd P.M., Situated in Macon County, Illinois	01-01-35-400-001	120.00	35	18	1	3
200	Queary, Jane	Beginning at a point on the West line of the Northwest 1/4 of Section 33, Township 18 North, Range 2 East of the 3rd P.M., said point being 1059.90 feet, South 0 deg 00' 00" West of the Northwest corner of said Section 33, running thence North 89 deg 29' 09" East for 166.40 feet, thence South 0 deg 30' 51" East for 62.00 feet, thence North 89 deg 29' 09" East for 46.00 feet, thence South 1 deg 29' 09" West for 185.00 feet, thence South 87 deg 21' 13" West for 208.37 feet, thence North 0 deg 00' 00" East for 254.65 feet to the point of beginning. Situated in Macon County, Illinois.	10-02-33-100-002	1.15	33	18	2	3
201	Shoemaker Family Trust, et al (fka Shoemaker Family Trust)	The East 1/2 of the Northwest 1/4 of Section 4, Township 18 North, Range 3 east of the 3rd P.M., Situated in Macon County, Illinois.	05-03-04-100-003	80.00	4	18	3	3
201	Shoemaker Family Trust, et al (fka Shoemaker Family Trust)	The East 1/2 of the Southeast 1/4 of Section 18, Township 18 North, Range 3 East of the 3rd P.M., Situated in Macon County, Illinois.	10-03-18-400-002	80.00	18	18	3	3
201	Shoemaker Family Trust, et al (fka Shoemaker Family Trust)	The North 70 acres of the Southwest 1/4 of Section 19, Township 18 North, Range 3 East of the 3rd P.M., Situated in Macon County, Illinois.	05-03-19-300-001	70.00	19	18	3	3
201	Shoemaker Family Trust, et al (fka Shoemaker Family Trust)	The West 45 acres of the East 104.69 acres of the Southeast 1/4 of Section 13, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-13-400-002	45.00	13	18	2	3
202	Jordan, Betty Leone (fka Jordan, Betty Leone & William Joseph)	The West 120 acres of the Southwest 1/4 of Section 13, Except the South 330 feet of the West 594 feet; Also Except Beginning at the Northwest corner of the Southwest 1/4 of said Section 13; thence North 87 deg 15' 00" East along the North line of the Southwest 1/4 706.97 feet to a point; thence South 327 feet to a point; thence South 89 deg 45' 00" West 706 feet to a point on the West line of the Southwest 1/4 of said Section 13; thence North a distance of 290 feet to the point of beginning, And Also Except the East 26.81 acres of even width off the East side of the West 120 acres of the Southwest 1/4 of Section 13 as aforesaid, all in Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-13-300-002	83.69	13	18	2	3
203	Trust #144 (Gerber State Bank)	The East 45 acres of the Northeast 1/4 of Section 4, Township 18 North, Range 3 East of the 3rd P.M., Situated in Macon County, Illinois.	05-03-03-10-001	45.00	4	18	3	3
203	Trust #144 (Gerber State Bank)	The West 50 acres of the Northwest 1/4 of Section 3, Township 18 North, Range 3 East of the 3rd P.M., Situated in Macon County, Illinois.	05-03-04-200-002	51.85	3	18	3	3
204	Trust #56 (Gerber State Bank)	The Northwest 1/4 of Section 19, Township 18 North, Range 3 East of the 3rd P.M., EXCEPT the North 15 acres of the Northwest 1/4 of the Northwest 1/4 thereof, And EXCEPT the East 10 acres thereof, Situated in Macon County, Illinois.	05-03-19-100-001	169.00	19	18	3	3
205	Lienhart, Terrell & Molly	The South 1/2 of the Northwest 1/4 of Section 24, Township 18 North, Range 2 East of the 3rd P.M., Situated in Macon County, Illinois.	10-02-24-100-003	80.00	24	18	2	3
206	Emily Rohrscheib Declaration of Trust	Lot Two (2) of School Road Orchard, as per Plat recorded in Book 1832, page 978 of the Records in the Recorder's Office of Macon County, Illinois. Situated in Macon County, Illinois.	10-02-20-200-008	37.72			3	3
207	Billy Franklin Rohrscheib Declaration of Trust	The West 1/2 of Lot One (1) of Section 19, Township 18 North, Range 2 East of the 3rd P.M., as per Plat recorded in Book 22, page 199 of the Records in the Recorder's Office of Macon County, Illinois. Situated in Macon County, Illinois.	10-02-19-100-004	63.45	19	18	2	3

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208	Buth, Martin	The Southeast 1/4 of the Northwest 1/4 AND the South 1/2 of the Southwest 1/4 of the Northwest 1/4 of Section 29, Township 18 North, Range 1 East of the 3rd P.M., Situated in Macon County, Illinois.	01-01-29-100-003	60.00	29	18	1	3
209	Buth, Victor (3)	That part of the Southeast Quarter (1/4) and the Southwest Quarter (1/4) of Section Eleven (11), Township Seventeen (17) North, Range One (1) East of the Third Principal Meridian, Macon County, Illinois, described as follows: beginning at an iron pin set marking the Southwest corner of Lot Eleven (11) of Moraine Highlands Addition to Warrensburg, Illinois, as per Plat recorded in Book 1575 Page 193 of the Records in the Recorder's Office of Macon County, Illinois; thence South 89 deg 43'25" West -489.79 feet along the Westerly extension of the North line of White Birch Addition to Warrensburg, Illinois, as per Plat recorded in Book 1405 Page 94 of the Records in the Recorder's Office of Macon County, Illinois, to an iron pin set on the Northerly right of way line of Illinois Route 121; thence along said right of way line along a curve to the left having a radius of 1425.99 feet and a chord that bears North 57 deg 25'37" West for a chord distance of 394.53 feet to an existing iron pin; thence North 54 deg 20'31" West -87.03 feet along said right of way line to an existing iron pin; thence along said right of way line along a curve to the left having a radius of 1445.99 feet and a chord that bears North 72 deg 00'43" West for a chord distance of 170.72 feet to an existing iron pin; thence South 89 deg 44'28" West -87.42 feet along said right of way line to an existing iron pin; thence along said right of way line along a curve to the left having a radius of 1425.99 feet and a chord that bears North 84 deg 36'04" West for a chord distance of 280.99 feet; thence South 89 deg 39'38" West -302.76 feet along said right of way line to an existing iron pin; thence North 53 deg 53'57" West -67.60 feet along said right of way line to an existing iron pin; thence North 89 deg 17'24" West -26.70 feet to a point on the center line of Haipster Road; thence North 0 deg 42'36" East -911.87 feet along said Harpster Road to an existing iron pin; thence South 89 deg 40'37" East -2597.66 feet to an existing iron pin; thence South 0 deg 20'21" East -297.71 feet to an iron pin set marking the Northeast corner of Lot Forty-two (42) of the Resurvey of Lots 20, 21, 22, 37, 38, 39, 40, 41, 42 & 48 of Moraine Highlands Addition to Warrensburg, Illinois as per Plat recorded in Book 1575 Page 199 of the Records in the Recorder's Office of Macon County, Illinois; thence South 89 deg 07'05" West -590.62 feet along the Northerly line of said Resurvey to an iron pin set; thence South 74 deg 20'55" West -227.02 feet along the Northerly line of said Resurvey to an iron pin set; thence South 0 deg 19'04" East -907.04 feet along the West line of said Resurvey and the West line of Moraine Highlands Addition to Warrensburg, Illinois, as per Plat recorded in Book 1575 Page 193 of the Records in the Recorder's Office of Macon County, Illinois, to the point of beginning. And shown as the 50.79 acres tract on the Survey by Robert L. Cox, Professional Land Surveyor #2442, dated February 24, 2014 and revised on March 12, 2014 and March 18, 2014. EXCEPT the North 297.77 feet. Situated in Macon County, Illinois.	08-06-11-376-005	33.09	11	17	3	3
209	Buth, Victor (3)	That part of the Southeast Quarter (1/4) of Section Eleven (11), Township Seventeen (17) North, Range One (1) East of the Third Principal, Macon County, Illinois, described as follows: beginning at an existing iron pin marking the Southeast corner of said Section Eleven (11); thence South 89 deg 43' 25" West -1098.24 feet to a point on the extension of the East lines of Lots Two (2), Three (3) and Four (4) of Moraine Highlands Addition to Warrensburg, Illinois, a per Plat recorded in Book 1575 Page 193 of the Records in the Recorder's Office of Macon County, Illinois; thence North 0 deg 19' 38" West -739.19 feet along said East lines to an existing iron pin; thence North 89 deg 39' 56" West -35.54 feet to an existing iron pin; thence North 0 deg 19' 48" East -314.75 feet to an existing iron pin marking the Southwest corner of the tract of land described in Book 3403 Page 907 of the Records in the Recorder's Office of Macon County, Illinois; thence South 89 deg 39' 56" East -1149.61 feet along the South line of said tract of land to an existing iron pin on the East line of the Southeast Quarter (1/4) of said Section Eleven (11); thence South 0 deg 32'16" West -1042.19 feet along said East line to the point of beginning, EXCEPT a tract of land described as follows, beginning at a point on the North right-of-way line of Highway 20, Macon County, Illinois, 1023.24 feet West and 33 feet North of the Southeast corner of Section Eleven (11), Township Seventeen (17) North, Range One (1) East, of the 3rd P.M.; thence 50 feet North; thence 50 feet West; thence 50 feet South; thence 50 feet East to the point of beginning. Said tract of land being subject to the right of way of Glasgow Road on the East side thereof and County Highway Number 20 along the South side thereof. And shown as the 26.81 acres tract of the Survey by Robert L. Cox, Professional Land Surveyor #2442, dated February 24, 2014 and revised on March 12, 2014 and March 18, 2014. Situated in Macon County, Illinois.	08-06-11-477-001	26.81	11	17	3	3
209	Buth, Victor (3)	That part of the Southeast Quarter (SE 1/4) of Section Eleven (11), Township Seventeen (17) North, Range One (1) East of the Third Principal Meridian, Macon County, Illinois, described as follows: beginning at an existing iron pin marking the Northeast corner of the Southeast quarter (1/4), of said Section Eleven (11); thence South 0 deg; 32'16" West -1227.30 feet along the East line of the Southeast quarter (1/4), of said Section Eleven (11) to an existing iron pin; thence North 89 deg; 40'30" West -680.92 feet to an existing iron pin; thence North 0 deg; 35'59" East -1220.31 feet to an iron pin set on the North line of the Southeast quarter (1/4) of said Section Eleven (11); thence North 89 deg; 44'08" East -679.66 feet along said North line to the point of beginning. Said tract of land being subject to the right of way of Glasgow Road along the East side thereof. And shown as the 19.11 acre tract on the Survey by Robert L. Cox, Professional Land Surveyor #2442, dated February 24, 2014 and revised on March 12, 2014 and March 18, 2014. Situated in Macon County, Illinois.	08-06-11-477-003	19.11	11	17	1	3
209	Buth, Victor (3)	The North 297.77 feet of the following described tract: That part of the Southeast Quarter (1/4) and the Southwest Quarter (1/4) of Section Eleven (11), Township Seventeen (17) North, Range One (1) East of the Third Principal Meridian, Macon County, Illinois, described as follows: beginning at an iron pin set marking the Southwest corner of Lot Eleven (11) of Moraine Highlands Addition to Warrensburg, Illinois, as per Plat recorded in Book 1575 Page 193 of the Records in the Recorder's Office of Macon County, Illinois; thence South 89 deg 43'25" West -489.79 feet along the Westerly extension of the North line of White Birch Addition to Warrensburg, Illinois, as per Plat recorded in Book 1405 Page 94 of the Records in the Recorder's Office of Macon County, Illinois, to an iron pin set on the Northerly right of way line of Illinois Route 121; thence along said right of way line along a curve to the left having a radius of 1425.99 feet and a chord that bears North 57 deg 25'37" West for a chord distance of 394.53 feet to an existing iron pin; thence North 54 deg 20'31" West -87.03 feet along said right of way line to an existing iron pin; thence along said right of way line along a curve to the left having a radius of 1445.99 feet and a chord that bears North 72 deg 00'43" West for a chord distance of 170.72 feet to an existing iron pin; thence South 89 deg 44'28" West -87.42 feet along said right of way line to an existing iron pin; thence along said right of way line along a curve to the left having a radius of 1425.99 feet and a chord that bears North 84 deg 36'04" West for a chord distance of 280.99 feet; thence South 89 deg 39' 38" West -302.76 feet along said right of way line to an existing iron pin; thence North 53 deg 53'57" West -67.60 feet along said right of way line to an existing iron pin; thence North 89 deg 17'24" West -26.70 feet to a point on the center line of Harpster Road; thence North 0 deg 42' 36" East -911.87 feet along said Harpster Road to an existing iron pin; thence South 89 deg 40' 37" East -2597.66 feet to an existing iron pin; thence South 0 deg 20' 21" East -297.71 feet to an iron pin set marking the Northeast corner of Lot Forty-two (42) of the Resurvey of Lots 20, 21, 22, 37, 38, 39, 40, 41, 42 & 48 of Moraine Highlands Addition to Warrensburg, Illinois as per Plat recorded in Book 1575 Page 199 of the Records in the Recorder's Office of Macon County, Illinois; thence South 89 deg 07' 05" West -590.62 feet along the Northerly line of said Resurvey to an iron pin set; thence South 74 deg 20'55" West -227.02 feet along the Northerly line of said Resurvey to an iron pin set; thence South 0 deg 19' 04" East -907.04 feet along the West line of said Resurvey and the West line of Moraine Highlands Addition to Warrensburg, Illinois, as per Plat recorded in Book 1575 Page 193 of the Records in the Recorder's Office of Macon County, Illinois, to the point of beginning. And shown as the 50.79 acres tract on the Survey by Robert L. Cox, Professional Land Surveyor #2442, dated February 24, 2014 and revised on March 12, 2014 and March 18, 2014. Situated in Macon County, Illinois.	08-06-11-376-004	17.78	11	17	3	3
210	Trust No. JHB-062891, John H. Butterfield, Trustee	All of Southwest 1/4, EXCEPT the East 80 acres, of Section 30, Township 18 North, Range 3 East of the 3rd P.M., EXCEPT Beginning 988 feet North of Southwest corner of North 208 feet, East 247.75 feet, South 208.7 feet, West 247.75 feet to the point of beginning. Situated in Macon County, Illinois.	05-03-30-300-006	96.82	30	18	3	3

Appendix B2: All Parcel Owner Information

104A	Twin Forks Wind Farm, LLC (SUB STATION)	Commencing at the West Quarter corner of Section 13, Township 18 North, Range 1 East of the 3rd Principal Meridian, Macon County, Illinois; thence South 00° 39' 06" West 751.34 feet along the West line of said Section 13 to the point of beginning; thence South 89° 20' 54" East 433.00 feet; thence South 00° 39' 06" West 503.00 feet; thence North 89° 20' 54" West 433.00 feet to the West line of said Section 13; thence North 00° 39' 06" West 503.00 feet along the West line of said Section 13 to the point of beginning, containing 5.00 acres of land, more or less.	01-01-13-300-001	5.00	13	18	1	3
34A	Montgomery, Kevin (fka Mary J. Montgomery Estate)	Part of the Southeast Quarter of Section Five (5), Township Eighteen (18) North, Range Two (2) East of the Third Principal Meridian, Macon County, Illinois, and more particularly described as follows: commencing at a found railroad spike located at the southeast corner of the southeast quarter of said Section Five (5); thence South 88 degrees 27 minutes 51 seconds west, along the South line of the Southeast Quarter of said Section Five (5), 153.00 feet to the Southwest corner of a tract of land conveyed to David C. Riley and Julie L. Giblin as described in warranty deed recorded in book 3494 on page 983 in the records of the recorder's office of Macon County, Illinois, said point also being the point of beginning. From said point of beginning; thence continue south 88 degrees 27 minutes 51 seconds west, 832.52 feet; thence north 00 degrees 05 minutes 23 seconds west, 486.98 feet; thence north 88 degrees 27 minutes 51 seconds east, 986.28 feet to a point on the east line of the southeast quarter of said section 5; thence south 00 degrees 00 minutes 00 seconds east, along said east line, 199.44 feet to a point on the north line of a tract of land conveyed to David C. Riley and Julie L. Giblin as described in warranty deed recorded in book 3494 on page 983 in the records of the recorder's office of Macon County, Illinois; thence south 88 degrees 27 minutes 51 seconds west, 153.00 feet to the northwest corner of said tract of land; thence south 00 degrees 00 minutes 00 seconds east, 287.56 feet to the point of beginning, containing 10.009 acres, more or less.	10-02-05-400-010	10.01	5	18	2	3
34A	Montgomery, Kevin (fka Mary J. Montgomery Estate)	Part of the West half of the Southeast Quarter of Section Five (5), Township Eighteen (18) North, Range Two (2) East of the Third Principal Meridian, Macon County, Illinois, and more particularly described as follows: Commencing at a found railroad spike located at the Southeast corner of the Southeast Quarter of said Section Five (5); thence South 88 degrees 27 minutes 51 seconds west, along the south line of the Southeast Quarter of said Section Five (5), 1881.06 feet to the point of beginning. From said point of beginning; thence continue South 88 degrees 27 minutes 51 seconds West, 145.00 feet; thence North 00 degrees 05 minutes 23 seconds West, 470.00 feet; thence North 88 degrees 27 minutes 51 seconds east, 145.00 feet; thence South 00 degrees 05 minutes 23 seconds east, 470.00 feet to the point of beginning, containing 1.564 acres, more or less.	10-02-05-400-008	1.56	5	18	2	3
75	Westerman, Evelyn	The Northeast 1/4 of Section 8, Township 18 North, Range 2 East of the 3rd PM, situated in Macon County, Illinois.	10-02-08-200-001	160	8	18	2	3
76	Westerman, Evelyn	The Northeast 1/4 of the Southeast 1/4 of Section 7 the SE 1/4 of Section 18 N, Range 2 East of the 3rd P.M. AND the Northwest 1/4 of the Southeast 1/4 of Section 7, Township 18, Range 2 East of the 3rd P.M., situated in Macon County, Illinois.	10-02-07-400-006	78.65	7	18	2	3
77	Westerman, Verniel	East 1/2 of the Southeast 1/4 (EXC S ~300.41 ~N 1432.41 E 290) ~ of Section 17, Range 2 East of the 3rd P.M., situated in Macon County, Illinois.	10-02-17-400-004	77.91	17	18	2	3
75	Westerman, Verniel	The South 1/2 of the North 1/2 of the SE 1/4 of Section 9, Township 18 N, Range 2 East of the 3rd P.M., situated in Macon County, Illinois.	10-02-09-400-003	40	9	18	2	3
76	Westerman, Verniel	The Southwest 1/4 of the Southeast 1/4 of Section 7 the SE 1/4 of Section 18 N, Range 2 East of the 3rd P.M. AND the Southeast 1/4 of the Southeast 1/4 of Section 7, Township 18, Range 2 East of the 3rd P.M., situated in Macon County, Illinois	10-02-07-400-005	78.62	7	18	2	3
75	Westerman, Verniel & Evelyn	The Northwest 1/4 of the Northwest 1/4 of Section 8, Township 18 North, Range 2 East of the 3rd PM, situated in Macon County, Illinois.	10-02-08-100-001	40	8	18	2	3

2 MW PLATFORM

Are you looking for the maximum return on **your investment** in wind energy?

Wind energy means the world to us. And we want it to mean the world to our customers, too, by maximising your profits and strengthening the certainty of your investment in wind power.

That's why, together with our partners, we always strive to deliver cost-effective wind technologies, high quality products and first class services throughout the entire value chain. And it's why we put so much emphasis on the reliability, consistency and predictability of our technology.

These aren't idle words. We have over 30 years' experience in wind energy. During that time, we've delivered more than 62 GW of installed capacity and we currently monitor over 25,000 wind turbines across the globe. Tangible proof that Vestas is the right partner to help you realise the full potential of your wind site.

What is the 2 MW platform?

Our 2 MW platform provides industry-leading reliability, serviceability and availability. Durable and dependable, the platform is built on technology that has been proven in the field over more than a decade. The 2 MW platform reduces your costs, minimises the risk of turbine downtime and helps to safeguard your investment.

You can choose from four turbines on the 2 MW platform:

- V110-2.0 MW™ IEC IIIA
- V100-2.0 MW® IEC IIB
- V100-1.8/2.0 MW™ IEC IIIA/IEC S
- V90-1.8/2.0 MW® IEC IIA/IEC IIIA

Each 2 MW turbine incorporates enhancements that improve performance and reliability, reducing your cost of energy. The platform's predictability allows you to forecast confidently, strengthening the business case for investment, while the tried-and-tested design ensures you can produce energy on low, medium and high-wind onshore sites at the lowest possible cost, even in extreme weather conditions. In addition, remote monitoring and easy servicing keep operational costs at a minimum, while its highly-tested components and power and control systems enhance reliability.



+13,000

Due to the strong performance and reliability of the 2 MW platform, over 13,000 turbines have been installed since 2002.

How does the 2MW platform increase **reliability** and **performance**?

Created with future generations of turbines in mind, the 2 MW platform's single-piece bed frame and stronger main bearing housing provide a better foundation for loads. The toughened frame and housing – each made from single-piece castings – work in conjunction to absorb higher loads from the rotor.

Additionally, the housing ensures correct alignment during bearing assembly, making the process more accurate and efficient and distributing loads evenly. These improvements combine to increase production capabilities and reduce downtime.

A reliable performer

The 2 MW platform is an extremely reliable turbine, which is documented through its strong availability performance. With the newest addition of rotor size, the 2 MW platform offers a competitive selection of turbines for all wind segments.

Thoroughly tested

The current 2 MW platform is built on unique knowledge from more than a decade of operational experience. We constantly monitor the majority of the installed 2 MW turbines, providing us with very detailed and invaluable information about how the turbine operates under all kinds of site conditions.

Our quality-control system ensures that each component is produced to design specifications and performs to peak potential at site. We also employ a Six Sigma philosophy and have identified critical manufacturing processes (both in-house and for suppliers). We systematically monitor measurement trends that are critical to quality, locating defects before they occur.

Innovative CoolerTop®

Our exclusive CoolerTop® technology uses the wind's own energy to generate the cooling required, rather than consuming energy from the wind turbine generator. CoolerTop® has no moving parts and requires little maintenance. Furthermore, the absence of cooling fans contributes to turbine efficiency and makes no noise.

Load and Power Modes increase energy output

The 2 MW platform supports Load and Power Modes, used to maximise energy production under specific wind and site conditions. Based on a site analysis, turbines can be configured to run derated when wind conditions require it. Conversely, under mild wind conditions, the turbine can be uprated - maximising annual energy production.

The 2 MW platform covers all wind segments enabling you to find the best turbine for your specific site.

WINDCLASSES - IEC

TURBINE TYPE	IEC III (6.0 – 7.5 m/s)	IEC II (7.5 – 8.5 m/s)	IEC I (8.5 – 10.0 m/s)
2 MW TURBINES			
V110-2.0 MW™ IEC IIIA	■	■	
V100-2.0 MW® IEC IIB		■	■
V100-1.8/2.0 MW™ IEC IIIA/IEC S	■		
V90-1.8/2.0 MW® IEC IIA/ IEC IIIA	■	■	■

■ Standard IEC conditions ■ Site dependent

Low Balance of Plant, installation and transportation costs

At Vestas, we use technology tailored to control loads on specific tower heights. We have applied this principle to the 2 MW platform by reducing both the weight of the turbine and the loads on the tower and foundation. This reduces foundation costs, saving you unnecessary expense.

All 2MW turbines are easy to transport (by rail, truck or ship) to virtually any site around the world. In terms of weight, height and width, all components comply with local and international standard transportation limits, ensuring you incur no unforeseen costs. In addition, 2MW turbines are built and maintained using tools and equipment that are standard in the installation and servicing industries – minimising maintenance costs.

Vestas Online® Business

All Vestas wind turbines benefit from Vestas Online® Business, the latest Supervisory Control and Data Acquisition (SCADA) system for modern wind power plants. This flexible system includes an extensive range of monitoring and management functions to control your wind power plant in the same way as a conventional power plant. Vestas Online® Business enables you to optimise production levels, monitor performance, and produce detailed, tailored reports from anywhere in the world. The system's power plant controller provides active and reactive power regulation, power ramping and voltage control.

24/7 remote surveillance with VMP Global® and Vestas Online® Business

To reduce the cost of energy, the 2 MW platform is equipped with VMP Global®, our latest turbine control and operation software. Developed to run this latest generation of turbines, VMP Global®, combined with Vestas Online® Business, automatically manages the turbine 24/7 and ensures maximum power generation. The application also monitors and troubleshoots the turbines – both onsite and remotely – saving further expense on servicing.

Designed for serviceability

Service is facilitated by the overall design of the 2 MW platform and components are specifically positioned for easy access.

Options available for the 2 MW platform

- Yaw power backup
- Increased cut-in
- Shadow detection
- Obstacle Collision Avoidance System (OCAS™)
- Smoke detection
- Aviation marking
- Load and power modes

Would you **benefit** from uninterrupted control of wind energy production?

Knowledge about wind project planning is key

Getting your wind energy project up and operating as quickly as possible is fundamental to its long-term success. One of the first and most important steps is to identify the most suitable location for your wind power plant. Vestas' SiteHunt® is an advanced analytical tool that examines a broad spectrum of wind and weather data to evaluate potential sites and establish which of them can provide optimum conditions for your project.

In addition, SiteDesign® optimises the layout of your wind power plant. SiteDesign® runs Computational Fluid Dynamics (CFD) software on our powerful in-house supercomputer Firestorm to perform simulations of the conditions on site and analyse their effects over the whole operating life of the plant. Put simply, it finds the optimal balance between the estimated ratio of annual revenue to operating costs over the lifetime of your plant, to determine your project's true potential and provide a firm basis for your investment decision.

The complexity and specific requirements of grid connections vary considerably across the globe, making the optimal design of electrical components for your wind power plant essential. By identifying grid codes early in the project phase and simulating extreme operating conditions, Electrical PreDesign provides you with an ideal way to build a grid compliant, productive and highly profitable wind power plant. It allows customised collector network cabling, substation protection and reactive power compensation, which boost the cost efficiency of your business.

Advanced monitoring and real-time plant control

All our wind turbines can benefit from VestasOnline® Business, the latest Supervisory Control and Data Acquisition (SCADA) system for modern wind power plants.

This flexible system includes an extensive range of monitoring and management functions to control your wind power plant. VestasOnline® Business enables you to optimise production levels,



+25,000

The Vestas Performance and Diagnostics Centre monitors more than 25,000 turbines worldwide. We use this information to continually develop and improve our products and services.

monitor performance and produce detailed, tailored reports from anywhere in the world. The VestasOnline® Power Plant Controller offers scalability and fast, reliable real-time control and features customisable configuration, allowing you to implement any control concept needed to meet local grid requirements.

Surveillance, maintenance and service

Operating a large wind power plant calls for efficient management strategies to ensure uninterrupted power production and to control operational expenses. We offer 24/7 monitoring, performance reporting and predictive maintenance systems to improve turbine performance and availability. Predicting faults in advance is essential, helping to avoid costly emergency repairs and unscheduled interruptions to energy production.

Our Condition Monitoring System (CMS) assesses the status of the turbines by analysing vibration signals. For example, by measuring the vibration of the drive train, it can detect faults at

an early stage and monitor any damage. This information allows pre-emptive maintenance to be carried out before the component fails, reducing repair costs and production loss.

Additionally, our Active Output Management® (AOM) concept provides detailed plans and long term agreements for service and maintenance, online monitoring, optimisation and troubleshooting. It is possible to get a full scope contract, combining your turbines' state-of-the-art technology with guaranteed time or energy-based availability performance targets, thereby creating a solid base for your power plant investment. The Active Output Management® agreement provides you with long term and financial operational peace of mind for your business case.

V110-2.0 MW™

Facts & figures

POWER REGULATION

Pitch regulated with variable speed

OPERATING DATA

Rated power	2,000 kW (50/60 Hz)
Cut-in wind speed	3 m/s
Rated wind speed	11.5 m/s
Cut-out wind speed	20 m/s
Wind class	IEC IIIA
Operating temperature range:	standard turbine: -20 °C to 40 °C. low temperature turbine: -30 °C to 40 °C

SOUND POWER

Max 107.5 dB*

(Mode 0, 10 m above ground, hub height 80 m, air density 1.225 kg/m³)

* for further information on noise limits please contact Vestas

ROTOR

Rotor diameter	110 m
Swept area	9,503 m²
Air brake	full blade feathering with 3 pitch cylinders

ELECTRICAL

Frequency	50/60 Hz
Generator type	4-pole (50 Hz)/6-pole (60 Hz) doubly fed generator, slip rings

GEARBOX

Type	two helical stages and one planetary stage
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BLADE DIMENSIONS

Length	54 m
Max. chord	3.9 m

TOWER

Type	tubular steel tower
Hub heights*	95 m and 125 m (50 Hz) 80 m and 95 m (60 Hz)

* Tower heights are preliminary and subject to change

NACELLE DIMENSIONS

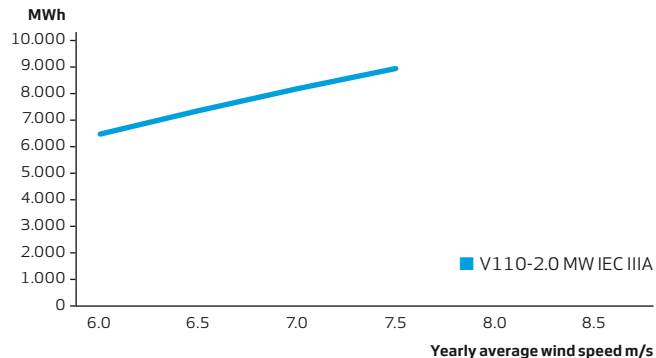
Height for transport	4 m
Height installed (incl. CoolerTop®)	5.4 m
Length	10.4 m
Width	3.5 m

HUB DIMENSIONS

Max. transport height	3.4 m
Max. transport width	4 m
Max. transport length	4.2 m

Max. weight per unit for transportation	70 metric tonnes
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ANNUAL ENERGY PRODUCTION

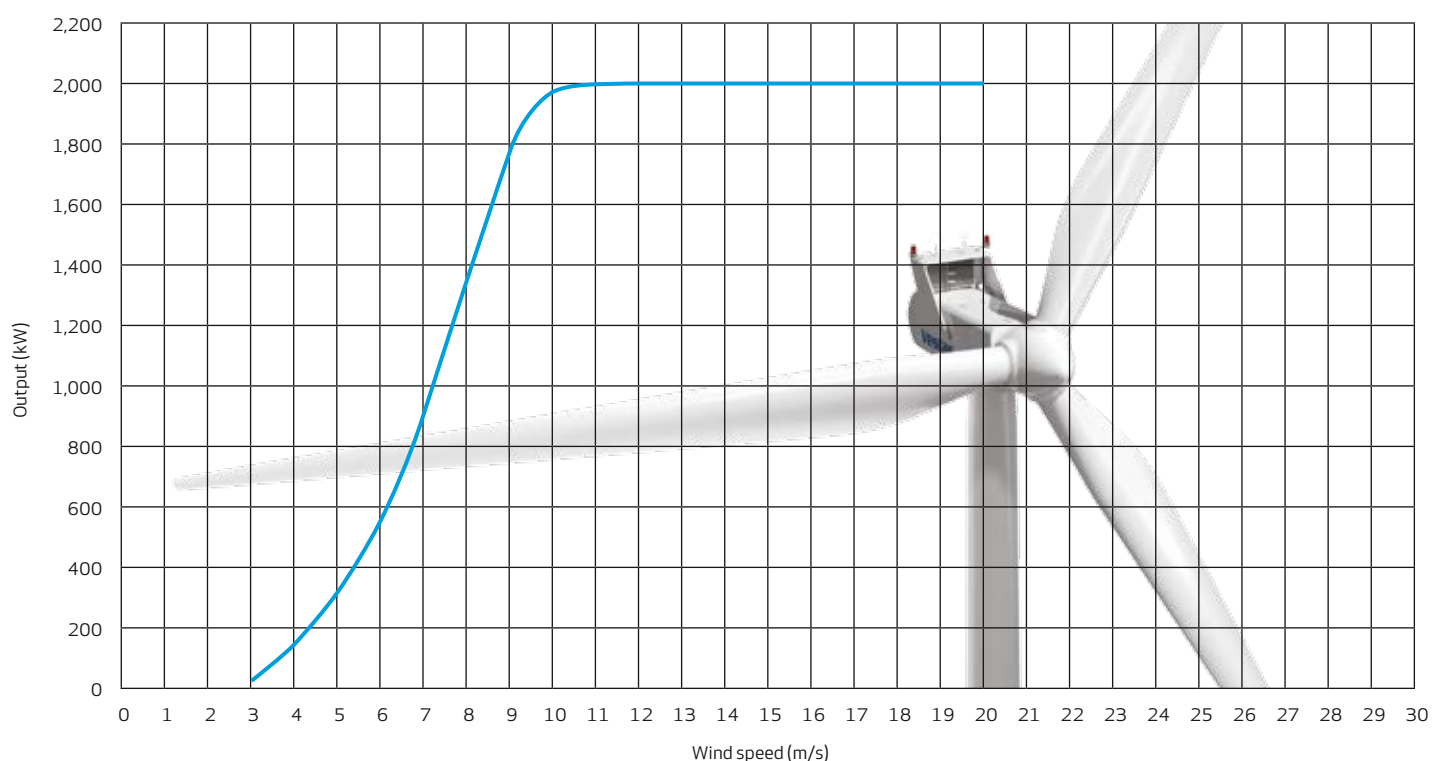


Assumptions

One wind turbine, 100% availability, 0% losses, k factor =2, Standard air density = 1.225, wind speed at hub height

POWER CURVE FOR V110-2.0 MW®

Noise reduced sound power modes are available



V110-2.0 MW FEATURES

- Vestas OptiStop pitch control strategy included to reduce loads and enable a lighter structure
- Select products from the Vestas PowerPlus™ range are added to maximise output

V110-2.0 MW OPTIONS

- Yaw Power Backup
- Increased Cut-In
- Shadow detection
- OCAS™
- Smoke detection
- Aviation marking
- Load mode

V100-2.0 MW®

Facts & figures

POWER REGULATION

Pitch regulated with variable speed

OPERATING DATA

Rated power	2,000 kW (50/60 Hz*)
Cut-in wind speed	3 m/s
Rated wind speed	12 m/s
Cut-out wind speed	22 m/s
Wind class	IEC IIB
Operating temperature range:	standard turbine: -20 °C to 40 °C. low temperature turbine: -30 °C to 40 °C

* The rated power for V100 IEC IIIA 60 Hz is limited to 1950 kW in North America

SOUND POWER

Max 105 dB*

(Mode 0, 10 m above ground, hub height 80 m, air density 1.225 kg/m³)

* for further information on noise limits please contact Vestas

ROTOR

Rotor diameter	100 m
Swept area	7,854 m²
Air brake	full blade feathering with 3 pitch cylinders

ELECTRICAL

Frequency	50/60 Hz
Generator type	4-pole (50 Hz)/6-pole (60 Hz) doubly fed generator, slip rings

GEARBOX

Type	two helical stages and one planetary stage
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BLADE DIMENSIONS

Length	49 m
Max. chord	3.9 m

TOWER

Type	tubular steel tower
Hub heights	80 m, 95 m and 120 m (IEC IIB)

NACELLE DIMENSIONS

Height for transport	4 m
Height installed (incl. CoolerTop®)	5.4 m
Length	10.4 m
Width	3.5 m

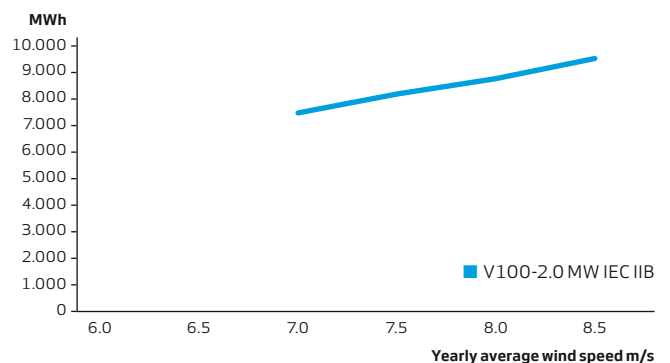
HUB DIMENSIONS

Max. transport height	3.4 m
Max. transport width	4 m
Max. transport length	4.2 m

Max. weight per unit for transportation

70 metric tonnes

ANNUAL ENERGY PRODUCTION

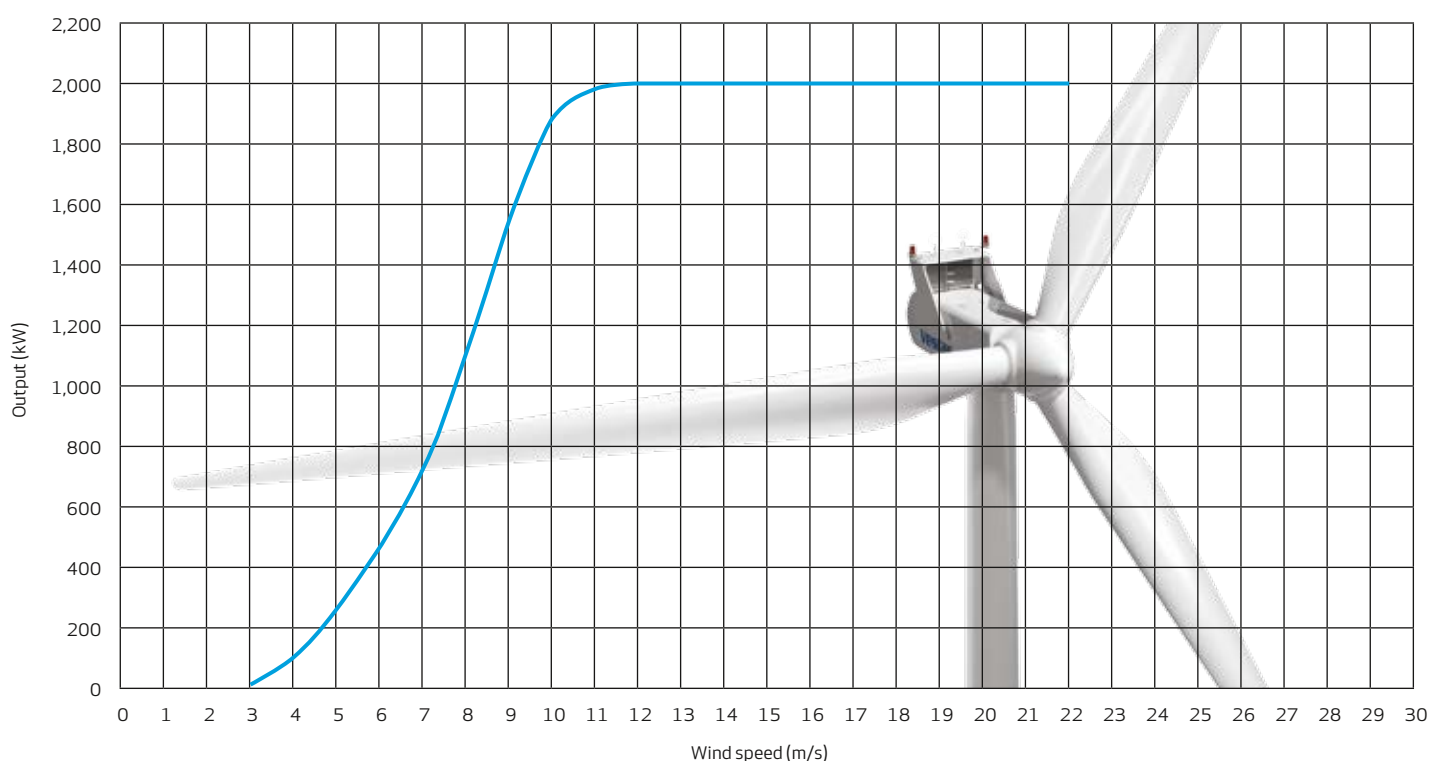


Assumptions

One wind turbine, 100% availability, 0% losses, k factor =2, Standard air density = 1.225, wind speed at hub height

POWER CURVE FOR V100-2.0 MW* (50/60 Hz)

Noise reduced sound power modes are available



V100-2.0 MW FEATURES

- Vestas OptiStop pitch control strategy included to reduce loads and enable a lighter structure
- Select products from the Vestas PowerPlus™ range are added to maximise output

V100-2.0 MW OPTIONS

- Yaw Power Backup
- Increased Cut-In
- Shadow detection
- OCAS™
- Smoke detection
- Aviation marking
- Load mode

V100-1.8/2.0 MW™

Facts & figures

POWER REGULATION

Pitch regulated with
variable speed

OPERATING DATA

Rated power	1,800/2,000 kW (50/60 Hz*)
Cut-in wind speed	3 m/s
Rated wind speed	12 m/s
Cut-out wind speed	20 m/s
Wind class	IEC S (IEC IIIA average wind/ IEC IIA extreme wind)
Operating temperature range:	standard turbine: -20 °C to 40 °C. low temperature turbine: -30 °C to 40 °C

* The rated power for V100 IEC IIIA 60 Hz is limited to 1950 kW in North America

SOUND POWER

Max 105 dB*

(Mode 0, 10 m above ground,
hub height 80 m, air density 1.225 kg/m³)

* for further information on noise limits please contact Vestas

ROTOR

Rotor diameter	100 m
Swept area	7,854 m²
Air brake	full blade feathering with 3 pitch cylinders

ELECTRICAL

Frequency	50/60 Hz
Generator type	4-pole (50 Hz)/6-pole (60 Hz) doubly fed generator, slip rings

GEARBOX

Type	two helical stages and one planetary stage
------	---

BLADE DIMENSIONS

Length	49 m
Max. chord	3.9 m

TOWER

Type	tubular steel tower
Hub heights	80 m, 95 m and 120 m (IEC IIIA)

NACELLE DIMENSIONS

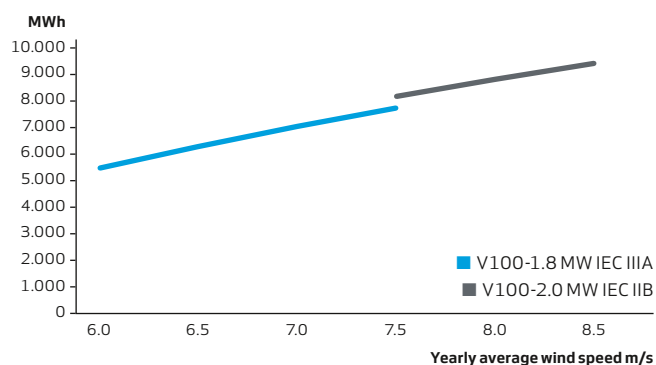
Height for transport	4 m
Height installed (incl. CoolerTop®)	5.4 m
Length	10.4 m
Width	3.5 m

HUB DIMENSIONS

Max. transport height	3.4 m
Max. transport width	4 m
Max. transport length	4.2 m

Max. weight per unit for transportation	70 metric tonnes
--	------------------

ANNUAL ENERGY PRODUCTION

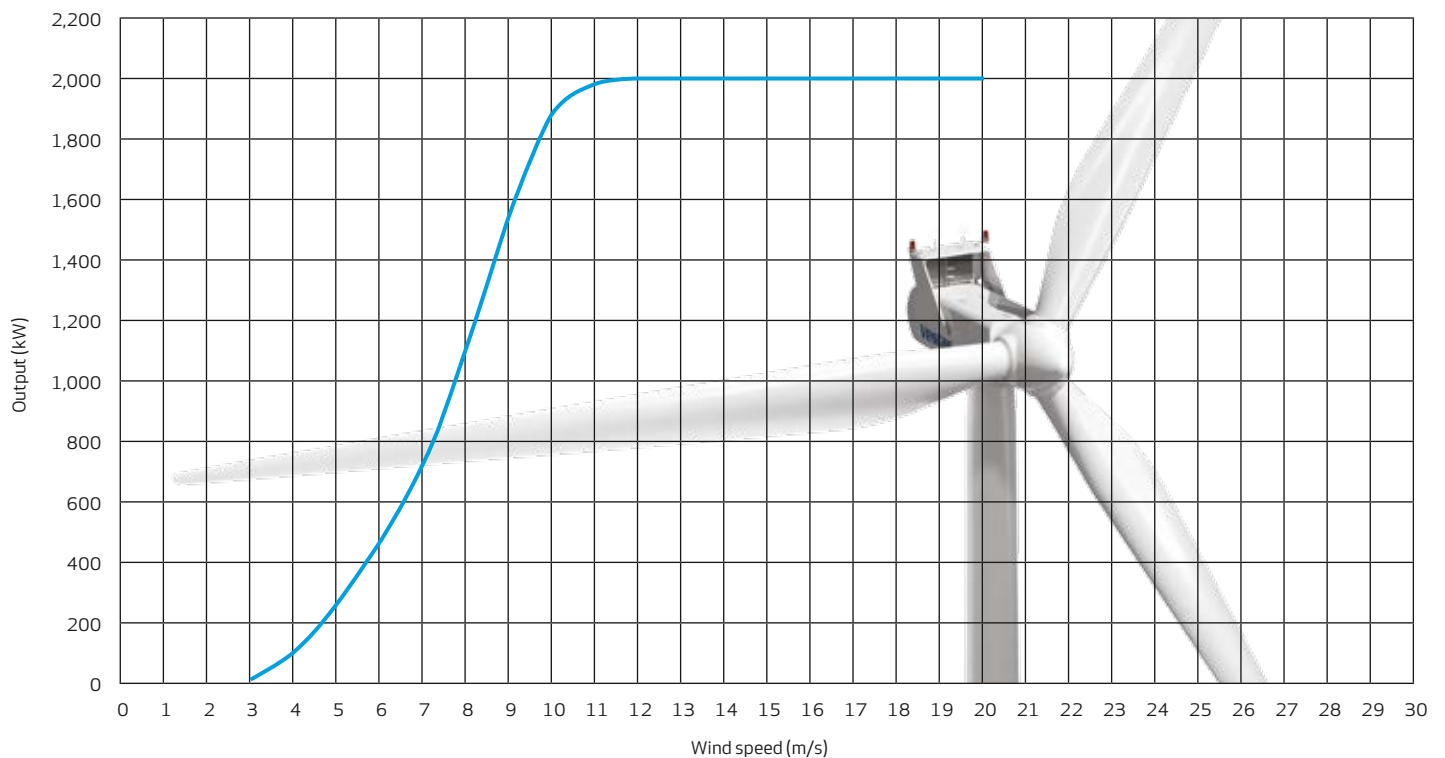


Assumptions

One wind turbine, 100% availability, 0% losses, k factor =2,
Standard air density = 1.225, wind speed at hub height

POWER CURVE FOR V100-1.8/2.0 MW* (50/60 Hz)

Noise reduced sound power modes are available



V100-1.8/2.0 MW OPTIONS

- Yaw Power Backup
- Increased Cut-In
- Shadow detection
- OCAS™
- Smoke detection
- Aviation marking
- Load and power modes

V90-1.8/2.0 MW®

Facts & figures

POWER REGULATION

Pitch regulated with variable speed

OPERATING DATA

Rated power	IEC IIA - 50 Hz: 1,800 kW IEC IIA - 60 Hz: 1,815 kW IEC IIIA - 50 Hz: 2,000 kW
Cut-in wind speed	4 m/s
Rated wind speed	12 m/s
Cut-out wind speed	25 m/s
Wind class	IEC IIA (V90-1.8 MW) IEC IIIA (V90-2.0 MW)
Operating temperature range:	standard turbine: -20 °C to 40 °C. low temperature turbine: -30 °C to 40 °C

SOUND POWER

Max 104 dB*

(Mode 0, 10 m above ground, hub height 80 m, air density 1.225 kg/m³)

* for further information on noise limits please contact Vestas

ROTOR

Rotor diameter	90 m
Swept area	6,362 m²
Air brake	full blade feathering with 3 pitch cylinders

ELECTRICAL

Frequency	50/60 Hz
Generator type	4-pole (50 Hz)/6-pole (60 Hz) doubly fed generator, slip rings
Nominal output	50 Hz: 1,800 kW/2,000 kW 60 Hz: 1,815 kW

GEARBOX

Type	two helical stages and one planetary stage
------	--

BLADE DIMENSIONS

Length	44 m
Max. chord	3.5 m

TOWER

Type	tubular steel tower
Hub heights	
V90-1.8 MW - 50 Hz	80 m, 95 m and 105 m (IEC IIA)
V90-1.8 MW - 60 Hz	80 m and 95 m (IEC IIA)
V90-2.0 MW	80 m, 95 m, 105 m and 125 m (IEC IIIA) 95 m, 105 m, and 125 m (DIBt2)

NACELLE DIMENSIONS

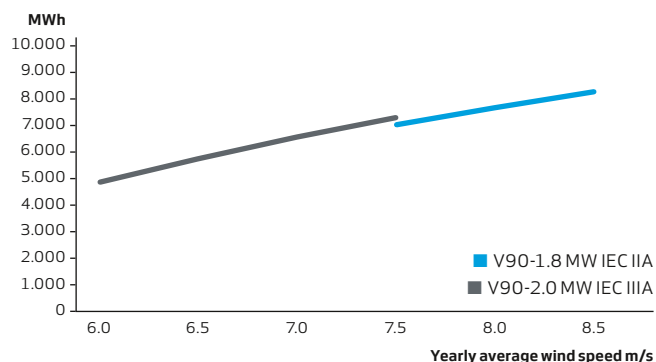
Height for transport	4 m
Height installed (incl. CoolerTop®)	5.4 m
Length	10.4 m
Width	3.5 m

HUB DIMENSIONS

Max. transport height	3.4 m
Max. transport width	4 m
Max. transport length	4.2 m

Max. weight per unit for transportation	70 metric tonnes
---	------------------

ANNUAL ENERGY PRODUCTION

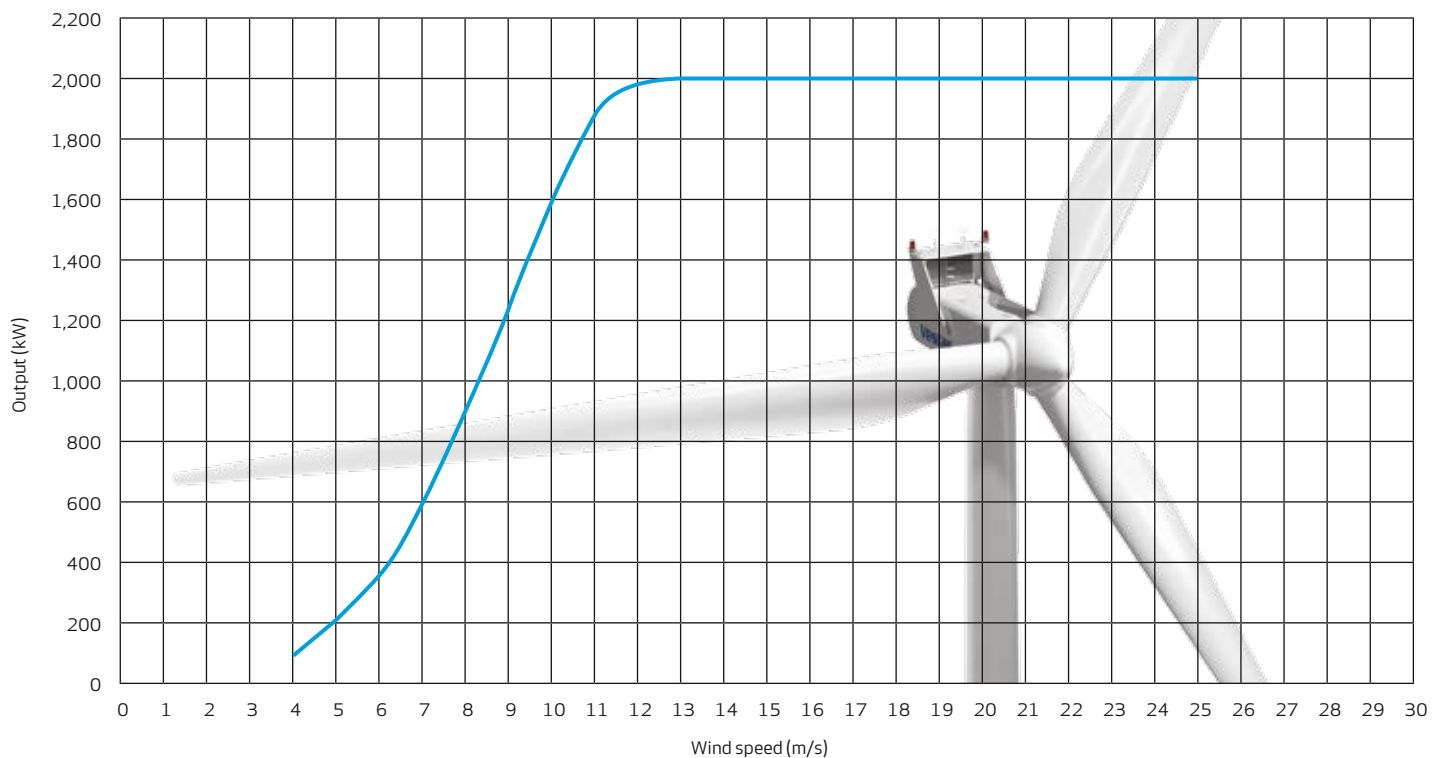


Assumptions

One wind turbine, 100% availability, 0% losses, k factor =2, Standard air density = 1.225, wind speed at hub height

POWER CURVE FOR V90-1.8/2.0 MW* (50/60 Hz)

Noise reduced sound power modes are available



V90-1.8/2.0 MW OPTIONS

- Yaw Power Backup
- Increased Cut-In
- Shadow detection
- OCAS™
- Smoke detection
- Aviation marking
- Load and power modes

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GE Power & Water
Renewable Energy



GE's 1.7-100

Best-in-class
capacity factor

ecomagination

ge-energy.com/wind



Since entering the wind industry in 2002, GE Power & Water's Renewable Energy business has invested more than 2 billion dollars in next generation wind turbines. Whether at the turbine, plant, or grid level, GE continues to focus on providing more value for our customers. Through the use of advanced analytics, GE's Renewable Energy business is redefining the future of wind power, delivering on proven performance, availability and reliability. With the integration of big data and the industrial internet, the company is helping to manage the variability of wind to provide smooth, predictable power. Our current product portfolio includes wind turbines with rated capacities ranging from 1.7 MW to 3.2 MW and support services ranging from development assistance, site optimization and operation and maintenance.

For more information visit our website:

www.ge-energy.com/wind

GE's 1.7-100 Wind Turbine

GE's 1.7-100 wind turbine offers a 47% increase in swept area when compared to the 1.6-82.5 turbine, resulting in a 24% increase in Annual Energy Production (AEP) at 7.5 m/s. This increase in blade swept area allows greater energy capture and improved project economics for wind developers. GE's 1.7-100 turbine has a 53% gross capacity factor at 7.5 m/s—a class leading performance. GE's proprietary 48.7 meter blade uses the same proven aerodynamic shape as the blades found on the 2.x-100 fleet.

GE's stringent engineering procedures result in a turbine made for high performance, reliability and availability. The use of the rotor from the proven GE 2.x-100 turbine and selected component modifications provide increased annual production with the same reliable performance as the 1.5 MW series turbine.

GE's 1.7-100 meter wind turbine advances the 1.6-100 wind turbine series by utilizing electrical system upgrades to increase the rating from 1.6 MW to 1.7 MW, allowing higher energy production while maintaining consistent workhorse performance, reliability and efficiency.

Available in 80 meter and 96 meter hub heights, these sizes provide flexible options for Class III wind sites, allowing for higher energy capture in lower wind speed environments.

Building Upon the Proven 1.5 MW and 2.5 MW Platforms

The evolution of GE's 1.5 MW turbine began with the 1.5i turbine introduced in 1996. The 65 meter rotor was increased to 70.5 meters in the 1.5s then to 77 meters in the 1.5sle turbine which was introduced in 2004. Building on the exceptional performance and reliability of the 1.5sle, GE introduced the 1.5xle with its 82.5 meter diameter in 2005. Subsequent improvements led to the 1.6-82.5 turbine, introduced in 2008. Ongoing investment in the industry workhorse resulted in the introduction of GE's 1.6-100, and now the 1.7-100 wind turbine with a 100 meter rotor. This product evolution provides an increased capacity factor while increasing AEP by 20–24%.

Incremental changes to the 1.6-100 and 1.7-100 have resulted in significant performance enhancements which include: greater blade length, controls improvements and enhanced power conversion capabilities resulting in increased AEP. With high reliability to ensure continued operation in the field, GE's 1.7-100 can provide excellent availability comparable with the 1.5 MW series units operating in the field today.

Technical Description

GE's 1.7-100 wind turbine is a three-blade, upwind, horizontal axis wind turbine with a rotor diameter of 100 meters. The turbine rotor and nacelle are mounted on top of a tubular steel tower providing hub heights of 80 meters and 96 meters. The machine uses active yaw control to keep the rotor pointed into the wind. The turbine can operate at a variable speed and uses a doubly fed asynchronous generator with a partial power conversion system.

Specifications:

1.7-100 Wind Turbine:

- Engineered to IEC 61400-1
- Standard and cold weather extreme options
- Standard tower corrosion protection; C2 internal and C3 external with optional C4 internal and C5 external available
- Rotational direction: Clockwise viewed from an upwind location
- Speed regulation: Electric drive pitch control with battery backup
- Aerodynamic brake: Full feathering of blade pitch

Features and Benefits

- Higher AEP than its 1.6 MW predecessors
- Highest capacity factor in its class
- Engineered to meet or exceed the 1.5 MW platform's historic high availability
- Grid friendly options are available
 - Enhanced Reactive Power, Voltage Ride Thru, Power Factor Control
- Wind Farm Control System; WindSCADA*
- GE proprietary 48.7 meter blade
- Available in both 50 Hz and 60 Hz versions for global suitability

Construction

Towers: tubular steel sections provide hub heights of 80 meters or 96 meters

Blades: GE 48.7 meter blades

Drivetrain components: GE's 1.7-100 uses proven gearboxes, mainshaft and generators with appropriate improvements to enable the larger rotor diameter on the 1.7 MW machine

Enhanced Controls Technology

The 1.7-100 wind turbine employs enhanced control features:

- GE's patented Advanced Loads Control reduces loads on turbine components by measuring stresses and individually adjusting blade pitch
- Controls developed by GE Global Research to minimize loads including those at near rated wind speeds to improve Annual Energy Production (AEP)

Condition Monitoring System (option)

GE's Condition Monitoring System (CMS) and SCADA Anomaly Detection Services, a complementary suite of advanced condition monitoring solutions, proactively detect impending drive train and whole-turbine issues enabling increased availability and decreased maintenance expenses. Built upon half a century of power generation drivetrain and data anomaly monitoring experience, this service solution is available as an option on new GE Units and as an upgrade.





Best-in-class capacity factor



Powering the world...responsibly.

For more than a century GE has been connecting people and ideas everywhere to create advanced technologies for powering a cleaner more productive world. Finding solutions in energy, health and home, transportation and finance—our diverse portfolio of product and service solutions and deep industry expertise help our customers solve their toughest challenges locally.

For more information, visit the company's website at www.ge.com



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GEA18628F (06/2014)

The Siemens logo, consisting of the word "SIEMENS" in a bold, teal, sans-serif font, is positioned in the top left corner. Below the text is a thick white horizontal line. The background of the entire page is a low-angle photograph of a white wind turbine against a clear blue sky.

SIEMENS

Siemens Wind Turbine SWT-2.3-108

The new productivity benchmark

www.siemens.com/wind



The industry standard, redefined

The Siemens 2.3-MW family has firmly established itself as the tried and tested workhorse for reliability, with a range of rotor diameters for different wind conditions. Our new SWT-2.3-108 adds a new, larger rotor to the family, setting a new standard for productivity

Greater output from lower wind speeds

Since wind turbine technology was in its infancy, Siemens has been a major driver of innovation. And with its enhanced reliability and productivity in low to moderate wind speeds, the new SWT-2.3-108 is yet another example of the commitment to customers' success.

Longer blades. More energy

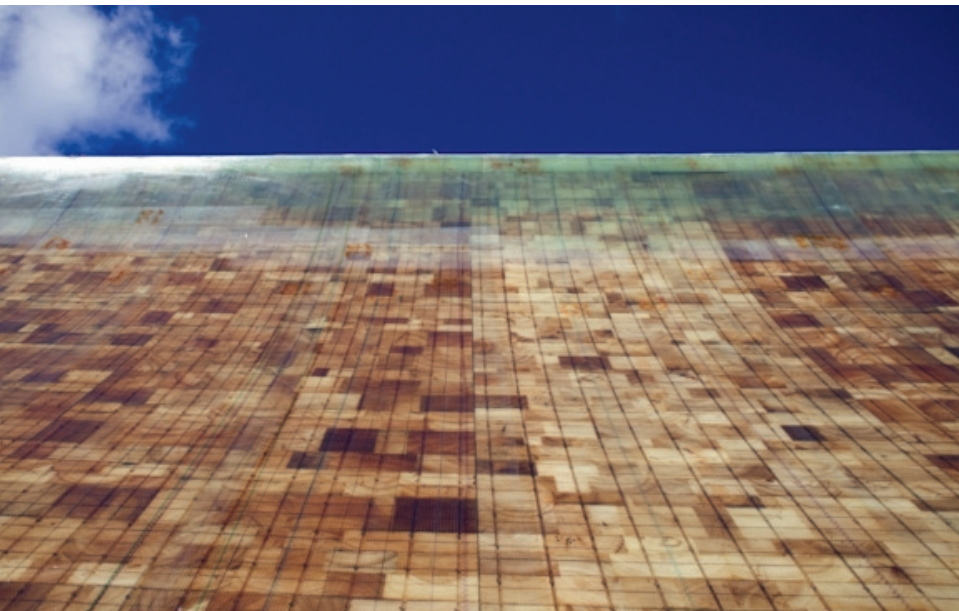
In recent years, Siemens created a product line specifically to extract more energy from moderate wind conditions. The SWT-2.3-108's innovative rotor blade design now extends productivity even further. The new 108-meter rotor with its unique blade properties is perfectly optimized for sites with low wind speeds.

Your trusted partner

With its combination of robust and reliable wind turbines, highly efficient solutions for power transmission and distribution and a deep understanding of the entire energy market, Siemens continues to be a leading supplier. Long-lasting customer relationships based on an excellent delivery record provide for a sound, sustainable and profitable investment.

With over 140 years of experience in the energy sector, a strong focus on renewables and a global network of highly skilled and trained employees, Siemens has proven itself to be a trustworthy and reliable business partner. And it will continue to be in the future.

For superior availability, reliability and a lower levelized cost of energy, look no further than the new Siemens SWT-2.3-108 turbine.



Advanced blade technology allows for longer lifecycles and contributes to lower levelized cost of energy

Superior performance provides higher yields

Optimum energy output at moderate wind conditions

The SWT-2.3-108 wind turbine is designed to increase the energy returns from sites with moderate wind conditions. The advanced blade design, with a rotor diameter of 108 meters and pitch regulation, optimize power output and increase control over energy output.

High availability

Currently, the Siemens fleet of 2.3-MW wind turbines sets the industry standard for availability. The SWT-2.3-108 will build on the reputation for reliability that the market has come to expect from a Siemens wind turbine.

High yield with minimal maintenance

Siemens optimizes the return on investment in its wind turbines through intelligent maintenance that allows high yield with low operational costs.

The rugged structural design, combined with an automatic lubrication system, internal climate control and a generator system without slip rings contributes to exceptional reliability. The innovative design of the SWT-2.3-108 allows for longer service intervals.

Superior grid compliance

The Siemens NetConverter® system is designed for maximum flexibility in the wind turbine's response to voltage and frequency variations, fault ride-through capability and output adjustment. The advanced wind farm control system provides state-of-the-art fleet management.

Proven track record

Siemens has a proven track record of providing reliable wind turbines that last. The company's first commercial turbine was installed in 1980 and still operates today. The world's first offshore wind farm in Vindeby, Denmark, was installed in 1991 and is also still fully operational. In California, Siemens installed over 1,100 units between 1983 and 1990, with 97% still in operation today.

Siemens takes its commitment to reliability seriously and prides itself on the long lifespan that its wind turbines have demonstrated.

Siemens' Turbine Condition Monitoring® system instantly detects deviations from normal operating conditions



No compromise on reliability

SWT-2.3-108: The newest member of an extremely reliable product family

Siemens wind turbines are designed to last. The robust design of the SWT-2.3-108 allows for trouble-free output throughout the complete lifecycle of the machine.

Instead of glueing the blades together from a number of spars and shells, they are cast in a single process. This not only enables both low weight and enormous strength, there are no glue joins which could potentially expose the blades to cracking and lightning damage.

Climate control within the nacelle protects vital equipment from the outside environment. The wind turbine also offers controlled-wear strategies for critical components, which results in a further reduction of maintenance costs.

Safety first

Safety is at the heart of all Siemens' operations. From production to installation, operation and service, Siemens strives to set the standard in safety.

The fail safe capabilities within a wind turbine, combined with Siemens' superior lightning protection system, are designed to enhance security for the turbine.

Advanced operations support

Given the logistical challenges associated with servicing wind farms, Siemens has equipped its turbines with a Turbine Condition Monitoring® system that reduces the need for on-site servicing.

Siemens' Turbine Condition Monitoring® system compares the vibration levels of the main nacelle components with a set of established reference spectra and instantly detects deviations from normal operating conditions. This allows Siemens to proactively plan the service and maintenance of the wind turbines, as any unusual event can be categorized and prioritized based on severity.

Using the knowledge gained from monitoring thousands of wind turbines over the years, Siemens' experts are exceptionally skilled at analyzing and predicting operational anomalies. This allows Siemens to proactively plan service and maintenance activity as each event can be categorized and prioritized based on severity. Siemens can then determine the most appropriate course of action to keep the wind turbine running at its best.

Technical Specifications

SWT-2.3-108

Rotor

Type	3-bladed, horizontal axis
Position	Upwind
Diameter	108 m
Swept area	9144 m ²
Speed range	6-16 rpm
Power regulation	Pitch regulation with variable speed
Rotor tilt	6 degrees

Blade

Type	Self-supporting
Blade length	53 m
Root chord	3.4 m
Aerodynamic profile	NACA63.xxx, FFAxxx, SWPxxx
Material	GRE
Surface gloss	Semi-gloss, <30 / ISO2813
Surface colour	Light grey, RAL 7035

Aerodynamic brake

Type	Full-span pitching
Activation	Active, hydraulic

Load-Supporting Parts

Hub	Nodular cast iron
Main bearing	Spherical roller bearing
Main shaft	Alloy steel
Nacelle bed plate	Steel

Transmission system

Coupling hub - shaft	Flange
Coupling shaft - gearbox	Shrink disc
Gearbox type	3-stage planetary/helical
Gearbox ratio	1:91
Gearbox lubrication	Splash/forced lubrication
Oil volume	Approx. 400 l
Gearbox oil filtering	Inline and offline
Gearbox cooling	Separate oil cooler
Gearbox designation	PEAB 4456 (Winergy) or EH851 (Hansen)
Coupling gear - generator	Double flexible coupling

Mechanical brake

Type	Hydraulic disc brake
Position	High speed shaft
Number of callipers	2

Canopy

Type	Totally enclosed
Material	Steel
Surface gloss	Semi-gloss, 25-45, ISO2813
Colour	Light grey, RAL 7035

Generator

Type	Asynchronous
Nominal power	2,300 kW
Protection	IP 54
Cooling	Integrated heat exchanger
Insulation class	F

Grid Terminals (LV)

Nominal power	2,300 kW
Voltage	690 V
Frequency	50 Hz or 60 Hz

Yaw system

Type	Active
Yaw bearing	Externally geared slew ring
Yaw brake	Passive friction brake
Yaw drive	Eight electric gear motors with frequency converter

Controller

Type	Microprocessor
SCADA system	WPS via modem
Controller designation	KK WTC 3.0
Controller manufacturer	KK Electronic A/S

Tower

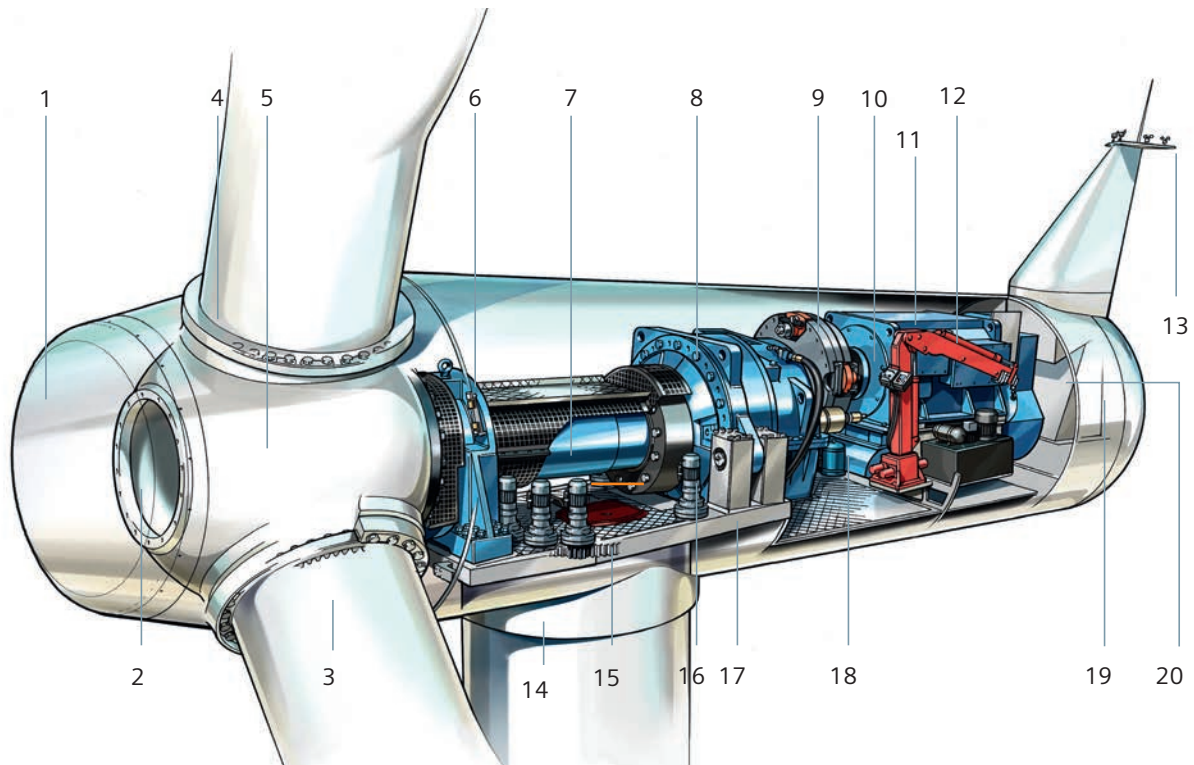
Type	Cylindrical and/or tapered tubular
Hub height	80 m or site-specific
Corrosion protection	Painted
Surface gloss	Semi-gloss, 25-45, ISO2813
Colour	Light grey, RAL 7035

Operational data

Cut-in wind speed	3-4 m/s
Rated power at	11-12 m/s
Cut-out wind speed	25 m/s
Maximum 3 s gust	59.5 m/s (IEC version)

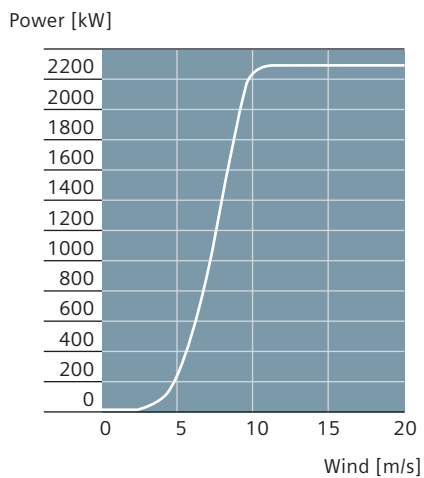
Weights (approximately)

Rotor	60,000 kg
Nacelle	82,000 kg



Sales power curve

The calculated power curve data are valid for standard conditions of 15 degrees Celsius air temperature, 1013 hPa air pressure and 1.225 kg/m³ air density, clean rotor blades and horizontal, undisturbed air flow. The calculated curve data are preliminary.



Nacelle arrangement

- | | |
|--------------------|----------------------------|
| 1. Spinner | 11. Generator |
| 2. Spinner bracket | 12. Service crane |
| 3. Blade | 13. Meteorological sensors |
| 4. Pitch bearing | 14. Tower |
| 5. Rotor hub | 15. Yaw ring |
| 6. Main bearing | 16. Yaw gear |
| 7. Main shaft | 17. Nacelle bedplate |
| 8. Gearbox | 18. Oil filter |
| 9. Brake disc | 19. Canopy |
| 10. Coupling | 20. Generator fan |

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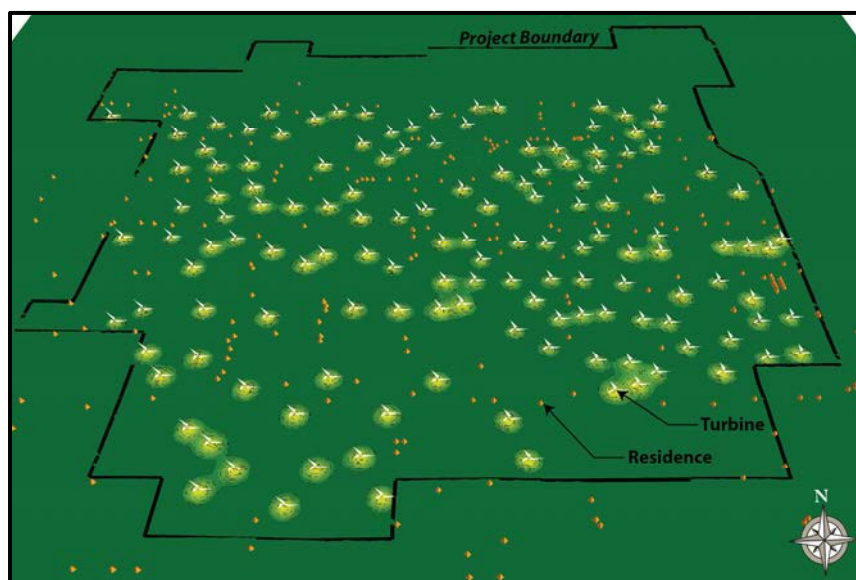
Subject to change without prior notice.
The information in this document contains
general descriptions of the technical options
available, which may not apply in all cases.
The required technical options should therefore
be specified in the contract.

Wind Turbine Noise Analysis

for the proposed

Twin Forks Wind Energy Project

June 2, 2015



Prepared for:

E.ON

353 North Clark Street, 30th Floor

Chicago, Illinois

Prepared By:

Hankard Environmental

Acoustical Consultants

Madison Wisconsin



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- A: Turbine Locations
- B: Residence Locations
- C: Turbines to be Operated in Mode 1
- D: Predicted Octave Band Noise Levels (dB)

1. Introduction

The proposed Twin Forks Wind Energy Project will be located on private land northeast of Decatur, Illinois in Macon County, as shown in Figure 1. The Project is bordered by 2400th Ave to the west, U.S. 51 to the east, the Village of Warrensburg, IL to the south, and West Lake Fork Road to the north. The Twin Forks Project consists of 140 Vestas model V110-2.0 turbines, each of which can produce 2.0 megawatts for a total Project capacity of 280 megawatts.

Noise from the proposed wind turbines must comply with applicable sections of Illinois Title 35: Environmental Protection, Subtitle H: Noise, Chapter I: Pollution Control Board. Compliance is demonstrated herein through the use of a detailed, conservative acoustical model. This report provides a description of the applicable noise standard, the Project site, the noise modeling methodology employed, and the predicted noise level results and demonstration of compliance.

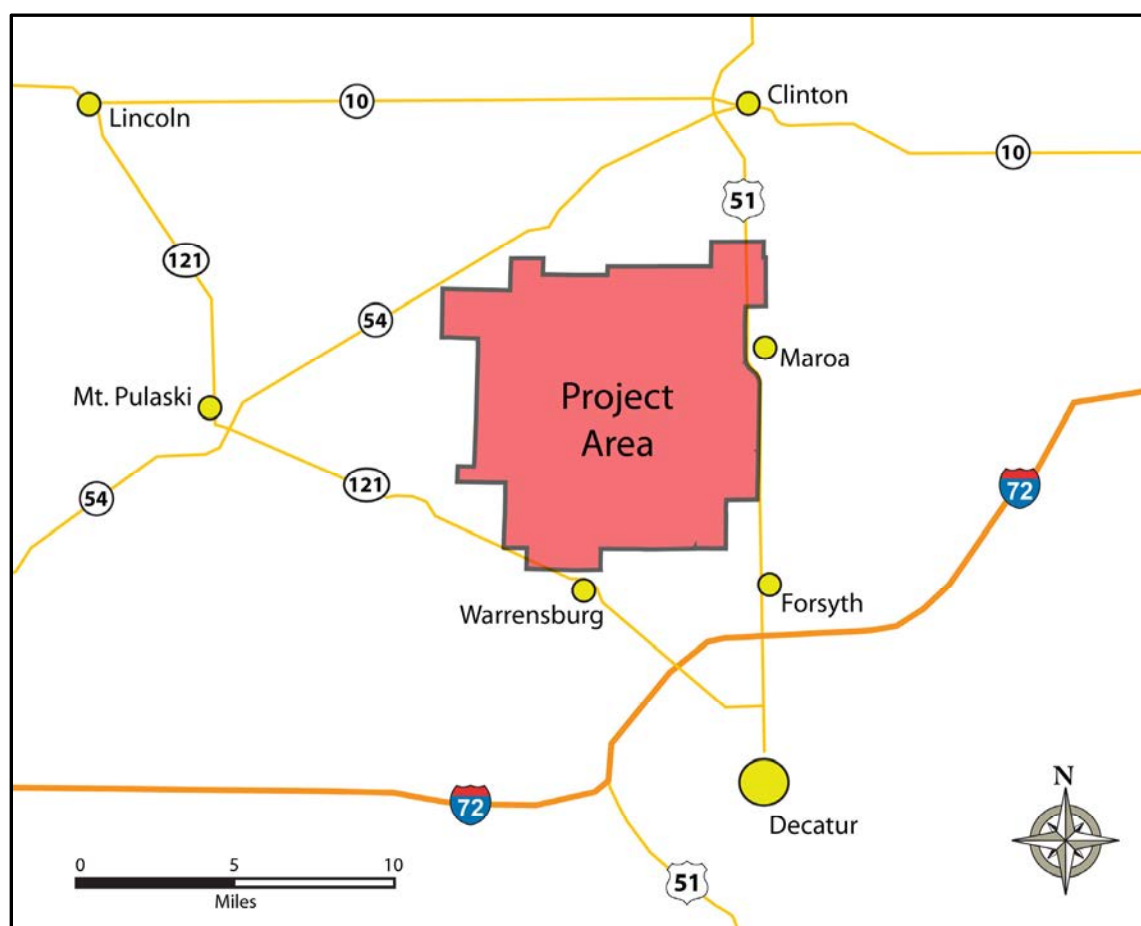


Figure 1: Approximate Location of the Twin Forks Wind Energy Project

2. Applicable Noise Standard

Noise emissions from the Project must adhere to the limits promulgated by Illinois Title 35: Environmental Protection, Subtitle H: Noise, Chapter I: Pollution Control Board. Specifically applicable to this project is Part 900 (General Provisions) and Part 901 (Sound Emission Standards and Limitations for Property Line-Noise-Sources).

Part 901 provides limits for noise generated on an “emitting parcel” of land that travels through the air and crosses a property line onto a “receiving parcel” of land. The noise level limits applicable under the Illinois Pollution Control Board (IPCB) rules are dependent on land use occurring on the emitting and receiving parcels. The rules specify three general classes of land use. Emitting land uses specified are (nominally) residential (Class A), commercial (Class B), and industrial (Class C). Receiving land uses specified are (nominally) residential (Class A) and commercial (Class B). Per Section 901.101, land use is classified according to the Land-Based Classification Standards (LBCS). The turbines will be located on agricultural land, which is designated Class C. Thus, the emitting land is Class C.

In terms of receiving land, there are three primary types of land use occurring within the Project study area: residential, agricultural, and unclassified. The latter two do not have any noise limits. There are limits for noise emitted from a Class C parcel onto land used as residential (Class A). These limits differ with time of day. Limits are lower during the nighttime, which is defined as 22:00 to 07:00 (and therefore daytime is defined as 07:00 to 22:00). Because the Project will operate 24 hours per day, the more stringent nighttime limits are the controlling limits.

Furthermore, the Illinois limits are expressed in terms of nine different "octave bands levels". This is in contrast to most other noise rules where the limit is a single number (usually the “A-weighted level”). The A-weighted level represents the weighted sum of all acoustic energy across the entire audible spectrum, which in general ranges from 20 to 20,000 Hertz (Hz). For the purposes of measurement and analysis, this large spectrum of frequencies has been divided into nine standard sub-ranges, or bands, by the American National Standards Institute (ANSI S1.11). The bands have center frequencies of 31.5, 63, 125, 250, 500, 1000, 2000, 4000, and 8000 Hz. Note that each frequency is a doubling of the one before it, i.e. an octave.

The Illinois rules provide specific limits in each of these nine octave bands separately based on land use and time of day as discussed above. The controlling limits applicable to the Twin Forks Project are listed in Table 3-1, below. The Illinois rules state that no person shall cause or allow the emission of sound from any property-line-noise-source that exceeds any allowable octave band sound pressure level when measured at any point within a receiving land, provided, however, that no measurement of sound pressure levels shall be made less than 25 feet from such property-line-noise-source. Note that only the residence itself is considered applicable. Thus, exterior noise levels from the Project were predicted at the center of each residence located within the Project study area.

**Table 1: Allowable Octave Band Sound Pressure Levels (dB)
of Sound Emitted to Any Receiving Class A Land
from Any Class C Land (IPCB)**

<i>Octave Band Center Frequency (Hz)</i>	<i>Nighttime Noise Level Limit (dB)</i>
31.5	69
63	67
125	62
250	54
500	47
1,000	41
2,000	36
4,000	32
8,000	32

Source: 35 Ill. Adm. Code 901.102, Amended at 30 Ill. Reg.5533, effective March 10, 2006

3. Project Site

The general layout of the proposed Twin Forks Wind Energy Project is shown in Figure 2. The location of each of the 140 proposed turbines is shown (as is their proposed maximum operating mode, which is explained in Section 4.0, below). Also shown is the location of each of the 228 residences where noise levels were predicted, which includes all residences located within approximately one mile of any Twin Forks wind turbine. Noise levels at more distant residences will be well below IPCB noise limits, if affected at all by noise from Twin Forks operations. The Universal Transverse Mercator (UTM) coordinates of each turbine and each residence are provided in Appendix A and B, respectively. Note that if the Project Applicant changes the project layout, turbine type, utilizes alternative turbine sites, and/or if a fewer/greater number of turbines are operated in a different operating mode, this noise analysis should be updated accordingly and compliance again demonstrated.

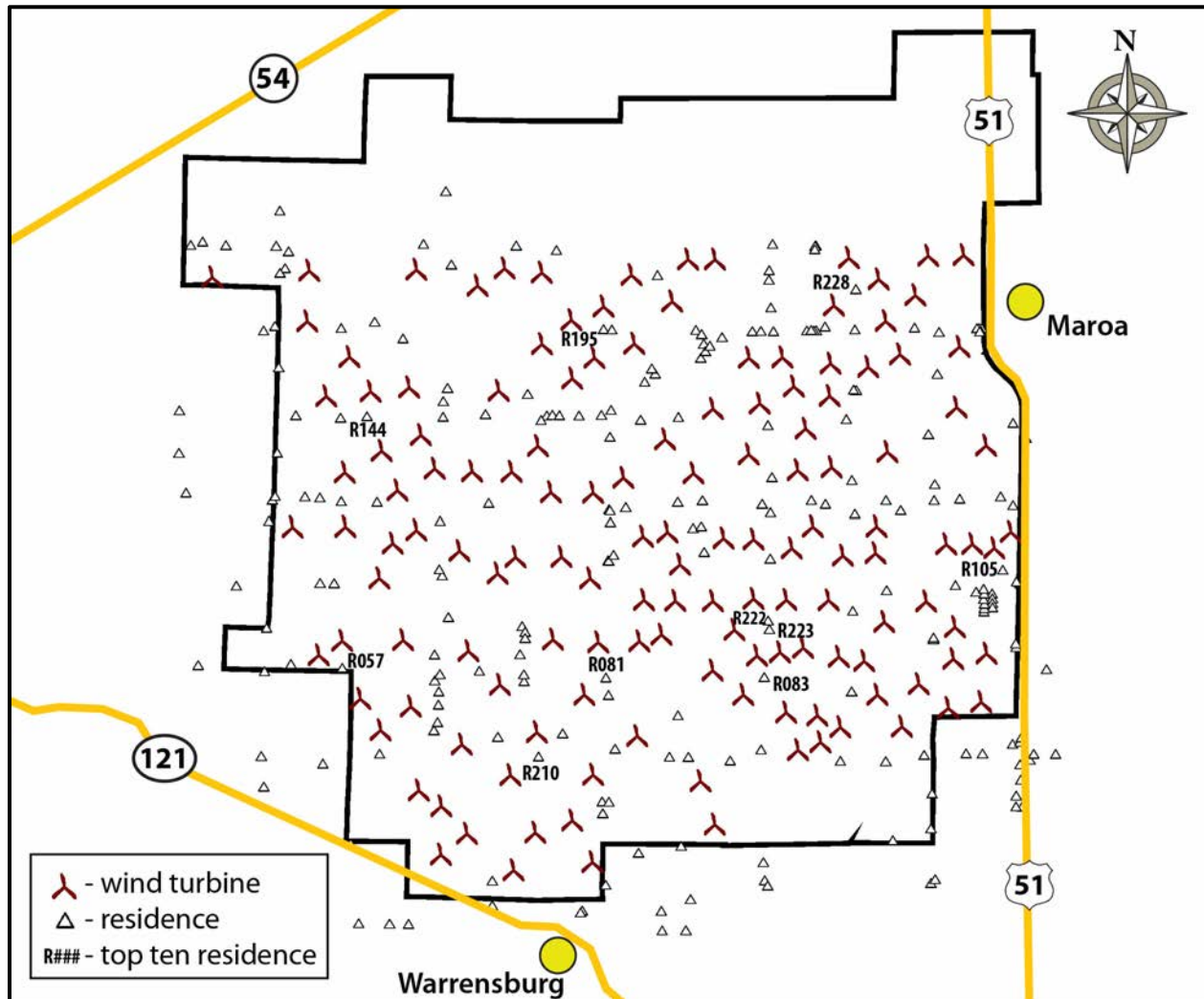


Figure 2: Twin Forks Wind Energy Project Noise Analysis Site Plan

4. Noise Modeling Methodology

Noise levels from the proposed Twin Forks turbines were modeled (predicted) using the International Organization for Standardization (ISO) method 9613-2 (1996), *Attenuation of Sound During Propagation Outdoors*. The method was implemented using the SoundPLAN v7.3 acoustical modeling software program. A sample view of the resulting acoustical model is provided in Figure 3.

Terrain

The terrain in the project area was modeled by importing into the model ground elevation in the USGS NED (National Elevation Dataset) - 1 arc second resolution (~30 meters). The acoustical effect of the ground was modeled using ISO 9613-2's "general method". This requires the selection of ground factors for the ground near the source, near the receiver, and between the two. Ground factors range from 0.0 to 1.0 and effect how much sound is absorbed or reflected (0.0 represents completely reflective terrain such as pavement, and 1.0 represents absorptive terrain such as thick grass or crops). For this project we assumed a ground factor of 0.0 (reflective) to be conservative. Actual ground conditions could at times be 0.0 when the ground is completely frozen, but would generally be closer to 0.5 when the ground is covered with new snow, crops, or the ground is bare and unfrozen.

Atmospheric Conditions

The air temperature, relative humidity, and atmospheric pressure were set to standard day conditions of 10°C, 70%, and 1 atmosphere, respectively.

Noise Receivers

In the SoundPLAN model receivers (prediction points) were located at each of the 228 residences located within the Project study area. The location of the residences was provided by E.On, and the coordinates of each are provided in Appendix B. In accordance with ISO 9613-2, the height above the ground for each receiver was set to 5 feet (1.5 meters).

Noise Sources

Noise levels were predicted assuming the operation of all 140 turbines that make up the 280 megawatt Twin Forks Wind Energy Project. The Vestas V110-2.0 turbines can be operated in standard mode (Mode 0), or in Noise Reduced Operation (NRO) modes. When in NRO mode, the turbine blades are pitched out of the wind earlier on the turbine's power curve in order to limit the speed of the turbine, and subsequently limit the maximum noise produced by the turbine. On this project, 72 specific turbines will need to be operated in Mode 1 during the nighttime, while the remaining 68 turbines can be operated in Mode 0 at all times. All turbines can be operated in Mode 0 during the daytime. The list of specific Mode 1 turbines is shown in Appendix A. In the SoundPLAN model each turbine was represented as an acoustical point source located at its hub-height (95 meters above the ground). No directivity was applied to the

noise sources. The sound power level data used in this analysis for each NRO mode is shown in Table 2, below. As can be seen, Mode 1 operation is approximately 2 dB quieter than Mode 0.

The sound power levels were obtained from Vestas, and were determined according to International Electrotechnical Commission (IEC) Standard 61400-11. The IEC 61400-11 standard requires sound power levels to be reported for a number of wind speed “bins” across the operating range of the turbine. In general, sound levels increase with increasing winds speeds up to approximately 10 meters per second at hub-height. Noise levels do not increase any more above this speed, because the turbines reach a maximum rotational speed. The maximum noise levels reported by Vestas were used in this analysis, which are those measured when the wind speed measured at a height of 10 meters is 14 meters per second.

Table 2: Wind Turbine Sound Power Levels, Octave Band and Overall, dBA

Center Frequency (Hz)	31.5	63	125	250	500	1,000	2,000	4,000	8,000	Overall
Vestas V110-2.0 Mode 0	115	112	108	104	102	103	102	94	83	122
Vestas V110-2.0 Mode 1	113	110	106	102	100	100	99	92	81	120

Data Source: Vestas

Validation of Noise Prediction Method

The noise level method employed on this Project has been validated by a number of acoustical consultants, including Hankard Environmental. Validation involves the comparison of predicted noise levels to those measured at operating wind farms. Most notably, the author compared noise levels measured over the course of four months near an existing Illinois wind farm employing similar turbines to the noise levels predicted by an acoustical model of that project using the methods described above. The results of that validation showed that the model over-predicts noise levels in all bands except 500 Hz, where it under-predicts by approximately 1 dB. To account for this, predicted noise levels were adjusted upward by 1 dB in the 500 Hz band and downward by 2 dB in the 1,000 Hz band. Additionally, the validation compared predicted levels to the very highest measured turbine-only noise levels. A majority of the time turbine noise levels will be less than those predicted. This is because, in addition to the conservative ground attenuation factor, sound levels were calculated assuming maximum turbine operations (which will not always be the case), and it was assumed that all receivers are downwind of all turbines at all times (a physical impossibility).

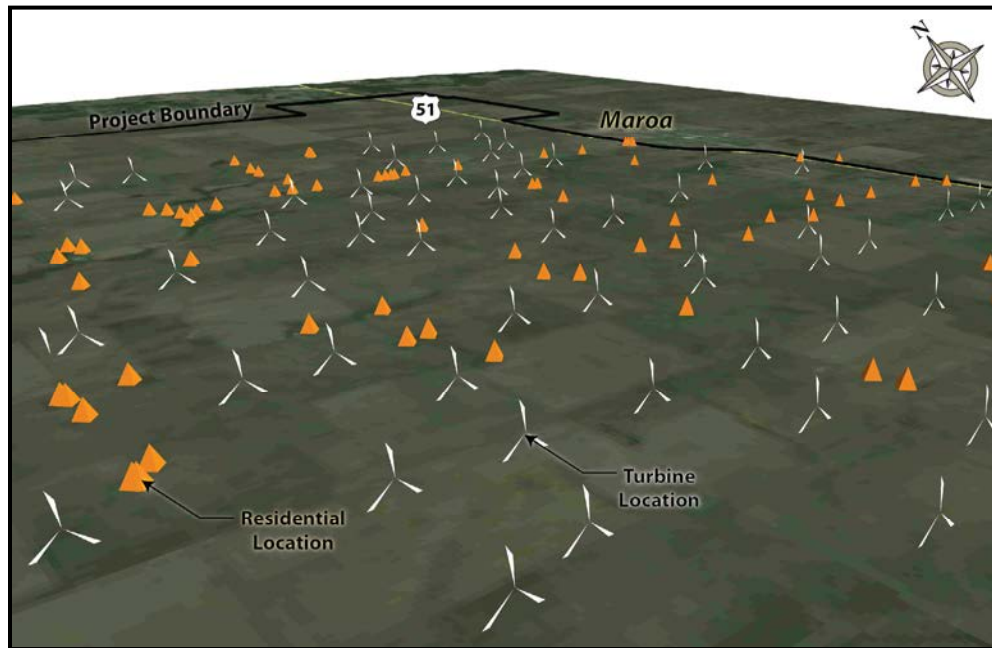


Figure 3: 3D View of Twin Forks Wind Project SoundPLAN Noise Model

5. Predicted Noise Levels

Noise levels from the full and continuous operation of the Twin Forks Wind Project were predicted at each of the 228 residences located within the Project study area. The predicted octave band noise levels at each residence are listed in Appendix C. None of the predicted levels exceed their respective octave band limits (Table 1) at any receiver location. Given the conservative nature of this analysis it can be confidently concluded that maximum turbine noise emissions from the Twin Forks Project will not exceed IPCB limits, and a majority of the time turbine noise levels will be well below the limits. For informational purposes, Table 3 lists the 10 residences where noise levels are within (but lower than) approximately 1 dB of the limit in the 1,000 Hz octave band (this is the band that controls compliance).

Table 3: Loudest Predicted Noise Levels (Octave Band, dB)

Residence	31.5	63	125	250	500	1,000	2,000	4,000	8,000
IPCB Allowable	69	67	62	54	47	41	36	32	32
R057	59	56	51	46	44	41	38	17	-41
R222	59	56	52	47	45	41	38	18	-35
R228	56	54	51	46	44	41	38	18	-36
R083	58	55	51	47	45	41	37	18	-35
R223	57	55	51	47	45	41	37	16	-43
R210	58	55	51	46	44	40	37	17	-38
R081	58	55	51	46	44	40	37	15	-41
R105	57	54	50	45	44	40	37	17	-36
R144	58	55	51	46	44	40	37	15	-40
R195	57	55	51	46	44	40	37	17	-36

Data Source: Hankard Environmental Inc.

APPENDIX A

Turbine Locations

Turbine	Northing (meters)	Easting (meters)	Elevation (hub height - 95m AGL)	Operational Mode
T001	324838	4423638	293	0
T002	323338	4423485	288	0
T003	321950	4423783	285	0
T004	327172	4424356	316	0
T005	326900	4425178	308	0
T006	325693	4426042	299	0
T007	324850	4425300	292	0
T008	324452	4424433	289	0
T009	323750	4424200	287	0
T010	322446	4424182	283	0
T011	321960	4424706	283	0
T012	321527	4425004	282	0
T013	320800	4426150	282	0
T014	321380	4426601	282	0
T015	320417	4426747	282	0
T016	319624	4427580	281	0
T017	320069	4427851	282	0
T018	321230	4427863	283	0
T019	332248	4426686	302	0
T020	331623	4426573	304	0
T021	330739	4426220	303	1
T022	329562	4426207	308	1
T023	329184	4425921	309	1
T024	328757	4425774	313	0
T025	329124	4426431	321	1
T026	328532	4426487	318	1
T027	327715	4426824	301	1
T028	330271	4426826	311	1
T029	331058	4427026	304	1
T030	332351	4427609	305	1
T031	331747	4428112	308	1
T032	331201	4428601	306	1
T033	330400	4428209	306	1
T034	330018	4427468	311	1
T035	329533	4427546	312	1
T036	329341	4428624	309	1
T037	328856	4427718	315	1
T038	328534	4428632	314	1
T039	328412	4427634	320	1
T040	327911	4428654	317	1
T041	327976	4427566	311	1
T042	327128	4427289	296	0
T043	327544	4428061	306	1

T044	327134	4428606	317	1
T045	326418	4428610	314	0
T046	326155	4427970	305	0
T047	325733	4427842	302	0
T048	325823	4428626	306	0
T049	324950	4427824	286	0
T050	332814	4429925	306	0
T051	332495	4429617	305	0
T052	332079	4429694	307	0
T053	331582	4429688	308	0
T054	330233	4429517	309	0
T055	330254	4430022	312	1
T056	329610	4429472	307	1
T057	329041	4430022	312	1
T058	328639	4429609	313	1
T059	327911	4429782	311	1
T060	327338	4429803	310	1
T061	326510	4429301	315	1
T062	326270	4429917	309	1
T063	325801	4429836	307	1
T064	324796	4429038	289	1
T065	324250	4429450	289	0
T066	323374	4429444	287	0
T067	323031	4429130	286	0
T068	322303	4429562	285	1
T069	321485	4429954	285	1
T070	321031	4429703	284	1
T071	320775	4429044	283	0
T072	320132	4430017	284	1
T073	331783	4432282	306	0
T074	319124	4430009	284	1
T075	320119	4431046	284	1
T076	320823	4431454	285	1
T077	321569	4431754	286	0
T078	321123	4430702	285	1
T079	321833	4431117	287	0
T080	322545	4431066	288	1
T081	323300	4431057	289	0
T082	323800	4431550	291	1
T083	324045	4430668	290	0
T084	324851	4430657	294	1
T085	325430	4430943	300	0
T086	326223	4431673	310	1
T087	326766	4431030	311	1
T088	327818	4431391	310	1
T089	331834	4433438	309	1

T090	328750	4431087	313	1
T091	329397	4431141	311	1
T092	330462	4431435	309	1
T093	328903	4431877	315	1
T094	327134	4432257	317	1
T095	328026	4432357	315	1
T096	328678	4432683	319	0
T097	327822	4433227	320	0
T098	328459	4433234	318	1
T099	329378	4433115	317	1
T100	330095	4433053	313	1
T101	330700	4433289	313	1
T102	330428	4433925	311	1
T103	329441	4434223	312	1
T104	330293	4434721	308	0
T105	330993	4434418	311	1
T106	331236	4435167	310	0
T107	329725	4435125	308	1
T108	327175	4435098	311	0
T109	326664	4435099	313	1
T110	326357	4434297	313	1
T111	325583	4434802	301	1
T112	325637	4433493	308	1
T113	325050	4434200	305	1
T114	324437	4433946	299	1
T115	324874	4433228	305	1
T116	324455	4432831	301	0
T117	323878	4433485	295	0
T118	323050	4432600	290	0
T119	322650	4434600	287	0
T120	331912	4435178	308	0
T121	321485	4434902	285	0
T122	324683	4426824	286	0
T123	321345	4432663	286	0
T124	320612	4432583	285	0
T125	319765	4432493	283	0
T126	320210	4433244	285	0
T127	323077	4427015	284	1
T128	319403	4433920	285	0
T129	319442	4434883	283	0
T130	332340	4431558	306	0
T131	317592	4434757	281	0
T132	323277	4425294	284	0
T133	322349	4425876	283	0
T134	323780	4426109	285	0
T135	322474	4427658	284	1

T136	324088	4427877	286	0
T137	331717	4427508	305	1
T138	329362	4432499	313	1
T139	323872	4434847	291	0
T140	323164	4434927	288	0

APPENDIX B

Receptor Locations

Receiver	Northing (meters)	Easting (meters)	Elevation (1.5m AGL)
R001	320779	4425673	189
R002	323036	4425992	189
R003	331339	4427846	213
R004	329837	4433735	222
R005	321227	4433565	192
R006	318980	4434900	190
R007	320384	4422445	195
R008	320973	4422436	203
R009	321333	4422432	203
R010	325718	4423788	219
R011	328121	4423261	212
R012	328177	4423162	212
R013	331288	4423208	206
R014	331369	4423282	206
R015	333027	4424663	209
R016	333000	4425174	207
R017	333668	4425667	210
R018	333173	4425558	210
R019	332911	4424669	209
R020	332916	4424874	208
R021	332989	4425469	209
R022	330427	4425531	209
R023	320234	4423960	189
R024	319700	4425484	187
R025	318576	4425046	185
R026	318527	4425625	186
R027	318588	4427243	187
R028	331161	4425648	209
R029	331960	4425677	208
R030	332274	4425675	208
R031	332845	4425858	208
R032	332985	4425899	209
R033	333014	4425978	209
R034	333248	4425668	210
R035	333493	4427281	211
R036	318051	4428872	190
R037	317323	4427356	189
R038	318832	4431391	191
R039	317094	4430629	192
R040	316959	4431385	189
R041	316967	4432192	189
R042	328272	4435361	217
R043	326474	4432070	219
R044	318627	4428068	189

R045	330563	4424027	207
R046	331288	4424250	207
R047	326528	4423915	223
R048	326708	4422906	220
R049	326618	4422311	218
R050	326168	4422307	218
R051	326151	4422680	215
R052	325092	4423178	207
R053	322929	4423255	195
R054	319092	4427380	187
R055	319914	4428918	189
R056	319648	4428919	188
R057	320069	4427304	189
R058	321819	4426119	189
R059	321885	4426272	189
R060	321903	4426604	189
R061	321910	4426856	190
R062	321831	4427068	190
R063	321930	4427184	190
R064	321827	4427561	190
R065	322684	4427250	191
R066	323534	4427052	191
R067	323529	4427183	191
R068	323460	4427562	191
R069	323498	4428101	193
R070	323557	4427991	190
R071	322093	4428271	192
R072	321977	4429066	192
R073	321919	4429181	192
R074	325032	4424537	203
R075	325021	4424761	204
R076	326468	4426402	203
R077	326305	4425614	214
R078	326666	4425612	211
R079	325270	4425764	201
R080	325144	4426789	194
R081	325096	4427123	194
R082	328052	4425753	216
R083	328115	4427128	219
R084	331309	4424914	209
R085	329562	4425537	211
R086	329777	4426855	221
R087	329798	4428391	215
R088	332916	4427704	209
R089	332904	4427772	209
R090	331338	4427883	213

R091	330444	4428783	213
R092	331756	4428878	215
R093	332149	4428754	216
R094	332454	4428720	213
R095	332461	4428629	213
R096	332461	4428539	214
R097	332463	4428456	213
R098	332302	4428380	213
R099	332307	4428439	213
R100	332309	4428527	214
R101	332294	4428616	215
R102	332303	4428718	215
R103	332294	4428809	215
R104	332919	4428948	212
R105	332660	4429171	213
R106	332854	4430390	213
R107	331838	4430513	213
R108	331351	4430489	214
R109	331361	4430790	213
R110	330713	4430299	218
R111	330431	4430488	217
R112	329781	4430872	218
R113	329838	4430230	220
R114	329281	4430416	219
R115	329009	4430489	221
R116	328229	4429384	221
R117	328071	4430416	216
R118	328231	4430258	217
R119	328258	4430924	213
R120	326968	4429509	218
R121	325136	4429352	199
R122	325149	4429345	199
R123	325240	4429455	201
R124	326756	4429963	212
R125	326911	4429997	212
R126	326936	4430485	206
R127	326463	4430457	209
R128	325155	4430315	204
R129	325471	4430355	207
R130	325181	4430074	205
R131	325172	4430292	204
R132	322863	4430435	195
R133	321936	4430100	193
R134	320734	4430457	192
R135	320049	4430467	191
R136	318672	4430100	190

R137	318737	4430493	191
R138	318791	4430565	191
R139	319645	4430537	191
R140	319358	4430559	192
R141	317852	4435338	190
R142	319186	4432100	192
R143	318859	4433014	192
R144	320540	4432081	192
R145	321991	4432072	194
R146	321994	4432369	194
R147	322076	4432621	194
R148	323605	4432506	198
R149	323968	4432096	198
R150	324074	4432108	198
R151	324208	4432099	198
R152	324584	4432098	197
R153	325011	4432105	202
R154	325173	4431693	204
R155	325194	4432203	202
R156	325756	4432015	213
R157	326033	4432891	207
R158	325969	4432990	207
R159	325833	4432740	204
R160	332260	4433756	221
R161	332210	4433760	221
R162	332168	4433759	221
R163	332219	4433696	221
R164	333103	4431666	213
R165	332855	4431956	217
R166	331239	4431741	213
R167	331413	4432887	215
R168	329869	4432579	220
R169	329816	4432586	221
R170	329678	4432026	219
R171	328181	4431915	219
R172	326808	4433725	211
R173	326920	4433644	209
R174	326959	4433463	211
R175	326902	4433194	211
R176	326991	4433318	215
R177	327076	4433427	213
R178	327308	4433587	210
R179	330977	4433769	217
R180	331443	4433686	216
R181	327884	4433701	222
R182	328050	4433705	222

R183	328290	4433703	223
R184	328239	4434153	213
R185	328203	4434680	213
R186	328208	4434863	217
R187	329271	4433790	224
R188	328925	4433715	227
R189	329103	4433719	224
R190	329060	4433713	225
R191	329005	4433722	226
R192	329098	4435332	221
R193	329080	4435323	220
R194	329077	4435259	220
R195	325051	4433736	213
R196	325208	4433734	211
R197	326078	4434771	221
R198	324154	4435245	203
R199	323384	4435332	197
R200	318882	4435997	191
R201	317410	4435406	190
R202	317183	4435341	189
R203	319048	4435221	191
R204	318809	4435328	192
R205	318885	4434809	191
R206	318572	4433713	192
R207	318788	4433800	190
R208	320049	4433764	192
R209	327463	4425541	217
R210	323810	4425620	192
R211	324269	4426057	193
R212	332617	4430556	212
R213	323860	4432010	198
R214	322800	4432122	196
R215	322151	4434969	193
R216	320686	4433882	191
R217	322045	4436366	194
R218	322931	4422782	200
R219	328095	4423609	213
R220	325152	4424759	206
R221	323554	4427874	190
R222	328209	4428045	222
R223	328187	4428207	222
R224	320037	4432051	192
R225	321618	4435361	193
R226	324645	4422685	209
R227	324612	4422647	210
R228	329861	4434502	214

APPENDIX C

Predicted Octave Band Noise Levels (dB)

Receiver	31Hz dB	63Hz dB	125Hz dB	250Hz dB	500Hz dB	1kHz dB	2kHz dB	4kHz dB	8kHz dB
R001	57	54	50	45	42	41	36	16	-36
R002	56	54	50	45	42	41	35	9	---
R003	58	55	51	46	43	42	36	16	-38
R004	57	54	50	45	42	41	35	11	-55
R005	55	52	48	43	39	38	29	-2	---
R006	56	53	48	44	41	41	36	17	-34
R007	47	44	38	32	27	25	9	-48	---
R008	50	46	41	36	32	28	15	-34	---
R009	52	49	44	37	33	30	17	-27	---
R010	54	51	47	41	37	36	27	-3	---
R011	49	46	41	36	32	29	17	-25	---
R012	50	47	42	36	31	28	15	-30	---
R013	49	46	41	34	28	21	-2	---	---
R014	49	46	41	34	28	21	-2	---	---
R015	51	47	42	35	30	25	9	-52	---
R016	49	46	42	36	32	28	15	-34	---
R017	49	46	42	36	31	27	14	-37	---
R018	52	49	44	37	33	29	18	-26	---
R019	51	48	42	36	30	25	9	-50	---
R020	51	48	43	36	31	27	12	-43	---
R021	52	49	44	38	33	30	19	-24	---
R022	55	52	47	42	39	36	28	1	---
R023	53	50	45	38	34	31	18	-31	---
R024	52	50	45	39	35	33	22	-18	---
R025	49	46	41	35	30	25	7	---	---
R026	51	48	43	36	31	27	11	-51	---
R027	52	49	44	39	35	33	24	-11	---
R028	52	49	46	42	39	37	29	4	---
R029	54	51	46	41	38	36	28	-4	---
R030	54	51	46	40	37	35	27	-6	---
R031	52	49	44	39	35	34	25	-8	---
R032	53	50	45	39	35	33	24	-10	---
R033	53	50	45	39	35	33	24	-9	---
R034	51	49	44	37	33	30	18	-24	---
R035	52	49	45	39	35	32	22	-16	---
R036	52	49	44	37	32	28	14	-32	---
R037	51	48	42	35	29	24	6	-58	---
R038	50	47	43	39	35	32	21	-20	---
R039	51	48	42	35	29	23	5	-53	---
R040	47	43	38	31	27	22	2	---	---
R041	48	44	39	34	29	24	4	---	---
R042	52	49	45	40	36	33	23	-12	---
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R047	54	51	46	41	38	36	29	2	---
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R053	57	54	49	45	42	41	36	17	-35
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R224	57	55	50	45	42	41	36	15	-42
R225	56	53	48	44	41	40	36	16	-36
R226	54	50	46	40	36	34	26	-6	---
R227	53	50	45	40	36	34	25	-8	---
R228	56	54	51	46	43	43	38	18	-36



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June 1, 2015

Twin Forks Wind Farm, LLC
353 N. Clark Street
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Chicago, IL 60654

RE: Twin Forks Wind Farm, LLC (“Applicant”) compliance efforts regarding Section 10 of the Macon County Wind Ordinance’s “Standard Conditions for Environmental Impact Study”

To assess the potential impacts that the Twin Forks Wind Farm (Project) could have on environmental resources in the area, numerous environmental studies have been conducted since the initiation of Project development in 2009 to characterize the environmental and biological resources in the Project area and assess the potential for environmental impacts. Additionally, in support of these studies, the Applicant has been engaged in ongoing consultation with the United States Fish and Wildlife Service (USFWS) and the Illinois Department of Natural Resources (IDNR) since 2011. These actions represent the Applicant’s commitment to ensuring that the Project is developed in compliance with applicable environmental regulations and industry best practices. Project siting, pre-construction environmental studies, and the Project design were all completed with the consideration that construction and operation will have limited impacts on environmental resources, and unavoidable impacts will be minimized and mitigated appropriately, as needed, to meet federal, state, or local requirements.

Attached is a description of the work completed to date including cross references to Section 10 of the Macon County Wind Ordinance’s “Standard Conditions for Environmental Impact Study”, broken down as follows:

- (1) A site-specific pre-and post-construction environmental impact study;
- (2) A Site-Specific Pre-and Post-Construction Bird and Bat Study;
- (3) Site-specific Pre- and Post-Construction Environmental Impact Study on Environmentally Sensitive Areas and other Natural Resources; and
- (4) Site Specific Pre- and Post-Construction Environmental Impact Study, Spring and Fall for Birds and Bats.

(1) A site-specific pre-and post-construction environmental impact study

E & E, a recognized global leader in environmental management, conducted all pre-construction environmental and biological surveys for the Project, consulting with USFWS and IDNR. E & E employs respected experts in 85 scientific and engineering disciplines, including a full-time staff of nearly 900 environmental professionals in 35 offices throughout the United States.

June 1, 2015

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Ms. Courtney Dohoney led E & E's consultation efforts with USFWS and IDNR and coordinated and directed E & E's field survey efforts. With more than nine years' of permitting experience, Ms. Dohoney has supported environmental investigations, water resource/water quality projects, and projects for wind and solar energy and transmission lines. Ms. Dohoney has managed more than 25 wind energy projects across the Midwest and mid-Atlantic, including several in Illinois, and maintains good working relationships with regulatory staff at the IDNR and USFWS. Her areas of expertise include identification of state and county permitting requirements, consultation regarding agency and public perceptions and concerns, wetland delineation and water resource permitting, and investigation of T/E species.

Ms. Dohoney was supported by E & E biologists experienced in survey design and implementation for bird, bat, habitat and wetland surveys. Mr. Josh Flinn managed and analyzed all acoustic bat data for the Project. Mr. Flinn is an expert in bat ecology with experience conducting bat surveys and studies by mist netting, radio-tracking, and acoustic monitoring in 18 states. He is a permitted biologist fully qualified to identify Indiana and northern long-eared bat calls. Ms. Katie Day conducted the bat mist-netting survey for the Project. Ms. Day has led and conducted biological surveys for bats and other wildlife for nearly a decade. A USFWS-approved Indiana bat surveyor, she is qualified to survey and identify all United States bat species as part of Endangered Species Act Section 7 consultation. She has managed surveys for numerous wind site permitting and compliance projects, including a recent post-construction fatality study at wind project in Oklahoma. She has identified and documented thousands of bats in the Midwest, including the Indiana bat and gray bat, the northern long-eared bat, and eastern small-footed bat. As the lead bird surveyor and ecologist for the Project, Mr. Ryan McGinnis' experience includes Bald Eagle monitoring, migratory bird surveys, breeding bird surveys, and surveys for threatened and endangered species for wind energy clients across the Midwest. Mr. McGinnis offers more than 11 years' experience providing natural resource management and conducting environmental investigations.

A summary of the site-specific pre-construction biological and environmental studies for the Project, consultation with USFWS and IDNR, and the proposed construction and post-construction restoration and monitoring efforts are provided to support E & E's environmental impact study.

Desktop Environmental Constraints Analysis Report - 2009

As an initial step in assessing the Project site, a desktop environmental constraints analysis report was prepared. The intent of this report was to identify any environmental conditions or biological resources at the site which had the potential to be adversely affected by the development and operation of the Project. The environmental constraints analysis was prepared by the Applicant's environmental consultant, Ecology and Environment, Inc. (E & E) in September 2009. The report assessed a number of environmental and cultural resources within an approximately 32,000 acre footprint in northern Macon and southern DeWitt counties, Illinois. These included, land usage of the area, geology and soils, water resources and floodplains, wetlands, federally- and state-listed threatened and endangered (T/E) species, migratory birds and bats, historic sites and cultural resources, and public recreational areas.

The report concluded that the site is comprised of relatively flat topographic agricultural land with a low population density and did not identify any critical environmental flaws that would prevent construction and operation of a wind energy facility. A critical environmental flaw is defined as those environmental impacts or regulatory requirements that have the potential to prevent Project development or to significantly impact the Project schedule or cost. Federal and state-listed T/E species were also evaluated for their potential presence, and field surveys were recommended to further determine their presence or absence at the site.

Land Use and Habitat Survey - 2011

In June 2011, a Land Use and Habitat Survey was conducted within the Project's 32,000 acre footprint as part of a voluntary pre-construction site assessment study to assist in the development of the Project. The survey was performed by E & E on behalf of the Applicant. The intent of this survey was to document and quantify the current land management practices and the types of vegetation within the Project's proposed footprint, and use the results of the survey to provide a better indication of the potential for federal and state-listed T/E species that may be present in the Project area. Seven different land use/habitat types were used to classify the landscape. These included: Agriculture; Deciduous/Mixed Forest; Grassland; Shrub-scrub or Old Field; Wetland/Waterway; Open Water/Pond; and Developed Area.

Results of the survey found that Agriculture was the dominant land use/habitat type, comprising 95.2% of the total Project area footprint. Developed Areas accounted for the second most abundant land use, accounting for approximately 2.0% of the total land area. Wetlands/Waterway habitat accounted for 1.4% of the total area, and the four remaining habitat types— Deciduous/Mixed Forest, Grassland, Shrub-scrub or Old Field, and Open Water/Pond collectively represented less than 1.5% of the total Project area.

Within the Project area Agricultural land is found throughout, typically represented by cultivated corn, soybeans, or wheat. Developed Areas, primarily residences and farm buildings, are located largely along the roadways in the Project area. Wetlands/Waterways within the Project area are primarily found in low-lying drainage swales, drainage channels, and ditches associated with the surrounding agricultural fields. There are several small creeks and drainage canals within the Project area, and the largest of these is North Fork Lake Fork Creek, which flows in an east to west direction through the center of the Project area. Deciduous/Mixed Forests are located almost exclusively along the riparian corridors of North Lake Fork Creek in the central Project area and around residential and farm structures. A stand of deciduous trees found along Lake Fork Creek's riparian corridor was comprised primarily of honey locust (*Gleditsia triacanthos*), red mulberry (*Morus rubra*), green ash (*Fraxinus pennsylvanica*), pin oak (*Quercus palustris*), cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), and black willow (*Salix nigra*). Grassland areas are limited, and are found in fragmented pockets that are primarily associated with homes and/or farm structures or along stream riparian areas. Smooth brome (*Bromus inermis*) and reed canary grass (*Phalaris arundinacea*) were the most common grass species. Other common herbaceous species including common peppergrass (*Lepidium virginicum*), Queen Anne's lace (*Daucus carota*), yarrow (*Achillea millefolium*), and goldenrod species (*Solidago sp.*). Shrub-Scrub habitat or Old Field was located primarily along the riparian corridor of North Fork Lake Fork Creek in the western-central Project area. Open Water was the least abundant land use in the Project area, and were found exclusively in the form of residential ponds.

In addition to the Land Use/Habitat survey, a protected species habitat assessment was conducted based upon the results of the Project area habitat delineation. At the time of the survey (June 2011), three federally listed and an additionally six state-listed T/E species were documented to potentially occur within Macon and DeWitt Counties. The nine species identified as T/E during the Land Use and Habitat Survey are provided in Table 1.

Table 1: Federal and State-Listed Threatened and Endangered Species in DeWitt and Macon Counties, Illinois

Common Name	County	Status
Bald Eagle	DeWitt	ST
Bewick's Wren	Macon	SE

Table 1: Federal and State-Listed Threatened and Endangered Species in DeWitt and Macon Counties, Illinois

Common Name	County	Status
Eastern prairie fringed orchid	DeWitt and Macon	FT
Henslow's Sparrow	DeWitt	ST
Indiana bat	DeWitt and Macon	FE, SE
Prairie bush clover	DeWitt	FT
Spike mussel	DeWitt	ST
Upland Sandpiper	Macon	SE
Wild hyacinth	Macon	SE

FE = Federally-listed endangered

FT = Federally-listed threatened

SE = State-listed endangered

ST = State-listed threatened

Sources: http://www.dnr.state.il.us/ORC/list_tande_bycounty.pdf.

<http://www.fws.gov/midwest/Endangered/lists/illinois-cty.html>.

The report concluded that, as the vast majority of the Project area is composed of agricultural lands, which is not considered essential or limited habitat for any of the listed protected species, the development of the Project would not result in significant impact to T/E species most likely to occur within DeWitt and Macon counties.

Desktop Wetland and Surface Water Assessment – 2014

On the behalf of the Applicant, in 2014 E & E performed desktop spatial analysis to identify and quantify the wetland and surface water resources present within the Project area footprint. This assessment was provided to the Applicant to assist with siting of Project infrastructure in order to avoid and minimize the potential for wetland and stream impacts. This analysis was conducted by utilizing ESRI ArcGIS software and the interpretation of a USFWS National Wetlands Inventory (NWI) data, United States Geological Survey (USGS) National Hydrography Data (NHD), USGS 7.5-minute topographic maps, Natural Resources Conservation Service SSURGO soils data, and 2014 high-resolution orthoimagery obtained from the USGS to identify wetlands and water bodies within the Project.

The mainstems of the three primary waterways in the Project, North Fork Lake Fork, South Fork Lake Fork, and Stevens Creek, account for approximately 28 miles of waterways within the Project area; however, all three have numerous tributaries associated with them. Collectively, these account for approximately 145 miles of waterways within the Project area, but many are smaller and maintained as ditches as a result of agricultural practices in the area.

The USFWS's NWI data indicated that there are 29 NWI identified wetlands, accounting for 285 acres, within the Project area footprint. The largest NWI wetland complexes are found along the banks of the North Fork Lake Fork Creek in the north-central portion of the Project area. NWI maps are produced by the USFWS using color infrared (CIR) aerial photographs, but are not delineated using the U.S. Army Corps of Engineers (USACE) methods for determining jurisdictional wetlands and therefore may not accurately reflect wetlands regulated by USACE or Illinois Environmental Protection Agency (IEPA).

To refine the results of the NWI and NHD data, high-resolution USGS orthoimagery of the Project area was reviewed to identify stained or stunted vegetation, ground depressions, or other features which could indicate the presence of a wetland. An additional 135 possible wetlands were identified, with many of these being small and primarily scattered throughout the eastern Project area or being associated with the drainages in the area, including the three major waterways. Collectively, these account of approximately

74 acres. Refer to Appendix A to Applicant's Macon County Special Use Permit Application for the location of the wetlands identified by the desktop study throughout the Project area footprint. This analysis was conducted via a desktop assessment and wetlands identified were not delineated as part of the study using the USACE methods for determining jurisdictional wetlands. The desktop study concluded that if impacts to Waters of the U.S. are unavoidable, the Project may be required to obtain Section 401/401 permits from the USACE and Illinois Environmental Protection Agency, respectively.

Agency Consultation (USFWS and IDNR) – 2011 to Current

The Applicant has been involved in ongoing consultation with the USFWS and IDNR since 2011. These consultations have allowed the agencies to provide specific feedback with regard to the development of the Project, and have provided an opportunity for the Applicant to adjust the site design and conduct additional studies to address agency concerns. The agencies have provided important information regarding the potential occurrence of protected species, natural areas, and ecologically sensitive areas within the Project area, or surrounding vicinity, and have provided assistance and recommendations regarding the nature of the studies that were used to quantify the avian, bat, and other wildlife resources present at the Project area, as well as the potential impact the Project may have on those resources.

The Project's consultation history with the USFWS and IDNR is outlined below in chronological order:

- April 26, 2011: On behalf of the Applicant, E & E spoke with the IDNR (*Keith Shank*) to discuss the Project and any potential concerns, including the results of IDNR's EcoCAT database of sensitive species review.
- July 25, 2011: The Applicant sent letters to the USFWS and IDNR describing the Project and requested agency input regarding potential environmental concerns.
- March 12, 2014: E & E and the Applicant participated in a conference call with the IDNR (*Keith Shank*) to discuss the current status of the Project, review the results of the environmental studies conducted to date, and the schedule and approach moving forward.
- March 13, 2014: E & E and the Applicant met with USFWS to provide an update on the current status of Project, review the results of the environmental studies conducted to date, and its plans and approach moving forward.

In addition to the consultation records listed above, routine correspondence with the USFWS and IDNR has been maintained throughout the planning and implementation of the spring and fall migratory bird and migratory raptor, bat acoustic monitoring, and bat mist-netting presence/assumed absence field surveys, conducted in 2011. A summary of each formal consultation event is provided below.

IDNR Project Introduction Call (April 26, 2011)

On April 26, 2011 E & E, on behalf of the Applicant, spoke with Keith Shank of IDNR to introduce the Project. The IDNR reviewed a map showing the location and setting of the Project and the results of an Illinois Ecological Compliance Assessment Tool (EcoCAT) database query, which found there were no records of state-listed T/E species within the Project area. As there were no state-listed T/E species documented occurring within the Project area, IDNR noted that migratory bird and bat presence were likely to be the most significant concern for this Project. An Important Bird Area (IBA) designated by the National Audubon Society, is located south of Decatur, Illinois has been designated as a result of congregations of migrating American golden plovers. The IDNR also noted that there is the potential for

northern harriers (state endangered) in this area, but given the lack of native grassland in the Project area, it is unlikely that nesting occurs in the Project area.

The IDNR also noted the potential for Indiana bat (state and federally endangered) impacts at the site; summer impacts were unlikely to occur but impacts during fall migratory season could occur.

Additionally, the IDNR noted that there are two breeding Bald Eagle pairs (state threatened, federally protected under Bald and Golden Eagle Protection Act) that nest along Clinton Lake, approximately 10 miles north of the Project area. IDNR also stated that there is the potential for aquatic species; smooth softshell turtle (state endangered), protected mussel species, mud-puppy salamander (state endangered), and salamander mussels (state endangered) to be present within the waterways of the Project area as they are tributaries of the Sangamon River and Salt Fork of Salt Creek which have occurrence records.

Overall, the IDNR felt the potential presence of T/E species at the site was low due to the predominance of agricultural land use. The greatest potential for Project impacts are the same as those throughout the Midwest, and are related to migrating bats and birds. IDNR agreed with the survey approach proposed by E & E (migratory bird and raptor surveys and bat acoustic monitoring) and E & E agreed to maintain coordination as the results of the migratory bird surveys and bat acoustic monitoring studies become available.

IDNR Consultation Call (March 12, 2014)

On March 12, 2014, the Applicant, E & E, and the Keith Shank, from IDNR held a conference call to discuss the Project's current standing and pathway forward. A discussion of the biological surveys conducted to date included:

- Land Use and Habitat Survey (June 2011) found that approximately 95% of the project area was row-crop agriculture.
- Passerine Migration Study (Spring and Fall 2011) found no large concentrations of migratory birds, and the species identified were typical for the agricultural habitat present at the site.
- Migratory Raptor Study (Fall 2011) found no large concentrations of migrating raptors, and those identified were typical for the agricultural habitat present.
- Bat Acoustic Monitoring Study (April 13 – November 15, 2011) was conducted using AnaBat detectors on the two meteorological towers in the Project area. The results of this study found that nightly bat passage rates were relatively low for the region and as compared to other wind energy projects in agricultural settings.
- Bat Mist-Netting Survey (August 6-15, 2012) resulted in no federal or state-listed threatened or endangered species being captured. Eastern red bats and big brown bats were captured in low numbers.

The field survey results confirmed the initial Project conclusions that the Project was unlikely to have T/E species present, and that the site was unlikely to attract large numbers of migratory birds and bats. A more detailed summary of the surveys listed above are provided in *Section 2 – A Site-Specific Pre-and Post-Construction Bird and Bat Study*

USFWS Consultation Meeting (March 13, 2014)

On March 13, 2014, the Applicant, E & E, and the USFWS held a meeting at the Rock Island USFWS Field Office to discuss the Project's current standing and pathway forward. Similar to the IDNR meeting on March 12, 2014, a discussion of the biological surveys conducted to date at the site was provided.

While the Project does not appear to be a risk to bats during the summer maternity season based on the low bat passage rates detected during acoustic monitoring and mist-netting, the USFWS felt that the Project still poses some risk to bats during fall migration. To address this risk, the Applicant proposed the preparation of a Bird and Bat Conservation Strategy (BBCS) as the basis for obtaining a Technical Assistance Letter (TAL) from the USFWS. The TAL would provide operating assurances to the project until a Habitat Conservation Plan (HCP) can be developed and an Incidental Take Permit (ITP) obtained for potential impacts to Indiana bats and the northern long-eared bat.

USFWS reviewed nearby known Bald Eagle nests and felt that the Project poses a low risk to this species because of the distance to the nearest nest (approximately 10 miles) and the lack of Bald Eagle sightings during the Project's avian surveys.

Construction and Post-Construction Restoration and Monitoring

The Applicant has sited Project facilities to minimize forest clearing and fragmentation of forested habitat, thereby minimizing the potential for impacts to wildlife. Where new access roads are necessary, the Applicant, to the extent, commercially reasonable, will construct access roads parallel or perpendicular with the county roads and in areas that create minimal disturbance to land contour features, minimizing clearing of previously undisturbed areas. However, during construction minor impacts to ecological resources will result from temporary and permanent conversion of vegetated habitat as a result of clearing required for access roads, collection lines, turbines, and temporary construction and staging areas.

As the Project area is comprised of approximately 95% agricultural field, most vegetation disturbed during construction will be cultivated crops. Fields will be returned to their preconstruction state following construction, with the exception being the location of the WTG pads, access roads, and the substation footprint.

With regard to waterway crossings by Project infrastructure, the Applicant will utilize construction methods that will avoid disturbances to the bed or banks of the streams. Impacts on fish and wildlife during construction will be further minimized through the implementation of a SWPPP to prevent erosion and sedimentation into nearby waterbodies under Illinois EPA's NPDES General Permit for Construction Activities. Silt fencing and the use of best management practices (BMPs) will be utilized along the construction ROW in all areas adjacent to wetlands, in accordance with the SWPPP. Further, areas disturbed during construction will be restored to pre-construction conditions as soon as possible in order to further minimize the impact of construction.

In addition to minimization measures to reduce the construction related impacts on the vegetation and surface waters, the Applicant is committed to performing post-construction mortality monitoring to document bird or bat fatalities as a result of the operation of the Project and to curtail turbines in an effort to minimize impacts to birds and bats. The specific study protocol, survey timing and reporting mechanisms are summarized in *Section 4 - Site Specific Pre- and Post-Construction Environmental Impact Study, Spring and Fall for Birds and Bats*.

(2) A Site-Specific Pre-and Post-Construction Bird and Bat Study

To determine avian and wildlife abundance, diversity, and distribution within the proposed Project site, and to assess the overall risk to flora and fauna, the Applicant contracted E & E to perform biological and ecological studies. The methodology, timing, and scope of these studies was developed by E & E in coordination with IDNR and USFWS. The studies were valuable as an assessment of the potential occurrence of T/E species and other wildlife at the Project site, and were used to estimate potential impacts to these species from the construction and operation of the wind energy facility. Pre-construction environmental studies were conducted throughout the spring, summer and fall months of 2011 and during the summer of 2012 to identify and quantify the bird and bat populations at the Project site. This section focuses on the pre-construction bird and bat environmental impact assessment while the post-construction effort to monitor these impacts is provided in *Section 4 – Site Specific Pre- and Post-Construction Environmental Impact Study, Spring and Fall for Birds and Bats*.

Bird Environmental Impact Study

Bird mortality at utility-scale wind energy facilities has been documented across the United States. Results of post-construction mortality studies indicate that patterns of bird fatalities are highly variable among wind farms and across regions. Post-construction studies have found that songbirds constitute the majority of the documented fatalities at wind farms in North America. There is a strong pattern indicating that mortality is highest during the spring and fall migratory periods. To minimize potential impacts to migratory songbirds, surveys are often a component of pre-construction due diligence studies. Pre-construction bird surveys provide a measure of the level of bird use and characterize bird behavior, which are important factors in assessing the potential risk to birds from the operation of a wind farm (NWCC 2010; Strickland et al. 2011).

Raptors have also been impacted by wind generation projects at several locations in North America; however, with the exception of Altamont Pass in California and several other older wind farms in that state, high numbers of raptor fatalities have not been recorded at wind farms elsewhere in the United States (Erickson et al. 2002; GAO 2005; NWCC 2010; Smallwood and Thelander 2008). To evaluate potential impacts on raptors posed by wind projects, migratory raptor surveys are often a component of the pre-construction due diligence evaluations. Pre-construction bird surveys provide a measure of the level of bird use and characterize bird behavior, which are important factors in assessing the potential risk to birds from the operation of a wind farm (Barrios and Rodríguez 2004; Kuvlesky et al. 2007; NWCC 2010).

Spring and Fall Migratory Bird Study

In 2011 a migratory bird study was conducted at the Project site during the months of spring and fall bird migration (April - May) and (September - October). The study was performed by E & E on behalf of the Applicant. The intent of the study was to assess the migratory bird activity in the Project area and identify the potential presence of sensitive species (federally or state-listed T/E species) in order to establish a baseline for evaluating potential risks to avian species from the construction and operation of the proposed wind farm. The results of the 2011 spring and fall migratory bird study were discussed with the IDNR and USFWS during the consultation meeting in March 2014.

E & E avian biologists conducted the 2011 pre-construction migratory bird study at the Project on four non-consecutive days between April 8 and May 18 in the spring, and September 13 and October 28 in the fall. The migratory bird study was conducted via a point-count style avian survey, and was designed to be consistent with the general point-count survey methodology described by Hutto et al. (1986) and Ralph et

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al. (1995). This methodology is generally accepted as an appropriate means to assess general migratory bird activity at a commercial wind project.

Eighteen survey points were distributed along the roadsides within the Project boundary. The same surveys points were sampled during both the spring and fall surveys. The habitats associated with the selected survey points were representative of the overall habitat types of the Project area and therefore are primarily located in row crop agricultural areas as these areas are the most abundant and best represent where the wind turbines will be sited. A limited number of survey points were also selected along forested blocks, riparian, shrub-scrub, and grassland habitats to document bird activity in the other limited habitat types present in the Project area.

A single observer documented all birds identified by sight or sound during a 5-minute period at each survey point, with the exception of non-MBTA species. Surveys were conducted during the morning hours from 30 minutes before sunrise until approximately 10:30 a.m., as bird activity is greatest during this period. To the extent possible, surveys were performed on days of preferable avian migration weather, which are characterized by little to no precipitation, no fog, average temperatures, and limited wind.

Spring Results

A total of 2,243 birds represented by 56 species were identified during the spring migratory bird study. The survey with the highest total number of birds detected was April 20 with 661 individuals recorded; the survey on May 5 recorded the lowest number of birds with 443 individuals recorded. The average number of detections per survey day, per survey point was 31.1 birds, and ranged from a low of 24.6 (May 5) to a high of 36.7 birds (April 20). The total number of species detected during the study ranged from 27 (May 5) to 34 (May 18), with an average of 30.8 species detected per survey day

There was a moderate variation in the number of birds and diversity of species detected at the survey points. The total number of individuals observed at each survey point during the spring study ranged from a low of 50 to a high of 416, with a study average of 124.6 per survey point. The most numerous species recorded were the Red-winged Blackbird (795 birds), Brown-headed Cowbird (109), Common Grackle (108), and American Robin (105); collectively these account for nearly 50% of all birds detected. These birds are considered common species and can be found occupying a variety of habitat types. No federally or state-listed T/E species were identified during the 2011 spring study.

The results from the spring study indicate that there was some migratory movement of known breeders and winter residents within the Project area, as indicated by the arrival of known summer residents and the departure of known winter residents. The species identified during the spring surveys were generally consistent with the population expected given the geographic location, habitat present in the Project area, and time of year the surveys were conducted. High concentrations of migratory birds were not observed during the spring study. A moderate abundance and diversity of year-round resident species were detected during the spring study.

Fall Results

A total of 1,848 birds represented by 54 species were identified during the fall migratory bird study. The highest detection day was September 27 with 863 individuals, and the lowest number of birds detected occurred on the October 28 survey, with 247 individuals recorded. The average number of individuals identified per survey date was 462. The average number of detections per survey day, per survey point was 25.7 birds, and ranged from 13.7 (October 28) to 47.9 birds (September 27). The total number of

species detected during the survey ranged from 23 (September 13 and 27) to 32 (October 28), with an average of 27 species detected per survey day.

There was a moderate variation in the number of birds and diversity of species detected across the survey points. The total number of individuals observed at each survey point during the fall study ranged from a low of 22 to a high of 532, with an average of 102.7 individuals across all survey points. The most numerous species recorded during the fall surveys were the Mourning Dove (238 birds), Brown-headed Cowbird (127), Red-winged Blackbird (86), and Horned Lark (85); collectively these account for nearly 30% of all birds detected. These birds are considered common species and can be found occupying a variety of habitat types. No federally listed T/E species were identified during the 2011 fall study. The state endangered Northern Harrier was observed four times during the fall study.

Similar to the results of the spring surveys, most birds detected during the fall surveys were likely local breeders or year-round residents although some migratory movement of known breeders and winter residents was observed within the Project area. The species identified during the fall surveys were generally consistent with the population expected given the geographic location, habitat present in the Project area, and time of year the surveys were conducted. High concentrations of migratory birds were not observed during the fall study, and a moderate abundance and diversity of year-round resident species were detected during the spring study.

Spring and Fall Migratory Raptor Study

In 2011 a migratory raptor study was conducted at the Project site during the months of spring and fall bird migration (April - May) and (September - October). These periods were chosen as they encompass the peak of spring and fall raptor migration periods in central Illinois.. The study was performed by E & E on behalf of the Applicant. The intent of the study was to provide a measure of the level of bird use and characterize bird behavior, and to identify the potential presence of sensitive species (federally or state-listed T/E species) in order to establish a baseline for evaluating potential risks to avian species from the construction and operation of the proposed wind farm. The results of the 2011 spring and fall migratory raptor study were discussed with the IDNR and USFWS during the consultation meeting in March 2014.

E & E avian biologists conducted the raptor study during the spring and fall avian migratory seasons to assess spring and fall raptor migration patterns in the Project area. The study was performed based upon a protocol developed by the Hawk Migration Association of North America (HMANA 2014). The spring and fall raptor migration studies were conducted at the same Raptor Observation Point (ROP), located near the center of the Project area. The migratory raptor study consisted of four, seven hour surveys, conducted on non-consecutive days during the spring season and four, seven hour surveys conducted on non-consecutive days during the fall season.

Field data collected included species identification, number of individuals, flight direction, and estimated flight altitude (above or below 400 feet above ground level (agl), the anticipated maximum height of the rotor-swept area). Birds observed flying in a sustained northerly direction during spring migration, or in a southerly direction during fall migration were assumed to be migrating. While birds observed flying in a non-northerly direction in spring, non-southerly direction in fall, hunting or foraging near the ground, or circling on a thermal for an extended period of time, or not traveling in a discernible direction were documented as not actively migrating or local birds.

The duration of each survey was seven hours, and the surveys were conducted from approximately 10:00 A.M. to 5:00 P.M., for a total of 28 survey hours during each the spring and fall studies, and 56 survey hours total for 2011.

Spring Results

A total of 29 raptors were observed during the spring 2011 survey, including five migrants and 24 locals, consisting of three raptor species. The three species identified included Turkey Vulture, Red-tailed Hawk, and American Kestrel. Approximately 55% of all raptors (migrants and locals) flew below 400 feet agl at some point during the observation period. The primary flight direction of migratory raptors was northerly, and no concentrated flight paths through the Project area were identified.

The Red-tailed Hawk (one observation) and Turkey Vulture (four observations) were the only migratory raptor species identified during the spring study. All five migratory raptors were observed during the first survey of the season, conducted on April 8, 2011. The passage rate of migratory raptors ranged from 0.0 to 0.7 raptors per hour during the four surveys, for an overall passage rate of 0.2 migratory raptors per hour for the entire spring study.

Diurnal, non-raptor species were also observed during the spring study. A total of eight Great Blue Herons were observed in the spring. All eight of the Great Blue Herons were seen flying below 400 ft agl and all exhibited a non-northerly flight direction during the observation period, and thus were deemed to be local birds.

No federally or state-listed T/E or species of concern raptor species were detected during the spring migratory raptor study. Overall, the number of raptors and the diversity of raptor species observed during the spring were very low.

Fall Results

A total of 15 raptors were observed, (all local birds) representing five species. Approximately 87% (13 individuals) of all raptors flew below 400 feet agl at some point during the observation period.

No federally listed T/E species were identified during the fall study. The state endangered Northern Harrier was observed twice the study. Both of the observed birds were adults and were observed flying at an estimated 50 feet agl over the fields surrounding the ROP. Both birds were categorized as locals as they did not display a direct and sustained southerly flight during the observation period. There were no migrating raptors observed during the fall study, and therefore a migratory passage rate of 0.0 birds per hour was documented for the fall study.

The Turkey Vulture was the most common local raptor species observed (six birds) and accounted for 40% of all raptors observed, followed by the Red-tailed Hawk which was observed four times and comprised approximately 27% of all the raptors observed during the fall.

Overall, the majority of raptors were observed flying below 400 feet agl, which is the anticipated maximum height of the rotor swept area. However, a very low number of raptors, with limited species diversity, were observed during the fall study.

Birds – Potential Project Impacts

Operational impacts of wind energy facilities on birds include varying degrees of displacement from the wind turbines and surrounding habitat, as well as mortalities resulting from collisions with turbines, transmission lines, and other facility structures (Winegrad 2004). Wind turbines may displace birds from an area due to the creation of edge habitat, the introduction of vertical structures, and/or disturbances directly associated with turbine operation (e.g., noise, shadow flicker). Disturbance impacts are often complex, involving shifts in abundance, species composition, and behavioral patterns. The magnitudes of these impacts vary across species, habitats, and regions. Direct collisions with the wind turbine rotors, towers, or overhead utility lines can result in bird injury or fatality. A number of factors affect the probability of a bird colliding with a turbine, such as flight height, weather, and turbine avoidance behaviors. Numerous studies and reviews from wind energy facilities in North America indicate that fatality rates are several orders of magnitude lower than other sources of human-related bird fatalities such as feral and domestic cats, buildings, and communication towers (Erickson et al. 2001, Loss et al. 2013, AWWI 2014).

The Project infrastructure will be sited within previously disturbed habitat that is dominated by row crop agriculture. Although Project operations have the potential to cause displacement of birds from the Project area, bird species sensitive to disturbance (e.g., federal or state-listed T/E species) currently exhibit low to no use of the Project area and minimal suitable habitat for these species is present. Therefore, it is unlikely that displacement impacts from the turbines would greatly alter the composition of the area's avian community. For species or individuals that are displaced, it is unclear if displacement impacts would persist for the life of the Project; certain species may adapt to the presence of the turbines (The Ornithological Council 2007).

The operating turbines will also pose a risk of bird mortalities from collisions. Total bird mortality rates at other wind energy facilities in the Midwest have ranged from 0.00 to 11.83 birds/turbine/year (Barclay et al. 2007 and Poulton 2010). Studies at the Crescent Ridge site, located in an agricultural landscape in Illinois, reported mortality rates of 0.49 bird/turbine in fall 2005 and 0.47 bird/turbine in spring 2006 (Kerlinger et al. 2007).

A comparison of the pre-construction avian survey results to other available pre-construction survey reports indicates that surveys within the Project area detected a similar number of birds and species to those that have been detected at other Midwestern wind energy sites. Based on the results of post-construction mortality studies at similar facilities, the Project should have fatality rates similar to the lower range of those observed at other Midwestern facilities (0.00 to 11.83 birds/turbine/year; Barclay et al. 2007 and Poulton 2010). However, there are numerous caveats (e.g., potential differences in project layout; turbine height, rotor swept area, and lighting; weather, including visibility; avian usage, etc.) for directly applying a post-construction fatality rate from one site to estimate fatality rates for another project. While site specific conditions may affect fatality rates at the Project, it is generally expected that they will be within the range documented for Midwest wind energy facilities because avian use at the site is low, habitat is disturbed and homogenous, and wildlife protection measures have been incorporated into the Project's design to reduce risk.

A total of 4,091 birds representing 71 passerine species were documented during the 2011 spring and fall surveys at the Project. As documented at other facilities, bird fatality rates at the Project are likely to peak during the spring and fall migration seasons (Johnson et al. 2002) and passerines, both resident and migrant, are likely to constitute the greatest number of fatalities (Erickson et al. 2001 and Johnson et al. 2002). Specifically, night-migrating passerines may be at a higher risk for collision with turbines as this group has accounted for over 50% of avian fatalities at certain sites. Nationally, these mortalities have

not been known to result in a significant population level impact to any one species, mainly because the migratory species with relatively high collision mortality are regionally abundant. Collision risk is likely to be much lower for other bird groups in the Project area.

A total of 128 waterfowl and shorebirds species (31% of the total species observed) were observed during pre-construction avian surveys. Waterfowl use may be increased in the Project area during the winter months if the croplands within the Project area attract large flocks of Canada Geese (Erickson et al. 2002). National research has demonstrated that waterfowl and shorebirds rarely collide with inland turbines (Everaert 2003, Kingsley and Whittam 2007 as cited in NWCC [2010]). This can likely be explained because of the high altitudes (500-5,000 feet [150-1,500 meters]) at which these species migrate over land (Kerlinger 1995).

A total of 44 raptors (five migrant birds and 39 locals) representing five species were observed during pre-construction raptor surveys. The relatively low level of observed raptor activity can likely be attributed to the absence of geographic features, such as a ridgeline or shoreline that would concentrate migrating raptors through the Project area. Additionally, the Project area provides very limited habitat that would provide adequate stopover habitat for migrating raptors. The Project appears to be part of broad-front raptor migration and should not attract migrating raptors apart from the surrounding landscape. Given the lack of major raptor migration routes through the Project area and the relatively low raptor use observed during the surveys in the Project area, raptor fatality rates at the Project are expected to be lower than or similar to those at other Midwestern sites.

The state endangered Northern Harrier was observed six times during the 2011 avian surveys. In 2012, The IDNR discussed the potential for the Northern Harrier to occur, but noted that due to the limited grassland habitat within the Project area, nesting is unlikely. Northern Harriers rarely collide with wind turbines because of their low flying nature (Whitfield and Madders 2006). Given the very low percentage of grassland habitat within the Project area (0.03% of total land cover); it is unlikely Northern Harriers are nesting within the Project boundaries, and the risk to the Northern Harrier as a result of the construction and operation of the Project is expected to be low.

The Project area is within the historic breeding, wintering, and migration range of the Bald Eagle. Illinois provides important wintering habitat for Bald Eagles, with an estimated wintering population of 2,500 to 3,000 birds residing in the state. Bald Eagles winter primarily along the Mississippi, Rock, and Illinois Rivers in the state; none of which are within or adjacent to the Project area. There are no large reservoirs or lakes within the Project area or the immediate vicinity. Bald Eagles were not observed during the spring or fall avian studies conducted within the Project area in 2011. In the March 2014 correspondence with the USFWS, it was noted that two Bald Eagle nests are known to occur within 10 miles of the Project area; one near Clinton Lake and the other along the Sangamon River south of Decatur, Illinois. However, the USFWS noted that because these nest locations were at a great enough distance from the Project and the habitat and land use features within the Project area are unlikely to attract Bald Eagles to the site, the Project is a low eagle risk site.

Bat Environmental Impact Study

Construction and operation of wind energy facilities can result in direct adverse impacts (injury or death) to bats through collisions with turbines. In addition, indirect impacts such as habitat loss, degradation, or displacement could also result from the construction and operation of wind projects (National Research Council 2007). In order to assess the bat resources present in the Project area and determine the potential effects from the Project, pre-construction bat surveys were conducted, and the results were compared to other pre-construction survey efforts and post-construction monitoring efforts.

Twelve species of bats occur in Illinois, nine of which have geographic distributions which include Macon and DeWitt counties, and could potentially be found within the Project area. A list of these species is provided in Table 2. The Indiana bat is listed as a federally endangered species and the northern long-eared bat is listed as a federally threatened species. Additionally, both species are listed as a state-endangered species.

Table 2 List of Potential Bat Species at the Twin Forks Wind Farm

Common Name	Scientific Name	Status	Roosting Habitat
Big brown bat	<i>Eptesicus fuscus</i>	--	Trees, structures, caves, mines
Silver-haired bat	<i>Lasionycteris noctivagans</i>	--	Trees, structures, rock crevices
Eastern red bat	<i>Lasiurus borealis</i>	--	Trees
Hoary bat	<i>Lasiurus cinereus</i>	--	Trees
Little brown bat	<i>Myotis lucifugus</i>	--	Trees, structures, caves, mines
Northern long-eared bat	<i>Myotis septentrionalis</i>	T, SE	Trees, structures, caves, mines
Indiana bat	<i>Myotis sodalis</i>	E, SE	Trees, structures, caves, mines
Evening bat	<i>Nycticeius humeralis</i>	--	Trees, structures
Tri-colored bat	<i>Perimyotis subflavus</i>	--	Trees, structures, caves, mines, culverts

Key:

E – Federally-listed Endangered (USFWS)

T – Federally-listed Threatened (USFWS)

SE – State Endangered (IDNR)

Source: Harvey et al. 1999; BCI 2010

Bat Acoustic Survey

Bat acoustic monitoring was conducted to document the temporal (both nightly and seasonal) and spatial distribution of bat activity and diversity (as categorized by species grouping into low-frequency, mid-frequency, or *Myotis* species groups) in the Project area.

On April 13, 2011, four AnaBat SD1 bat detectors (Titley Electronics, Australia) were installed on two meteorological towers within the Project area at approximately 5 and 50 meters above ground level; these detectors recorded bat activity through November 15, 2011. Detectors were named according to the tower number (e.g., 1, 2) and height of the microphone (high or low). Both meteorological towers (Tower 1 and Tower 2) where the detectors were located are surrounded by cropland.

Analysis of data collected from the AnaBat detectors was completed in two phases. The first phase included identifying the total number of bat passes recorded at each detector regardless of species (total bat activity). The second phase involved analyzing the bat passes that were of sufficient quality to be identified to one of three species groups (low-frequency, mid-frequency, or *Myotis* species) to determine the relative composition of species recorded at each detector. The low-frequency species group includes bat passes with minimum frequencies typically below 30 kilohertz (kHz) and could include hoary bats,

big brown bats, and silver-haired bats. The mid-frequency species includes bat passes with minimum frequencies typically between 30 and 45 kHz and minimum slope values <40 octaves per second. The mid-frequency group could possibly include eastern red bats and tri-colored bats. Bats in the *Myotis* genus typically produce echolocation calls with minimum frequencies of 38 to 50 kHz and have minimum slope values of >40 octaves per second. Bat passes identified to the *Myotis* species group could possibly include Indiana bats, little brown bats, northern long-eared bats, gray bats, and southeastern bats. Rafinesque's big eared bat produces echolocation calls with unique harmonics distinguishable from other species potentially occurring at the Project and this bat can be identified to the species level.

A total of 1,811 bat passes were recorded during the survey period, with 761 of these passes of sufficient quality to be identified to a species group. The first bat pass was recorded the day after AnaBat deployment (April 14, 2011), while the last bat pass of the season was recorded on the night before AnaBat decommissioning on November 15, 2011. Mean bat activity per detector night across all detectors was 2.2 passes per detector night. Nightly bat activity recorded on a single detector unit was highly variable and ranged from 0 to 34 bat passes per detector night.

The most active period for bats occurred from late July to the end of September. A peak in activity was recorded on the low (5 meters above ground surface) detectors from July 21 to August 10, whereas a smaller peak was evident from high elevation detectors for a short period in late September. An hourly analysis of bat activity revealed that activity was not consistent throughout the night and was highest between 9 p.m. and 11 p.m. at both the high and low detectors.

Of the 1,811 bat passes recorded from all detectors during the survey period, a total of 761 bat passes contained five passes and could be identified to low-frequency, mid-frequency, or *Myotis* species groups. Low-frequency bats were the most prevalent (499 bat passes) and comprised 65.6% of the identifiable bat passes. Mid-frequency bats (250 bat passes, 32.8%) and *Myotis* species (12 bat passes, 1.6%) were less common than the low-frequency bats (Table 3).

Table 3 Summary of 2011 Species Group Composition at the Twin Forks Wind Farm

Detector	Total Number of Bat Passes Identified to Species Group	Average Number of Bat Passes Per Detector Night	Percentage of Total Bat Passes
High Detectors (1 High and 2 High)			
Low-frequency bats	178	0.4	62%
Mid-frequency bats	110	0.3	38%
<i>Myotis</i> species	1	0.002	<1%
High Detectors Total	289	--	100%*
Low Detectors (1 Low and 2 Low)			
Low-frequency bats	321	0.8	68%
Mid-frequency bats	140	0.3	30%
<i>Myotis</i> species	11	0.03	2%
Low Detectors Total	472	--	100%

*Due to rounding, percentages exceed 100%

The mean activity levels recorded for the Project (2.2 passes per detector night) are lower than the activity levels found during other comparable acoustic studies in Indiana (Gruver et al. 2007 [4.7 bat passes per

detector night]; Carder et al. 2009 [6.5 bat passes per detector night]), Iowa (Jain et al. 2011 [34.9 bat passes per detector night]), Ohio (Good et al. 2009 [3.0 bat passes per detector night]; Good et al. 2010 [2.8 bat passes per detector night]; Stantec 2012 [23.8 bat passes per detector night]), and Wisconsin (Gruver 2008a [2.8 and 7.7 bat passes per detector night]; Gruver 2008b [5.7 bat passes per detector night]). Project mean bat activity levels were similar to those recorded in Minnesota (Johnson et al. 2004 [2.2 and 1.9 bat passes per detector night]). Inherent variability in bat activity gleaned from passive acoustic surveys exists due to the differences in site characteristics and methodology, therefore direct comparisons among surveys should be made with caution.

Seasonally, overall bat activity in the Project area peaked from July 21 to August 10 and again to a lesser extent in late September. Bat activity recorded at the detectors was much higher during the fall season than during the spring and summer; low frequency bat activity comprised the majority of all bat activity recorded on the detectors. For most bat species summering in central Illinois, fall migration typically occurs between August and September (Cryan 2003); the higher level of bat activity observed at the Project area starting in late July and continuing throughout the fall season is therefore likely to be associated with dispersal from summer habitat, juvenile bats becoming volant, the onset of breeding, and migration to winter habitats.

Bat Mist-Netting Study

Bat mist-netting surveys were conducted on July 24 - 27, 2012 to document the presence or probable absence of the Indiana bat, as well as to determine the overall species composition and relative activity of bats in the Project area. Mist-net surveys were conducted in accordance with the then current USFWS guidelines (USFWS 2007). Mist-netting survey locations were selected based on suitable habitat and land access. Habitat preferred by Indiana bats was targeted, which generally includes forested riparian corridors and forest blocks with interior flight corridors. Mist-nets were set at two sites and surveyed on two non-consecutive nights, resulting in a total of four survey nights.

Two bat species were captured during the mist-net survey, with a total of 13 individual bats caught (Table 4). The two species captured were the big brown bat and the eastern red bat. Eastern red bats were more common, and represented 77% (10 captures) of the total number of bats captured during the survey, while big brown bats represented 23% (three captures). Site 2 (12 captures) had significantly more bat captures than Site 1 (one capture), and also recorded the highest species diversity (two species).

Table 4 Species Bat Capture Summary by Net Site at the Twin Forks Wind Farm

Site	Big Brown Bat	Eastern Red Bat	Total Captured
1	0	1	1
2	3	9	12
Total	3	10	13

Table 5 provides the sex and age of all bats captured during the survey. Adult males (62%) were captured more often than females (38%). However, females composed 75% of the juvenile captures. Notably, no lactating or post-lactating females were captured during the survey.

Table 5 Distribution of Sex and Age of Captured Bats at the Twin Forks Wind Farm

	Adult		Juvenile	
	Female	Male	Female	Male
Big brown bat	0	2	0	1
Eastern red bat	2	5	3	0
Total	2	7	3	1

In addition to the mist-net surveys, AnaBat echolocation detectors were placed at each net site to further characterize bat activity and species group composition within the Project area. One AnaBat detector was placed at each net site through the duration of mist-netting activities, to record bat activity at that net location. Detectors were placed in forest interior flyways and along streams and field edges adjacent to the mist-net locations.

At survey Site 1 and 2, a total of 134 bat passes were recorded over the course of the mist-netting surveys (16 hours, 41 minutes), resulting in an average of 0.1 bat passes per minute. Of the 134 recorded bat passes, 55 (41%) contained five or more echolocation pulses and therefore were identifiable to species group. A summary of the species groups detected and the percent composition of each is presented in Table 6. The identified bat passes belonged evenly to the low-frequency species group (41.8%; big brown bats, hoary bats, and silver-haired bats), and the mid-frequency species group (41.8%; eastern red bats, evening bats, and tri-colored bats). *Myotis* species group calls comprised the smallest percentage of calls identified at the Project (16.4%; gray bats, Indiana bats, little brown bats, northern bats, and south-eastern bats). No bat passes were identified as Rafinesque's big-eared bat echolocation calls.

Table 6 Summary of Bat Species Groups Recorded with AnaBat Detectors at Net Sites at the Twin Forks Wind Farm

Site	Low-Frequency	Mid-Frequency	Myotis Sp.	Total
1	1	0	1	2
2	22	23	8	53
Total	23 (41.8%)	23 (41.8%)	9 (16.4%)	55

Using classifiable call files that contained high quality bat passes, a species list was developed for the Project area. All bat call files recorded during the acoustic survey were analyzed using automated species identification software. The software programs, or automated classifiers, included BCID East (version 2.6a, Bat Call Identification, Inc.) and Kaleidoscope (version 1.1.22, Wildlife Acoustics, Inc.) and are approved for use by the USFWS.

Seven bat species were determined to be present in the Project area based on the acoustic survey:

- Big brown bat (*Eptesicus fuscus*)
- Eastern red bat (*Lasiurus borealis*)
- Evening bat (*Nycticeus humeralis*)
- Hoary bat (*Lasiurus cinereus*)
- Little brown bat (*Myotis lucifugus*)
- Silver-haired bat (*Lasionycteris noctivagans*)

- Tri-colored bat (*Perimyotis subflavus*)

Of these seven, two bat species were confirmed in the Project area during the mist-netting survey, the big brown bat and the eastern red bat.

None of the species confirmed in the Project area are listed as state or federally threatened or endangered. The results from the acoustic and mist-netting surveys were consistent in finding that bat activity within the Project area is relatively low.

The Project siting process incorporated considerations to avoid and minimize impacts to birds and bats, including Indiana and northern long-eared bats. To further minimize impacts and avoid take of the Indiana bat and northern long-eared bat, the Applicant will implement operational curtailment measures at the Project. Additionally, a post-construction mortality study of bird and bat fatalities at the site will be used to verify the effectiveness of the avoidance and minimization strategies incorporated into the Project. Further details on these avoidance, minimization, and monitoring efforts are detailed below in Section 3 *Site-specific Pre- and Post-Construction Environmental Impact Study on Environmentally Sensitive Areas and other Natural Resources*

Bats – Potential Project Impacts

Construction and operation of wind energy facilities could potentially result in direct adverse impacts (injury or death) to bats through collisions with turbines. In addition, indirect impacts such as habitat loss, degradation, or displacement could also result from the construction and operation of wind projects (National Research Council 2007). Widespread and higher than expected bat fatalities have increased concern regarding the impacts of wind energy development. Barotrauma, a rapid air-pressure drop found near rotating turbine blades thought to cause internal trauma to bat organs and ultimately death, does not appear to be a significant cause of fatality as previously thought (Grotsky et al. 2011, Rollins et al. 2012). The cumulative impact from WNS, a disease causing significant population decline of cave-dwelling bats in the United States, is poorly understood at this time (AWWI 2014).

Pre-construction acoustic and mist-netting bat surveys indicated a low level of bat activity within the Project area. The mean activity levels recorded for the Project (2.2 passes per detector night) are much lower than the activity levels found during other acoustic studies in the Midwest. Total bat captures (13 individuals representing two species) from the mist-netting surveys conducted at the Project were also low. The low documented bat activity can likely be explained by the lack of suitable bat habitat at the Project.

There are no known Indiana bat records within Macon or DeWitt counties, and the bat surveys conducted in the Project area did not detect their presence. Coupled with the fact that there is minimal, if any, Indiana bat summer habitat in the Project area, there are no anticipated impacts to summer Indiana bat populations from construction and operation of the Project. Similarly, there was no indication from the bat surveys conducted at the site that northern long-eared bats are present within the Project area during the summer season. While summer impacts to these two species are not expected, it is possible that they could potentially pass through the Project area during spring and fall migration. As a result, in order to further avoid risk to Indiana and northern long-eared bats at the site, Twin Forks has incorporated a 1,000 foot turbine setback from any habitat that could potentially be used by migrating Indiana or northern long-eared bats and will also implement turbine curtailment during fall migration.

While impacts to the Indiana bat and northern long-eared bat are not expected, Project turbines will present a risk of bat mortality due to collisions or for other bat species. Bat fatality rates at the Project are

expected to be at the lower end of the fatality range reported at Midwestern wind energy facilities of 0.1-40.5 bats/turbine/year (Poulton 2010). The Project is expected to be at the low end of the Midwestern range as a result of the low bat activity documented at the site during pre-construction surveys and the lack of suitable bat habitat. Mortality rates are expected to be further reduced from the regional average as a result of avoidance and minimization efforts by Twin Forks that are explained in Section 4.3.

Bat mortalities at wind projects in the Midwest occur most frequently during late summer (mid-July through September), within what is known as the fall migration period for many bat species, with migratory tree bat species comprising the majority of the fatalities both in the Midwest and nationally (Erickson et al. 2002; Kunz et al. 2007). Mortality risk at the current Project is therefore expected to primarily affect bats that are migrating through the Project area during the late summer or early fall. Additionally, certain weather conditions, including low wind speeds and warmer temperatures may increase the risk of bat mortality at the Project area, as these conditions have been demonstrated to coincide with nights of high bat mortality at wind energy facilities (Good et al. 2011, Gruver et al. 2009, Kunz et al. 2007).

The lack of forested habitat and open water within the Project area likely reduces risk to bats, as most bat species in Illinois prefer forests and bodies of open water for foraging and migration stopover roosting habitat (BCI 2010). Bats migrating through the vicinity of the Project area may utilize the small, forested riparian areas associated with North Fork Lake Fork Creek, South Fork Lake Fork Creek, and Stevens Creek, though these limited areas represent low quality habitat. The Project turbines will be sited to avoid the forested riparian corridors associated with these waterways, but the presence of the turbines, even in open, non-forested areas, poses some risk of bat mortality as evidenced by bat fatalities documented during migration at wind projects with essentially no bat habitat (Good et al 2011; Kerlinger et al. 2007; Johnson et al. 2003; Howe et al. 2002). While bat migration patterns and behaviors, and, subsequently, indicators of bat fatality risk at wind energy sites, are not well understood (Poulton 2010), Twin Forks has used the best science available to incorporate bat avoidance and minimization strategies in the Project design and operation. This includes habitat avoidance and a turbine curtailment strategy as a means to attempt to reduce bat risk at the Project. The operational strategies are intended to avoid take of federally listed bat species at the Project, but will also protect susceptible tree bat species, including the red bat, hoary bat, and silver-haired bat, which are expected to comprise the majority of potential bat mortality at the Project.

Bird and Bat Avoidance and Minimization Strategies

The bird and bat avoidance and minimization strategies, as well as post-construction monitoring were developed in coordination with USFWS as part of a Bird and Bat Conservation Strategy (BBCS) document. The intent of the BBCS is to develop and document a program designed to reduce the potential impacts of the operational Project on bird and bat species in the area, and to avoid impacts to federally-listed species in the absence of a federal Incidental Take Permit (ITP). Further, the BBCS includes a post-construction monitoring plan and adaptive management procedures to guide management actions for the life of the Project. The BBCS will remain in effect throughout the life of the Project, and is designed to evolve along with the Project as conditions warrant, or unless it is to be replaced in whole or in-part by an approved Habitat Conservation Plan (HCP) prepared in conjunction with the issuance of an ITP issued under Section 10(a)(1)(B) of the federal Endangered Species Act (ESA). Ultimately, the BBCS results in an agreement between the Applicant and the USFWS that the Applicant has made a “good faith” effort to develop its wind energy project and produce renewable energy in a responsible manner that conserves bird and bat species to the greatest practicable extent.

Project Siting Design Measures

The Project siting process incorporated considerations to avoid and minimize impacts to birds and bats, including Indiana and northern long-eared bats.

The primary avoidance measure to avoid or reduce potential impacts to birds and bats was the Project's approach to siting. The Project site was selected based upon wind resources and land use dominated by agriculture, which provides limited unique habitat and/or previously disturbed habitat. Development of the Project in an almost exclusively agricultural habitat area avoids fragmentation or other impacts to native habitats (i.e., riparian, grassland, wooded areas) and the sensitive species they support. By placing turbines in disturbed, agricultural fields, direct and indirect impacts to many of the sensitive species identified during consultation with the IDNR and the USFWS are avoided. Further, no substantial tree clearing is planned during Project construction, and construction staging areas will be sited to avoid sensitive features, including surface waters.

During consultation with the USFWS in 2014, the USFWS recommended that the Applicant implement a 1,000-foot setback for turbines from all contiguous forested habitats surrounding North Fork Lake Fork Creek in order to further minimize the potential for Indiana bat and northern long-eared bat take during the summer and migration seasons. Accordingly, Twin Forks identified contiguous forested habitat surrounding North Fork Lake Fork Creek, buffered the habitat by 1,000 feet and has designed the Project to avoid turbine placement in the buffered areas. The buffered areas for the Project are presented in Appendix A to Applicant's Macon County Special Use Permit Application.

The planning, development, and operational stages of the Project will incorporate industry best practices and measures based on the best available scientific data to reduce risk to birds and bats. Project component features that will help reduce impacts to avian and bat resources include the turbine design which will utilize conical steel towers; lattice structures will not be used to avoid creating perches for raptors and other bird species. The permanent meteorological tower will be a self-supporting, unguyed, lattice steel structure. This meteorological tower design will minimize avian collisions with guy-wires, which can occur, especially during nights with low-visibility. Turbines around the perimeter of the Project area and at some additional locations within the Project area will be lighted per FAA specifications, with a single, medium-intensity aviation warning light. These lights are flashing red strobes (L-864) and operate only at night. During nights of inclement weather and/or poor visibility, passerines may fly at lower altitudes and may be attracted to lights, especially steady (i.e., not blinking) lights, therefore, by utilizing a FAA-minimum flashing red strobe light plan, this lighting effort will reduce the potential for birds to collide with the turbines.

During the operational phase of the Project, all Project employees are required to immediately turn off internal lights in turbines at night when lights are not required for safety or compliance purposes. Further, all of the Project substation lights will be equipped with downward facing shields. Similar to the turbine lighting plan, these measures will minimize the potential for birds to be attracted to the site at night and therefore minimize the collision risk. The power collection system will be buried underground in all areas where interference with other features would not preclude it, again in an effort to minimize the potential for avian collisions.

Overall impacts to birds and bats are expected to be low at the Project area, based on the Project area's agricultural landscape, low levels of bird and bat use, lack of attractive habitat characteristics, lack of use by federally protected species, and implementation of the above listed avoidance and minimization measures.

Turbine Operational Protocols

Pre-construction surveys recorded low bird use and low species diversity in the Project area, as well as a lack of federally sensitive species, eagles, and native avian habitats. The Project is not expected to pose a high level of risk to sensitive avian species, eagles, or birds in general. Therefore, no operational minimization measures for birds are determined to be necessary at this time. This determination will be re-evaluated throughout the life of the Project, through the Project's adaptive management framework.

Although the Project is not located in an area of high concern for bats, and avoids siting turbines near bat habitat including forested areas and open water, studies at other wind energy facilities have shown that bat mortality during the fall migration season is a potential concern at all wind energy facilities, even those located in agricultural landscapes (Good et al 2011, Kerlinger et al. 2007, Johnson et al. 2003, Howe et al. 2002). Additionally, based on the uncertainties associated with the five Indiana bat wind farm fatalities on record (Pruitt and Okajima 2013), and the 13 known northern long-eared bat wind farm fatalities on record (USFWS 2013a), it is assumed that any wind energy facility located within the range of either species may pose some unknown level of risk to that species. Therefore, to further minimize impacts and avoid take of the Indiana bat and northern long-eared bat, Twin Forks will implement operational curtailment measures at the Project.

During the fall migratory season (August 1- September 30), Twin Forks will feather the turbines from sunset to sunrise until wind speeds reach 6.9 meters per second (m/s) and when the ambient temperature is above 50° Fahrenheit (10° Celsius). During the remainder of the year turbines will be feathered up to the manufacturer's cut-in speed from sunset to sunrise. Feathering turbine blades involves changing the pitch of the blade so that they are parallel to the airflow and the rotor rotation is reduced to a nominal speed. Once the wind cut-in speed is reached the blades are pitched back into the wind, enabling the rotor to spin and generate electricity.

The Applicant will monitor bird and bat fatalities at the site in accordance with the monitoring plan to verify the effectiveness of the avoidance and minimization strategies incorporated into the Project.

(3) Site-specific Pre- and Post-Construction Environmental Impact Study on Environmentally Sensitive Areas and other Natural Resources

As discussed in *Section 1 - Desktop Wetland and Surface Water Assessment – 2015* of this document, E & E, on behalf of the Applicant, conducted a desktop wetland and surface water assessment of the Project area to identify the location and extent of wetland and surface waters. This analysis found three primary waterways within the Project boundary; North Fork Lake Fork Creek, the South Fork Lake Fork Creek, and Stevens Creek. Some of the largest tracts of deciduous/mixed forests and wetlands are located along the riparian corridor of North Lake Fork Creek in the central Project area. Given that the overall Project area is comprised of approximately 95% agricultural land, this waterway and associated forested corridor provides the most favorable potential habitat for migratory birds and bats, and roosting bats and forest-edge and forested-interior breeding birds within the entire Project area.

The Applicant and USFWS discussed this habitat during the their 2014 consultation meeting, and determined that a 1,000-foot turbine setback distance should be established from all contiguous forested habitats surrounding North Fork Lake Fork Creek, to further minimize the potential impacts to the Indiana bat and/or northern long-eared bat. Limited data are available regarding the distance Indiana bats forage

away from the edge of forest habitat during the summer; however, one study examined radio-telemetry data from 21 captured Indiana bats and found that 97% of the radio-telemetry points during foraging were located within 1,000 feet of a forest edge (USFWS 2013c). USFWS has subsequently used this study as the basis for the recommended 1,000 foot setback. The Applicant has identified contiguous forested habitat surrounding North Fork Lake Fork Creek, buffered the habitat by 1,000 feet and has designed the Project turbine array to avoid these buffered areas. The buffered areas for the Project are presented in Appendix A to Applicant's Macon County Special Use Permit Application. Additional avoidance, minimization, and monitoring efforts implemented by the Applicant are provided below in Section 4 - *Site-specific Pre-and Post-Construction Environmental Impact Study*.

There are no other locations within the Project area that have been determined by IDNR or USFWS to be environmentally sensitive. As waterways, wetlands, and forested areas have largely been avoided by the Project, there is no need for a post-construction environmental impact study.

(4) Site Specific Pre- and Post-Construction Environmental Impact Study, Spring and Fall for Birds and Bats.

In order to document the Project's impact on bird and bat resources, the Applicant will conduct a post-construction monitoring effort, consisting of mortality monitoring surveys at Project turbines, as agreed to in the BBCS with USFWS.

Monitoring Goals

To verify the avoidance of incidental Indiana and northern long-eared bat take, and also to monitor the Project's impact on other bat species as measured by total bat fatality rates, Twin Forks will conduct spring and fall mortality surveys at the site. Post-construction monitoring results will also provide triggers for adaptive management.

As Indiana and northern long-eared bat mortalities are not expected to occur at the Project, the monitoring plan is designed to detect non-listed bat and bird carcasses and calculate total bat fatality estimates with enough precision to determine if the operational protocols are effective in reducing bat fatalities at the Project. Though the monitoring is not specifically designed to detect Indiana and northern long-eared bat carcasses, the proposed study is expected to detect Indiana or northern long-eared bat fatalities should they occur. The monitoring plan will also enable comparison of the Project's bat fatality rates with other operating wind energy projects. Within the overall bat fatality estimate, estimates by species will be made, if possible, based on the number of carcasses detected.

Study Design

The results of the post-construction monitoring effort are intended to provide an estimate of overall bat fatality at the Project; the fatality rate can be influenced by several sources of bias during field-sampling. In order to correct for the survey biases when calculating fatality rates, the mortality methodology will also include carcass persistence trials and searcher efficiency trials (conducted once in the fall and once in the spring). The Applicant's proposed post-construction mortality monitoring plan methodology is designed to account for these sources of bias and adapt to preliminary results such that effectiveness, efficiency, and accuracy of the study is maximized.

Baseline post-construction mortality monitoring will be conducted during the first two years of Project operation. Follow-up monitoring will then be conducted every five years after the completion of the baseline monitoring period, for the life of the Project. During the baseline period, standardized carcass

searches will be conducted for six weeks during the spring (April 1 to May 15) and nine weeks during the fall (August 1 to September 30). Should the spring monitoring results confirm the Project's expected low risk (i.e., the lower 90% confidence interval estimates less than 0.5 bats/season) to spring migrating bats, and if no adaptive management measures are triggered, follow-up monitoring would occur during the fall migratory season only.

Standardized carcass searches will be conducted by trained surveyors at approximately 50% of the turbines in the Project. The randomly selected turbines will be searched weekly during the first two years of monitoring, as well as during the follow-up monitoring that will occur every fifth year (USFWS 2012a; NWCC 2011). If more or less intensive monitoring is deemed necessary following initial data collection (carcass searches and carcass persistence trials) at the Project area, the search intervals will be modified accordingly. During each monitoring period, at 80 percent of the turbines that will be searched, only the turbine pads and access roads out to 262 feet (80 meters) from the turbine will be searched.

Carcass searches will be conducted under applicable permits by qualified individuals experienced in fatality search methods, including proper handling and reporting of carcasses. Searchers will be familiar with and able to accurately identify bird and bat species likely to be found in the Project area. Any unknown bats or suspected Indiana or northern long-eared bats discovered during fatality searches will be examined by a qualified USFWS-approved bat expert for positive identification. Bird carcasses will be photographed from several angles to provide the best chance of photographic identifications, and photographs will be verified by a bird expert for positive identification. A digital picture of each detected carcass will be taken before the carcass is handled and removed. As previously mentioned, all bat carcasses will be labeled with a unique number, bagged, and stored frozen (with a copy of the original data sheet) at the Project O & M building.

Reporting

Twin Forks will provide an annual fatality monitoring report to IDNR and USFWS describing the survey results for that calendar year. Included within each annual report will be a detailed documentation of the survey methods and results, including mortality estimates broken down for each survey period, an annual estimate, and results of the searcher efficiency and carcass persistence trials. Annual mortality estimates will be presented per turbine and per MW to provide comparable results to other regional or national monitoring studies. Following the first year of mortality monitoring, the report will also provide a comparison to previous year's results.

In addition to the annual reports, Twin Forks will report the discovery of any Indiana bat fatalities, northern long-eared bat fatalities, other ESA-listed species, or eagles to the USFWS within 24 hours of discovery. Any adaptive management measures implemented shall be described in the annual fatality monitoring report.

June 1, 2015

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If you have any questions about this response, please do not hesitate to contact me at (703) 522-6065 or by e-mail at cdohoney@ene.com. We look forward to continuing to support this project.

Sincerely,

ECOLOGY AND ENVIRONMENT, INC.

A handwritten signature in black ink, appearing to read 'CD', with a stylized, flowing script.

Courtney Dohoney
Project Manager

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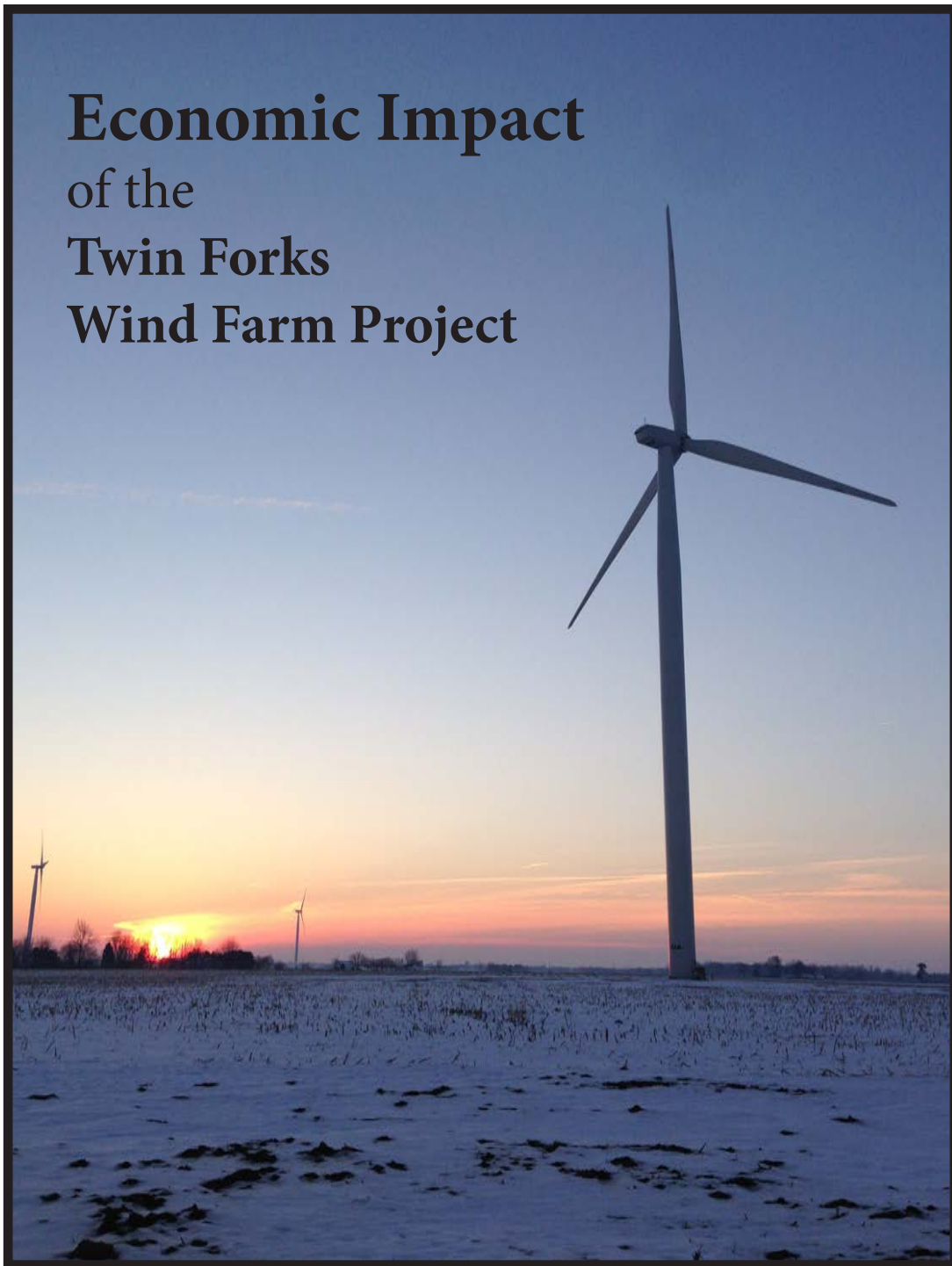
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Economic Impact of the Twin Forks Wind Farm Project



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About the Author



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Energy Partners, Illinois Chamber of Commerce, Geronimo Energy, EDP Renewables and others. He has testified on the economic impacts of wind energy before the Illinois Senate Energy and Environment Committee and the LaSalle and Livingston County Boards in Illinois. Dr. Loomis is a widely recognized expert and has been quoted in the Wall Street Journal, Forbes Magazine, Associated Press, and Chicago Tribune as well as appearing on CNN.

Dr. Loomis has published over 15 peer-reviewed articles in leading energy policy and economics journals. He has raised and managed over \$5 million in grant and contracts from government, corporate and foundation sources. He received the 2011 Department of Energy's Midwestern Regional Wind Advocacy Award and the 2006 Best Wind Working Group Award. Dr. Loomis received his Ph.D. in economics from Temple University in 1995.

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Executive Summary



E.ON is developing the Twin Forks Wind Farm Project in Macon County in Illinois. The purpose of this report is to aid decision makers in evaluating the economic impact of this project on Macon County and the State of Illinois. The basis of this analysis is to study the direct, indirect and induced impacts on job creation, wages and total economic output.

As currently modeled for the purposes of this economic impact study, the 282 MW Twin Forks Project will consist of 141 wind turbines (at 2.0 MW nameplate generating capacity) and will also include associated access roads, a 345kV transmission line, collection substation, switchyard, underground collection cable and communication equipment, storage areas, and control facilities. The total project represents an investment in excess of \$500 million. The proposed development is anticipated to result in the following:

Jobs

- 724 new local jobs during construction for Macon County
- 1,223 new local jobs during construction for the State of Illinois
- 51 new local long term jobs for Macon County and 60 new local long term jobs for the State of Illinois

Earnings

- Over \$43.1 million in new local earnings during construction for Macon County
- Over \$83 million in new local earnings during construction for the State of Illinois
- Over \$2.8 million in new local long term earnings for Macon County
- Over \$4 million in new local long term earnings for the State of Illinois

Output

- Over \$155.5 million in new local output during construction for Macon County
- Over \$203.5 million in new local output during construction for the State of Illinois
- Over \$8.8 million in new local long term output for Macon County
- Over \$11.4 million for the State of Illinois in new local long term output

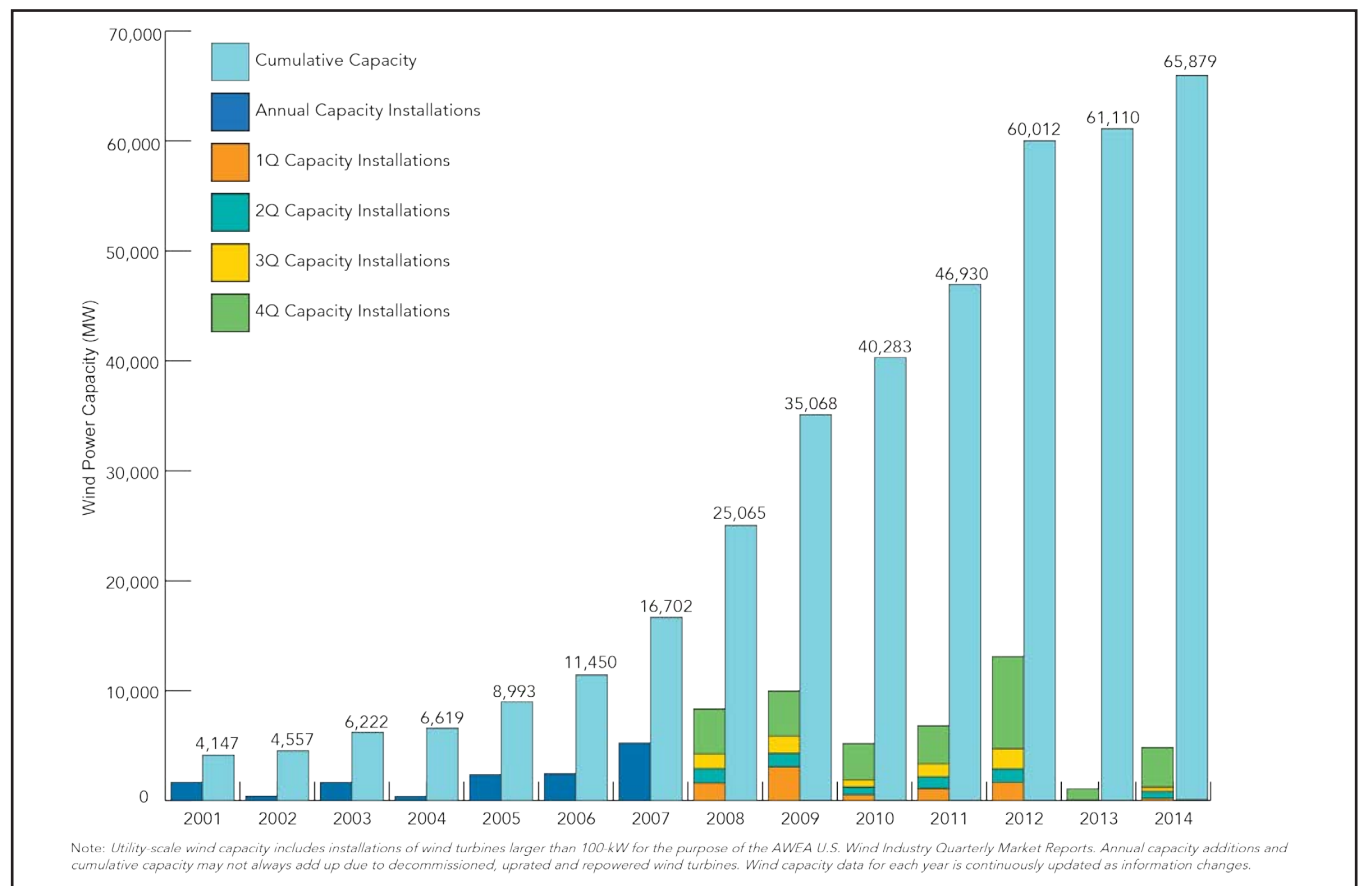
The U.S. wind industry grew at a rapid but uneven pace from 2006-2014. In 2012, the U.S. set a new record of 13,131 MW far surpassing the previous annual peak just over 10,000 MW of wind power installed in 2009. Due to the uncertainty surrounding wind energy policy, the industry only installed 1,087 MW in 2013. The industry rebounded in 2014 with 4,854 MW installed.

The total amount of wind capacity in the U.S. by the end of 2014 was 65,879 MW which is enough to power the equivalent of over 19 million homes. China is the global leader with 91.4 GW of installed capacity with Germany in third place with 34 GW of installed capacity (2013 figures). Figure 1 shows the growth in installed annual capacity and cumulative capacity in the U.S. and Figure 2 shows the state-by-state breakdown of installed capacity.

II. U.S. Wind Industry Growth and Economic Development

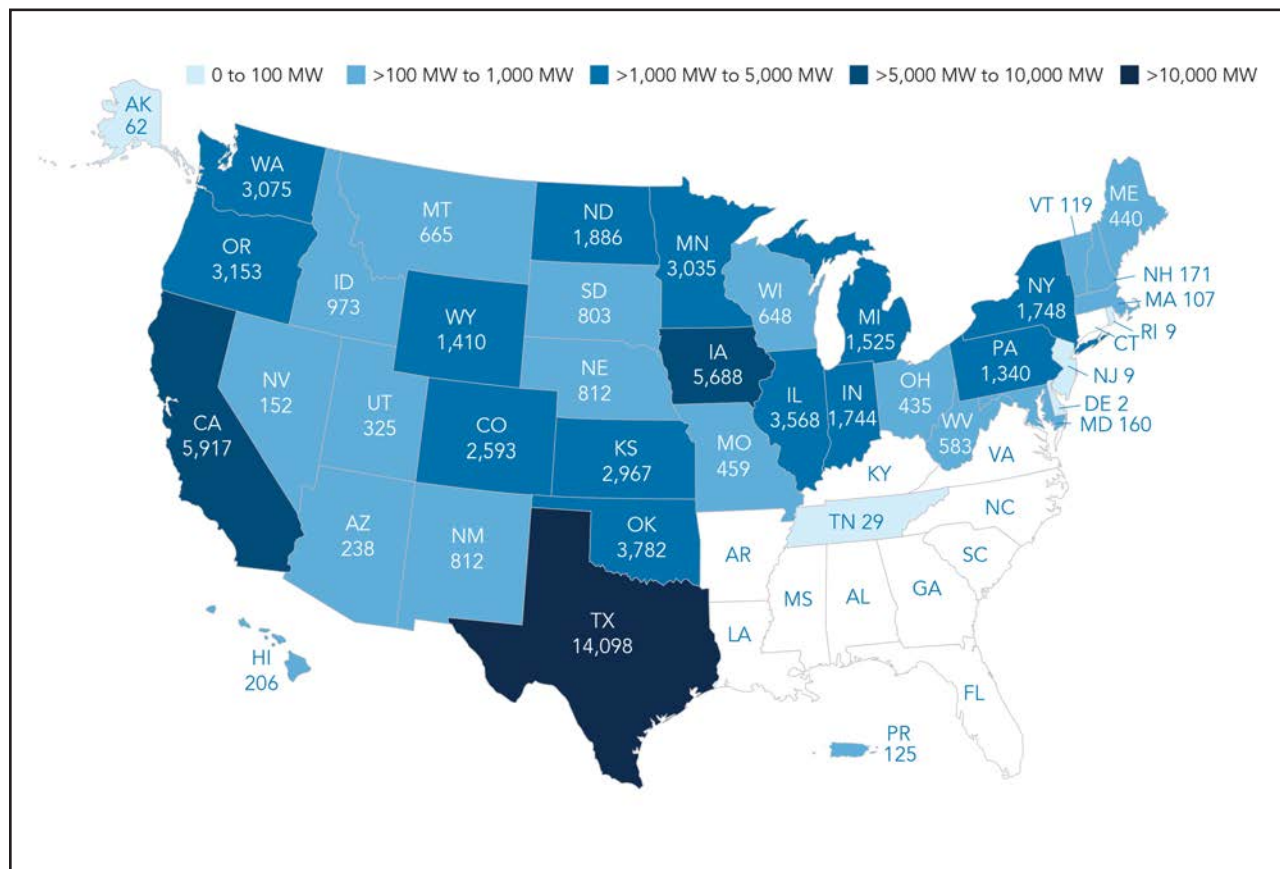
a. U.S. Wind Industry Growth

Figure 1.—U.S. Annual and Cumulative Wind Power Capacity Growth (Utility-Scale Wind)



Source: American Wind Energy Association, U.S. Wind Industry 4Q2014 Market Report

Figure 2.—Total Wind Capacity by State



Source: American Wind Energy Association, U.S. Wind Industry 4Q2014 Market Report

Illinois' wind power capacity has grown from 50 MW in 2003 to 3,568 MW in 2014. As of December, 2014, Illinois ranked 5th in the United States in existing wind-powered generating capacity and ranked 16th in the United States in potential capacity (AWEA, 2010b; AWEA, 2014). Table 1 has a list of the operational wind farms in Illinois. Illinois has 23 wind farms greater than 50 MW covering parts of 17 different counties.

b. Illinois Wind Industry Growth

Table 1. — Illinois Wind Farm Projects over 50 MW

Wind Farm	Location (County)	Capacity (MW)
Streator Cayuga Ridge Couth Wind Farm	Livingston	300.0
Big Sky Wind Farm	Bureau and Lee	239.4
Lee-DeKalb Wind Energy Center	DeKalb and Lee	217.5
California Ridge	Champaign and Vermillion	214.0
Bishop Hill I	Henry	209.4
Top Crop Wind Farm Phase II	Grundy	198.0
Twin Groves Wind Farm Phase I	McLean	198.0
Twin Groves Wind Farm Phase II	McLean	198.0
Pioneer Trail	Iroquois and Ford	150.0
Settlers Trail	Iroquois	150.0
Camp Grove Wind Farm	Marshall and Stark	150.0
White Oak Energy Center	McLean	150.0
Grand Ridge Energy Center Expansion	LaSalle	111.0
Shady Oaks	Lee	109.5
Top Crop Wind Farm Phase I	LaSalle	102.0
EcoGrove Wind Farm	Stephenson	100.5
Railsplitter Wind Farm	Logan and Tazewell	100.5
Grand Ridge Energy Center Phase I	LaSalle	99.0
Bishop Hill II	Henry	80.0
GSG Wind Farm	Lee and LaSalle	80.0
Providence Heights Wind Farm	Bureau	72.0
Crescent Ridge Wind Farm	Bureau	54.4
Mendota Hills	Lee	51.7

c. Economic Benefits of Wind Farms



Wind farms have numerous economic benefits. Wind farms create job opportunities in the local area during both the short-term construction phase and the long-term operational phase. Lease payments made to landowners provide a steady source of long-term income to offset the fluctuating prices received from crops. Wind farms strengthen the local tax base helping to improve county services, schools, police and fire departments and infrastructure improvements, such as public roads.

Numerous studies have quantified the economic benefits across the United States (see http://apps2.eere.energy.gov/wind/windexchange/economics_tools.asp). The National Renewable Energy Laboratory has produced economic impact reports for the State of Arizona (NREL, 2008a), State of Idaho (NREL, 2008b), State of Indiana (NREL, 2014), State of Iowa (NREL, 2013), State of Maine (NREL, 2008c), State of Montana (NREL, 2008d), State of New Mexico (NREL, 2008e), State of Nevada (NREL, 2008f), State of Pennsylvania (NREL, 2008g), State of South Dakota (NREL, 2008h), State of Utah (NREL 2008i), State of West Virginia (NREL, 2008j), State of Wisconsin (NREL, 2008k), and the State of North Carolina (NREL, 2009).

More locally, two reports recently released by the Center for Renewable Energy have examined the economic impact of Illinois wind farms and the economic impact of the related wind turbine supply chain in Illinois (see <http://renewableenergy.illinoisstate.edu/wind/publications/>). According to the *Economic Impact: Wind Energy Development in Illinois* (June 2012), “the 23 largest wind farms in Illinois:

- Created approximately 19,047 full-time equivalent jobs during construction periods with a total payroll of over \$1.1 billion
- Support approximately 814 permanent jobs in rural Illinois areas with a total annual payroll of nearly \$48 million
- Support local economies by generating \$28.5 million in annual property taxes
- Generate \$13 million annually in extra income for Illinois landowners who lease their land to the wind farm developer
- Will generate a total economic benefit of \$5.98 billion over the life of the projects.

According to the *Illinois Wind Turbine Supply Chain Report* (June 2010), “if all of the new wind turbine capacity that is predicted to be installed in Illinois over the 2011-2015 time period were to be produced in Illinois, we estimate that between 15.8 and 16.8 thousand additional jobs would be created. Income would increase by between \$1.04 and \$1.08 billion, while total output would increase by approximately \$3.9 billion.”

Twin Forks Wind Farm, LLC is designed to be a state-of-the-art wind energy facility, located in Macon County, Illinois on primarily agricultural land within the county. The Project is designed to include approximately 140 wind turbines with generation capacity between approximately 250-336-MW of electricity depending on the generation capacity of the turbine model used. Additionally, the Project will require the development of access roads, underground collection lines, an operation and maintenance (O & M) building, and a collection substation & switchyard). In addition, the Project will require a 345 kilovolt (kV) monopole overhead transmission line to connect to the 345 kV Commonwealth Edison (ComEd) Transmission line within the Pennsylvania New Jersey Maryland (PJM) System Operator electricity transmission system. While the actual Project encompasses approximately 24,862 acres of land within the County, the actual footprint of the Project's components will be less than 2 tenths of an acre per wind turbine after construction, restoration and reclamation activities.

The Project is located on land leased from participating landowners, who will continue existing use of the land to a significant extent. As a leaseholder, Twin Forks' rights are limited to those incorporated in the lease agreement to allow for safe and effective construction, operation, maintenance and decommissioning of the Project. Twin Forks has no control over landowner activities on the property within which the Project will be located to the extent not covered in specific lease provisions.

The nearest city is Maroa, which abuts the Project area along the eastern Project boundary with Highway 51; Lake Fork Road is the northern Project boundary line in Macon county; The Macon county-Logan County border is the western boundary line, and the Project does not extend south below Illiniwick Road (Village of Warrensburg). The Project is located primarily on privately-owned lands which are developed mainly for agricultural practices.

III. Twin Forks Wind Farm Project Description and Location

a. Twin Forks Wind Farm Project Description

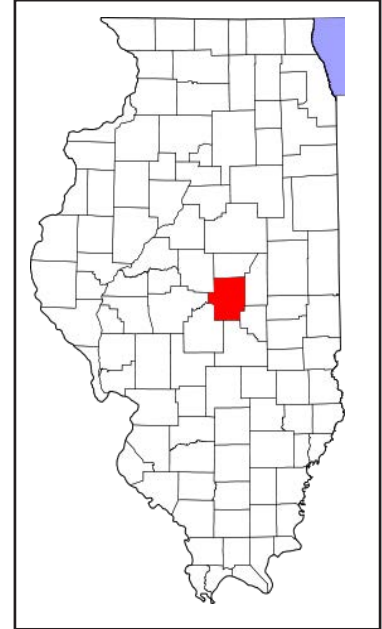


b. Macon County,
Illinois

Macon County is located in the central part of Illinois (see Figure 3). It has a total area of 586 square miles and the U.S. Census estimates that the 2010 population was 110,768. Its population density is 190.8 (persons per square mile) compared to 231 for the State of Illinois. Median household income in the county was \$46,559 (2009-2013). The largest industry providing employment is retail trade (16.0%) followed by other services (13.52%), health care and social assistance (12.17%), accommodation and food services (9.41%), and construction (8.51%).

The City of Decatur is the county seat and the largest municipality within Macon County with a population of 74,710. Top employers in Decatur include Archer Daniels Midland (4,040), Caterpillar (3,292), Decatur Memorial Hospital (2,374) and Decatur Public School District (1,500).

**Figure 3.—Map of
Macon County, Illinois**



The economic analysis of wind power development presented here utilizes the National Renewable Energy Laboratory's (NREL's) latest Jobs and Economic Development Impacts (JEDI) Wind Energy Model (W4.28.14). NREL is the U.S. Department of Energy's primary national laboratory for renewable energy and energy efficiency research and development. The JEDI Wind Energy Model is an input-output model that measures the spending patterns and location-specific economic structures that reflect expenditures supporting varying levels of employment, income, and output. Essentially, JEDI is an input-output model, which takes into account the fact that the output of one industry can be used as an input for another. For example, when a wind farm developer purchases turbines to build a wind farm, those wind turbines are made of components such as fiberglass, aluminum, steel, copper, etc. Therefore, purchases of wind turbines impact the demand for these components. In addition, when a wind farm developer purchases a wind turbine from a manufacturing facility, the manufacturer uses some of that money to pay employees, and then the employees spend that money to purchase goods and services within their community. In essence, JEDI reveals how purchases of wind project materials not only benefit local turbine manufacturers but also the local industries that supply the concrete, rebar, and other materials (Reategui et al., 2009). The JEDI model uses construction cost data, operating cost data, and data relating to the percentage of goods and services acquired in the state to calculate jobs, earnings, and economic activities that are associated with this information. The results are broken down into the construction period and the operation period of the wind project. Within each period, impacts are further divided into direct, turbine and supply chain (indirect), and induced impacts.

The Jobs and Economic Development Impacts (JEDI) Model was developed in 2002 to demonstrate the economic benefits associated with developing wind farms in the United States. The model was developed by Marshall Goldberg of MRG & Associates, under contract with the National Renewable Energy Laboratory. The JEDI model utilizes state specific industry multipliers obtained from IMPLAN (IMpact Analysis for PLANning). IMPLAN software and data are managed and updated by the Minnesota IMPLAN Group, Inc., using data collected at federal, state, and local levels. The JEDI model considers 14 aggregated industries that are impacted by the construction and operation of a wind farm: agriculture, construction, electrical equipment, fabricated metals, finance/insurance/real estate, government, machinery, mining, other manufacturing, other services, professional service, retail trade, transportation/communication/public utilities, and wholesale trade (Reategui et al., 2009). This study does not analyze net jobs. It analyzes the gross jobs that the new wind farm development supports.

IV. Methodology



NREL: National Renewable
Energy Laboratory

JEDI: Jobs and Economic
Development Impacts

IMPLAN: IMpact Analysis
for PLANning



Direct impacts during the construction period refer to the changes that occur in the onsite construction industries in which the direct final demand (i.e., spending on construction labor and services) change is made. Final demands are goods and services purchased for their ultimate use by the end user. Onsite construction-related services include engineering, design, and other professional services. Direct impacts during operating years refer to the final demand changes that occur in the onsite spending for wind farm workers. Direct jobs consist primarily of onsite construction and project development labor.

The initial spending on the construction and operation of the wind farm creates a second layer of impacts, referred to as “turbine and supply chain impacts” or “indirect impacts.” Indirect impacts during the construction period consist of the changes in inter-industry purchases resulting from the direct final demand changes, and include construction spending on materials and wind farm equipment and other purchases of goods and offsite services. Essentially, these impacts result from “spending related to project development and on-site labor such as equipment costs (turbines, blades, towers, transportation), manufacturing of components and supply chain inputs, materials (transformer, electrical, HV line extension, HV subinterconnection materials), and the supply chain of inputs required to produce these materials” (JEDI Support Team, 2009, 2). Concrete that is used in turbine foundations increases the demand for gravel, sand, and cement. As a result of the expenditure for concrete there is increased economic activity at quarries and cement factories and these changes are indirect impacts. The accountant for the construction firm and the banker who finances the contractor are both considered indirect impacts. All supply chain component impacts/manufacturing-related activities are included under indirect impacts; therefore, the late stage turbine assembly process, which includes gearbox assembly, blade production, and steel rolling are all included under the construction period indirect impacts category.

Indirect impacts during operating years refer to the changes in inter-industry purchases resulting from the direct final demand changes. Essentially, these impacts result from “expenditures related to on-site labor, materials, and services needed to operate the wind farms (e.g., vehicles, site maintenance, fees, permits, licenses, utilities, insurance, fuel, tools and supplies, replacement parts/equipment); the supply chain of inputs required to produce these goods and services; and project revenues that flow to the local economy in the form of land lease revenue, property tax revenue, and revenue to equity investors” (JEDI Support Team, 2009, 3). All land lease payments and property taxes show up in the operating-years portion of the results because these payments do not support the day-to-day operations and maintenance of the wind farm but instead are more of a latent effect that results from the wind farm being present (Eric Lantz, February 25, 2009, e-mail message to Jennifer Hinman).

Induced impacts during construction refer to the changes that occur in household spending as household income increases or decreases due to the direct and indirect effects of final demand changes. Local spending by employees working directly or indirectly on the wind farm project who receive their paychecks and then spend money in the community is included. Additional local jobs and economic activity are supported by these purchases of goods and services. Thus, for example, the increased economic activity at quarries and cement factories results in increased revenues for the affected firms and raises individual incomes. Individuals employed by these companies then spend more money in the local economy, e.g., as workers receive income, they may decide to purchase more expensive clothes, or higher quality food along with other goods and services from local businesses. This increased economic activity may result from “construction workers who spend a portion of their income on lodging, groceries, clothing, medicine, a local movie” theater, restaurant, or bowling alley; or a “steel mill worker who provides the inputs for turbine production and spends his money in a similar fashion, thus supporting jobs and economic activities in different sectors of the economy” (JEDI Support Team, 2009, 2). Induced impacts during operating years refer to the changes that occur in household spending as household income increases or decreases as a result of the direct and indirect effects from final demand changes. Some examples include a “wind farm technician who spends income from working at the wind farm on buying a car, a house, groceries, gasoline,” or movie tickets; or a “worker at a hardware store who provides spare parts and materials needed at the wind farm and who spends money in a similar fashion, thus supporting jobs and economic activities in different sectors of the economy” (JEDI Support Team, 2009, 3).

This methodology was been validated by a paper in the peer-reviewed economics literature. In the article, “Ex Post Analysis of Economics Impacts from Wind Power Development in U. S. Counties,” the authors conducted an ex post econometric analysis of the county-level economic development impacts of wind power installations from 2000 through 2008. They found an aggregate increase in county-level personal income and employment of approximately \$11,000 and 0.5 jobs per megawatt of wind power capacity which is consistent with the JEDI results at the county level. (Brown, 2012)



V. Results



The results were derived from detailed cost estimates supplied by E.ON. In addition, E.ON also estimated the percentages of project materials and labor that will be coming from within Macon County and the State of Illinois.

Two separate JEDI models were run to show the economic impact of the Twin Forks Wind Farm. The first JEDI model used the 2013 Macon County multipliers from IMPLAN. The second JEDI model used the 2013 IMPLAN multipliers for the State of Illinois and the same total project costs.

The output from these two models is shown in Tables 2-4. Table 2 lists the total employment impact from the Twin Forks Wind Farm for the county and for the State of Illinois. Table 3 shows the impact on total earnings and Table 4 contains the impact on total output.

Table 2. — Total Employment Impact from the Twin Forks Wind Farm

	Macon County	State of Illinois
Construction		
Project Development and Onsite Labor Impacts	144	141
Turbine and Supply Chain Impacts	484	764
Induced Impacts	96	318
<i>New Local Jobs during Construction</i>	724	1223
Operations		
Onsite Labor Impacts	13	13
Local Revenue and Supply Chain Impacts	29	28
Induced Impacts	8	19
<i>New Local Long Term Jobs</i>	51	60

The results from the JEDI model show significant employment impacts from the Twin Forks Wind Farm. Employment impacts can be broken down into several different components. Direct jobs created during the construction phase typically last anywhere from 6 months to over a year depending on the size of the project; however, the direct job numbers present in Table 2 from the JEDI model are based on a full time equivalent (FTE) basis for a year. In other words, 1 job = 1 FTE = 2,080 hours worked in a year. A part time or temporary job would constitute only a fraction of a job according to the JEDI model. For example, the JEDI model results show 724 new jobs during construction in Macon County, though the construction of the wind farms may actually involve hiring closer to 1,448 workers for 6 months. Thus, due to the short-term nature of construction projects, the JEDI model significantly understates the number of people actually hired to work on the project. It is important to keep this fact in mind when looking at the numbers or when reporting the numbers.

As shown in Table 2, new local jobs created or retained during construction total 724 for Macon County and 1,223 for the State of Illinois. New local long term jobs created from the Twin Forks Wind Farm total 51 for Macon County and 60 for the State of Illinois.

Direct jobs created during the operational phase last the life of the wind farm, typically 30 years. Direct construction jobs and operations and maintenance jobs both require highly-skilled workers in the fields of construction, management, and engineering. These well-paid professionals boost economic development in rural communities where new employment opportunities are welcome due to economic downturns (Reategui and Tegen, 2008). Accordingly, it is important to not just look at the number of jobs but also the earnings that they produce. The earnings impacts from the Twin Forks Wind Farm are shown in Table 3 and are categorized by construction impacts and operations impacts. The new local earnings during construction total over \$43.1 million for Macon County. The new local earnings are over \$83 million for the State of Illinois. The new local long term earnings total over \$2.8 million for Macon County and over \$4 million for the State of Illinois.



Table 3. — Total Earnings Impact from the Twin Forks Wind Farm

	Macon County	State of Illinois
Construction		
Project Development and Onsite Earnings Impacts	\$9,998,732	\$10,802,892
Turbine and Supply Chain Impacts	\$29,341,679	\$53,709,911
Induced Impacts	\$3,820,725	\$18,489,616
<i>New Local Earnings during Construction</i>	<i>\$43,161,135</i>	<i>\$83,002,419</i>
Operations		
Onsite Labor Impacts	\$953,958	\$953,719
Local Revenue and Supply Chain Impacts	\$1,528,162	\$1,862,293
Induced Impacts	\$334,114	\$1,191,970
<i>New Local Long Term Earnings</i>	<i>\$2,816,234</i>	<i>\$4,007,982</i>

Output refers to economic activity or the value of production in the state or local economy. According to Table 4, the new local output during construction totals over \$155.5 million for Macon County. This figure increases to over \$203.5 million for the State of Illinois. The new local long term output totals over \$8.8 million for Macon County and over \$11.4 million for the State of Illinois.

Table 4. — Total Output Impact from the Twin Forks Wind Farm

	Macon County	State of Illinois
Construction		
Project Development and Onsite Jobs Impacts on Output	\$12,214,349	\$12,211,283
Turbine and Supply Chain Impacts	\$130,885,903	\$140,425,240
Induced Impacts	\$12,411,087	\$50,911,048
<i>New Local Output during Construction</i>	\$155,511,338	\$203,547,572
Operations (Annual)		
Onsite Labor Impacts	\$953,958	\$953,719
Local Revenue and Supply Chain Impacts	\$6,806,354	\$7,246,564
Induced Impacts	\$1,085,211	\$3,282,434
<i>New Local Long Term Output</i>	\$8,845,524	\$11,482,717

Wind power projects increase the property tax base of a county, creating a new revenue source for education and other local government services. According to the JEDI model, the modeled 282 MW Twin Forks Wind Farm would generate more than \$1.945 million in annual property taxes when it is built. A more detailed look at the tax benefits of the wind farm is contained in Section VI.

Landowners also benefit when they lease their land to wind developers because of the stabilized income stream increase associated with leased acreage, wind facilities on their property, and royalty revenue share.

Wind power projects increase the property tax base of a county, creating a new revenue source for education and other local government services. According to Public Act 095-0644, the fair cash value for a utility-scale wind turbine in Illinois is \$360,000 per megawatt of capacity beginning in 2007 and is annually adjusted for inflation and depreciation. The inflation adjustment, as known as the Trending Factor, increases each year according to the Bureau of Labor Statistics' Consumer Price Index for all cities for all items. The depreciation is allowed 4% per year up to a maximum depreciation of 70%. In April 2010, the Illinois legislature extended Public Act 095-0644, which was set to expire at the end of 2011, until 2016. If this law were allowed to expire in the future, the determination of the equalized assess value of the wind farm would revert back to the county assessor's office.

Tables 5-9 detail the tax implications of the Twin Forks Wind Farm. There are several important assumptions built into the analysis in these tables. First, the analysis assumes that the valuation of the wind farm is the same as set forth in Public Act 095-0644. Second, the table assumes inflation is constant at 2.2% and the depreciation is 4% until it reaches the maximum of 70%. Third, the projections assume a constant tax rate for each taxing body. Fourth, the analysis assumes that the wind farm is placed in service on January 1, 2016 at a fair cash value of \$123,483,711 according to Public Act 095-0644. Fifth, it assumes that the wind farm is decommissioned in 30 years and pays no more taxes. Sixth, the reduction in state aid assumes no changes in the school funding formula or the foundation level determined by the state. Six, because the taxing bodies and tax rates vary across townships and school districts, no comprehensive tax payment was calculated.

According to Table 5, the taxes paid by the wind farm to the county starts out at almost \$380,000 but declines due to depreciation (and offset by the trending factor) until it reaches the bottom in 2034. After that, the wind farm is fully depreciated and the trending factor causes the taxable value and taxes to increase.

IV. Property Taxes

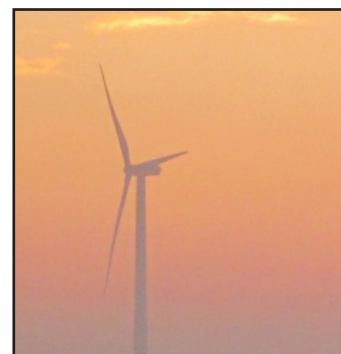


Table 5. — County and Township Tax Implications of the Twin Forks Wind Farm

Year	Taxable Value of Wind Farm	Macon County	Austin Township	Illini Township	Maroa Township	Hickory Township
2016	\$40,088,312	\$379,765	\$294,979	\$27,627	\$164,243	\$2,016
2017	\$39,331,444	\$372,595	\$289,410	\$27,106	\$161,142	\$1,978
2018	\$38,521,872	\$364,925	\$283,453	\$26,548	\$157,825	\$1,937
2019	\$37,657,642	\$356,738	\$277,094	\$25,952	\$154,284	\$1,894
2020	\$36,736,742	\$348,015	\$270,318	\$25,317	\$150,511	\$1,847
2021	\$35,757,095	\$338,734	\$263,109	\$24,642	\$146,498	\$1,798
2022	\$34,716,564	\$328,877	\$255,453	\$23,925	\$142,235	\$1,746
2023	\$33,612,942	\$318,422	\$247,332	\$23,165	\$137,713	\$1,690
2024	\$32,443,959	\$307,348	\$238,730	\$22,359	\$132,924	\$1,632
2025	\$31,207,272	\$295,633	\$229,631	\$21,507	\$127,857	\$1,569
2026	\$29,900,467	\$283,253	\$220,015	\$20,606	\$122,503	\$1,504
2027	\$28,521,059	\$270,186	\$209,865	\$19,656	\$116,851	\$1,434
2028	\$27,066,485	\$256,406	\$199,162	\$18,653	\$110,892	\$1,361
2029	\$25,534,105	\$241,890	\$187,886	\$17,597	\$104,614	\$1,284
2030	\$23,921,201	\$226,610	\$176,018	\$16,485	\$98,006	\$1,203
2031	\$22,224,971	\$210,542	\$163,537	\$15,317	\$91,056	\$1,118
2032	\$20,442,528	\$193,656	\$150,421	\$14,088	\$83,753	\$1,028
2033	\$18,570,901	\$175,926	\$136,649	\$12,798	\$76,085	\$934
2034	\$17,793,244	\$168,559	\$130,927	\$12,262	\$72,899	\$895
2035	\$18,184,696	\$172,267	\$133,807	\$12,532	\$74,503	\$914
2036	\$18,584,759	\$176,057	\$136,751	\$12,808	\$76,142	\$935
2037	\$18,993,624	\$179,930	\$139,760	\$13,090	\$77,817	\$955
2038	\$19,411,484	\$183,889	\$142,834	\$13,378	\$79,529	\$976
2039	\$19,838,536	\$187,934	\$145,977	\$13,672	\$81,279	\$998
2040	\$20,274,984	\$192,069	\$149,188	\$13,973	\$83,067	\$1,020
2041	\$20,721,034	\$196,294	\$152,470	\$14,280	\$84,895	\$1,042
2042	\$21,176,896	\$200,613	\$155,825	\$14,594	\$86,762	\$1,065
2043	\$21,642,788	\$205,026	\$159,253	\$14,915	\$88,671	\$1,088
2044	\$22,118,929	\$209,537	\$162,756	\$15,243	\$90,622	\$1,112
2045	\$22,605,546	\$214,147	\$166,337	\$15,579	\$92,615	\$1,137
2046	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL		\$6,150,223	\$4,777,140	\$447,417	\$2,659,882	\$32,648

The tax implication for school districts is more complicated than for the county or townships. The Center for Renewable Energy did a report titled Wind Farm Implications for School District Revenue which details how a wind farm affects the local school district's revenue. Although the school district collects increased local property tax revenue from the wind farm, it receives less from General State Aid because of the increases in Equalized Assessed Value (EAV) due to the wind farm.

Tables 6-9 calculate the reduction in General State Aid and the net school revenue after adjusting for the loss in state aid for each of the affected school districts. Because the state uses the previous year's EAV, the school district gets "extra" revenue in its first year. This will be partially offset in the year after the wind farm is decommissioned because the state is using an old EAV that had the wind farm on the books. According to Table 6, the Warrensburg-Latham School District will receive over \$4.1 million in revenue after the state aid reduction over the expected 30 year life of the wind farm. According to Table 7, the net revenue to the Maroa-Forsyth School District will be over \$4.4 million. Because fewer turbines will be placed within its borders, the Clinton School District will receive over \$305,000 in net revenue according to Table 8. Finally, Mount Pulaski School District will receive \$440,000 in net revenue according to Table 9.

Collectively, the school districts will receive \$1,637,180 in property tax revenue in its first full year of operations and \$32,573,530 in property tax revenue over the expected 30 year lifetime of the project.



Table 6. — Warrensburg-Latham School District Tax Implications of the Twin Forks Wind Farm

Year	Wind Farm Property Tax	Reduction in State Aid	Net School Revenue
2016	\$735,352	\$0	\$735,352
2017	\$721,468	\$528,825	\$192,644
2018	\$706,618	\$518,840	\$187,778
2019	\$690,765	\$508,161	\$182,604
2020	\$673,873	\$496,760	\$177,112
2021	\$655,903	\$484,612	\$171,291
2022	\$636,816	\$471,689	\$165,127
2023	\$616,572	\$457,963	\$158,609
2024	\$595,129	\$443,405	\$151,724
2025	\$572,444	\$427,984	\$144,460
2026	\$548,473	\$411,670	\$136,803
2027	\$523,170	\$394,432	\$128,738
2028	\$496,488	\$376,235	\$120,253
2029	\$468,380	\$357,047	\$111,332
2030	\$438,794	\$336,833	\$101,961
2031	\$407,679	\$315,556	\$92,123
2032	\$374,983	\$293,180	\$81,803
2033	\$340,651	\$269,667	\$70,984
2034	\$326,387	\$244,978	\$81,409
2035	\$333,567	\$234,719	\$98,848
2036	\$340,906	\$239,883	\$101,022
2037	\$348,406	\$245,161	\$103,245
2038	\$356,071	\$250,554	\$105,516
2039	\$363,904	\$256,066	\$107,838
2040	\$371,910	\$261,700	\$110,210
2041	\$380,092	\$267,457	\$112,635
2042	\$388,454	\$273,341	\$115,113
2043	\$397,000	\$279,355	\$117,645
2044	\$405,734	\$285,501	\$120,233
2045	\$414,660	\$291,782	\$122,879
2046	\$0	\$298,201	-\$298,201
TOTAL	\$14,630,649		\$4,109,090

Table 7. — Maroa-Forsyth School District Tax Implications of the Twin Forks Wind Farm

Year	Wind Farm Property Tax	Reduction in State Aid	Net School Revenue
2016	\$863,411	\$0	\$863,411
2017	\$847,109	\$639,707	\$207,402
2018	\$829,673	\$627,629	\$202,044
2019	\$811,059	\$614,711	\$196,349
2020	\$791,225	\$600,920	\$190,306
2021	\$770,126	\$586,225	\$183,901
2022	\$747,715	\$570,592	\$177,123
2023	\$723,946	\$553,988	\$169,958
2024	\$698,769	\$536,377	\$162,392
2025	\$672,133	\$517,723	\$154,411
2026	\$643,988	\$497,988	\$145,999
2027	\$614,278	\$477,135	\$137,143
2028	\$582,950	\$455,123	\$127,827
2029	\$549,946	\$431,912	\$118,034
2030	\$515,208	\$407,459	\$107,749
2031	\$478,675	\$381,721	\$96,954
2032	\$440,285	\$354,654	\$85,632
2033	\$399,975	\$326,211	\$73,764
2034	\$383,226	\$296,344	\$86,882
2035	\$391,657	\$283,935	\$107,722
2036	\$400,273	\$290,181	\$110,092
2037	\$409,079	\$296,565	\$112,514
2038	\$418,079	\$303,090	\$114,989
2039	\$427,277	\$309,758	\$117,519
2040	\$436,677	\$316,572	\$120,104
2041	\$446,284	\$323,537	\$122,747
2042	\$456,102	\$330,655	\$125,447
2043	\$466,136	\$337,929	\$128,207
2044	\$476,391	\$345,364	\$131,028
2045	\$486,872	\$352,962	\$133,910
2046	\$0	\$360,727	-\$360,727
TOTAL	\$17,178,525		\$4,450,832

Table 8. — Clinton School District Tax Implications of the Twin Forks Wind Farm

Year	Wind Farm Property Tax	Reduction in State Aid	Net School Revenue
2016	\$15,751	\$0	\$15,751
2017	\$15,454	\$416	\$15,038
2018	\$15,136	\$408	\$14,727
2019	\$14,796	\$400	\$14,396
2020	\$14,434	\$391	\$14,043
2021	\$14,049	\$381	\$13,668
2022	\$13,641	\$371	\$13,269
2023	\$13,207	\$360	\$12,847
2024	\$12,748	\$349	\$12,399
2025	\$12,262	\$337	\$11,925
2026	\$11,748	\$324	\$11,424
2027	\$11,206	\$310	\$10,896
2028	\$10,635	\$296	\$10,339
2029	\$10,033	\$281	\$9,752
2030	\$9,399	\$265	\$9,134
2031	\$8,732	\$248	\$8,484
2032	\$8,032	\$231	\$7,801
2033	\$7,297	\$212	\$7,085
2034	\$6,991	\$193	\$6,798
2035	\$7,145	\$185	\$6,960
2036	\$7,302	\$189	\$7,113
2037	\$7,463	\$193	\$7,270
2038	\$7,627	\$197	\$7,430
2039	\$7,795	\$201	\$7,593
2040	\$7,966	\$206	\$7,760
2041	\$8,142	\$210	\$7,931
2042	\$8,321	\$215	\$8,106
2043	\$8,504	\$220	\$8,284
2044	\$8,691	\$225	\$8,466
2045	\$8,882	\$230	\$8,652
2046	0	\$235	-\$235
TOTAL	\$313,387		\$305,109

Table 9. — Mount Pulaski School District Tax Implications of the Twin Forks Wind Farm

Year	Wind Farm Property Tax	Reduction in State Aid	Net School Revenue
2016	\$22,666	\$0	\$22,666
2017	\$22,238	\$416	\$21,822
2018	\$21,780	\$408	\$21,372
2019	\$21,292	\$400	\$20,892
2020	\$20,771	\$391	\$20,380
2021	\$20,217	\$381	\$19,836
2022	\$19,629	\$371	\$19,258
2023	\$19,005	\$360	\$18,645
2024	\$18,344	\$349	\$17,995
2025	\$17,645	\$337	\$17,308
2026	\$16,906	\$324	\$16,582
2027	\$16,126	\$310	\$15,816
2028	\$15,304	\$296	\$15,008
2029	\$14,437	\$281	\$14,156
2030	\$13,525	\$265	\$13,260
2031	\$12,566	\$248	\$12,318
2032	\$11,558	\$231	\$11,328
2033	\$10,500	\$212	\$10,288
2034	\$10,060	\$193	\$9,868
2035	\$10,282	\$185	\$10,097
2036	\$10,508	\$189	\$10,319
2037	\$10,739	\$193	\$10,546
2038	\$10,975	\$197	\$10,778
2039	\$11,217	\$201	\$11,015
2040	\$11,464	\$206	\$11,258
2041	\$11,716	\$210	\$11,505
2042	\$11,974	\$215	\$11,758
2043	\$12,237	\$220	\$12,017
2044	\$12,506	\$225	\$12,282
2045	\$12,781	\$230	\$12,552
2046	0	\$235	-\$235
TOTAL	\$450,969		\$442,691

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VII. Curriculum Vita - David Loomis

Education

Doctor of Philosophy, Economics, Temple University, Philadelphia, Pennsylvania, May 1995.

Bachelor of Arts, Mathematics and Honors Economics, Temple University, Magna Cum Laude, May 1985.

Experience

1996-present Illinois State University, Normal, IL

Full Professor – Department of Economics (2010-present)

Associate Professor - Department of Economics (2002-2009)

Assistant Professor - Department of Economics (1996-2002)

- Taught Regulatory Economics, Telecommunications Economics and Public Policy, Industrial Organization and Pricing, Individual and Social Choice, Economics of Energy and Public Policy and a Graduate Seminar Course in Electricity, Natural Gas and Telecommunications Issues.
- Supervised as many as 5 graduate students in research projects each semester.
- Served on numerous departmental committees.

1997-present Institute for Regulatory Policy Studies, Normal, IL

Executive Director (2005-present)

Co-Director (1997-2005)

- Grew contributing membership from 5 companies to 16 organizations.
- Doubled the number of workshop/training events annually.
- Supervised 2 Directors, Administrative Staff and internship program.
- Developed and implemented state-level workshops concerning regulatory issues related to the electric, natural gas, and telecommunications industries.

Experience (cont'd)

2006-present Illinois Wind Working Group, Normal, IL

Director

- Founded the organization and grew the organizing committee to over 200 key wind stakeholders
- Organized annual wind energy conference with over 400 attendees
- Organized strategic conferences to address critical wind energy issues
- Initiated monthly conference calls to stakeholders
- Devised organizational structure and bylaws

2007-present Center for Renewable Energy, Normal, IL

Director

- Created founding document approved by the Illinois State University Board of Trustees and Illinois Board of Higher Education.
- Secured over \$150,000 in funding from private companies.
- Hired and supervised 4 professional staff members and supervised 3 faculty members as Associate Directors.
- Reviewed renewable energy manufacturing grant applications for Illinois Department of Commerce and Economic Opportunity for a \$30 million program.
- Created technical “Due Diligence” documents for the Illinois Finance Authority loan program for wind farm projects in Illinois.

1997-2002 International Communications Forecasting Conference
Chair

- Expanded Planning Committee with representatives from over 18 different international companies and delivered high quality conference attracting over 500 people over 4 years.

1985-1996 Bell Atlantic, Philadelphia, Pa.

Economist - Business Research

- Wrote and taught Applied Business Forecasting multimedia course.
- Developed and documented 25 econometric demand models that were used in regulatory filings.
- Provided statistical and analytic support to regulatory costing studies.
- Served as subject matter expert in switched and special access.
- Administered \$4 million budget including \$1.8 million consulting budget.

Professional Awards and Memberships

2011 Midwestern Regional Wind Advocacy Award from the Department of Energy's Wind Powering America presented at WindPower 2011

2009 Economics Department Scott M. Elliott Faculty Excellence Award – awarded to faculty who demonstrate excellence in teaching, research and service.

2009 Illinois State University Million Dollar Club – awarded to faculty who have over \$1 million in grants through the university.

2008 Outstanding State Wind Working Group Award from the Department of Energy's Wind Power America presented at WindPower 2008.

1999 Illinois State University Teaching Initiative Award

Member of the American Economic Association, National Association of Business Economists, International Association for Energy Economics, Institute for Business Forecasters; Institute for International Forecasters, International Telecommunications Society.

Professional Publications

Loomis, D. G. and Bowden, N. S. (2013). Nationwide Database of Electric Rates to Become Available, Natural Gas & Electricity, 30 (5), 20-25.

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- Loomis, D. G.** & Ohler, A. O. (2010). Are Renewable Portfolio Standards A Policy Cure-all? A Case Study of Illinois's Experience. *Environmental Law and Policy Review*, 35, 135-182.
- Gil-Alana, L. A., **Loomis, D. G.**, & Payne, J. E. (2010). Does energy consumption by the U.S. electric power sector exhibit long memory behavior ? *Energy Policy*, 38, 7512-7518.
- Carlson, J. L., Payne, J. E., & **Loomis, D. G.** (2010). An assessment of the Economic Impact of the Wind Turbine Supply Chain in Illinois. *Electricity Journal*, 13, 75-93.
- Apergis, N., Payne, J. E., & **Loomis, D. G.** (2010). Are shocks to natural gas consumption transitory or permanent? *Energy Policy*, 38, 4734-4736.
- Apergis, N., Payne, J. E., & **Loomis, D. G.** (2010). Are fluctuations in coal consumption transitory or permanent? Evidence from a panel of U.S. states. *Applied Energy*, 87, 2424-2426.
- Hickey, E. A., Carlson, J. L., & **Loomis, D. G.** (2010). Issues in the determination of the optimal portfolio of electricity supply options. *Energy Policy*, 38, 2198-2207.
- Carlson, J. L., & **Loomis, D. G.** (2008). An assessment of the impact of deregulation on the relative price of electricity in Illinois. *Electricity Journal*, 21, 60-70.
- Loomis, D. G.**, (2008). The telecommunications industry. In H. Bidgoli (Ed.), *The handbook of computer networks* (pp. 3-19). Hoboken, NJ: John Wiley & Sons.
- Cox, J. E., Jr., & **Loomis, D. G.** (2007). A managerial approach to using error measures in the evaluation of forecasting methods. *International Journal of Business Research*, 7, 143-149.
- Cox, J. E., Jr., & **Loomis, D. G.** (2006). Improving forecasting through textbooks – a 25 year review. *International Journal of Forecasting*, 22, 617-624.
- Swann, C. M., & **Loomis, D. G.** (2005). Competition in local telecommunications – there's more than you think. *Business Economics*, 40, 18-28.

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- Swann, C. M., & Loomis, D. G. (2005). Intermodal competition in local telecommunications markets. *Information Economics and Policy*, 17, 97-113.
- Swann, C. M., & Loomis, D. G. (2004) Telecommunications demand forecasting with intermodal competition – a multi-equation modeling approach. *Telektronikk*, 100, 180-184.
- Cox, J. E., Jr., & Loomis, D. G. (2003). Principles for teaching economic forecasting. *International Review of Economics Education*, 1, 69-79.
- Taylor, L. D. & Loomis, D. G. (2002). *Forecasting the internet: understanding the explosive growth of data communications*. Boston: Kluwer Academic Publishers.
- Wiedman, J. & Loomis, D. G. (2002). U.S. broadband pricing and alternatives for internet service providers. In D. G. Loomis & L. D. Taylor (Eds.) *Boston: Kluwer Academic Publishers*.
- Cox, J. E., Jr. & Loomis, D. G. (2001). Diffusion of forecasting principles: an assessment of books relevant to forecasting. In J. S. Armstrong (Ed.), *Principles of Forecasting: A Handbook for Researchers and Practitioners* (pp. 633-650). Norwell, MA: Kluwer Academic Publishers.
- Cox, J. E., Jr. & Loomis, D. G. (2000). A course in economic forecasting: rationale and content. *Journal of Economics Education*, 31, 349-357.
- Malm, E. & Loomis, D. G. (1999). Active market share: measuring competitiveness in retail energy markets. *Utilities Policy*, 8, 213-221.
- Loomis, D. G. (1999). Forecasting of new products and the impact of competition. In D. G. Loomis & L. D. Taylor (Eds.), *The future of the telecommunications industry: forecasting and demand analysis*. Boston: Kluwer Academic Publishers.
- Loomis, D. G. (1997). Strategic substitutes and strategic complements with interdependent demands. *The Review of Industrial Organization*, 12, 781-791.

Grants

- “SmartGrid for Schools,” with William Hunter, Illinois Science and Energy Innovation Foundation, RSP # 14B116, March 2014, \$451,701.

Grants (cont'd)

“WINDPOWER 2014 Conference Exhibit,” Illinois Department of Commerce and Economic Opportunity, RSP #14C167, March, 2014, \$95,000.

“Lake Michigan Offshore Wind Energy Buoy,” with Matt Aldeman, Illinois Clean Energy Community Foundation, Request ID 6435, November, 2013, \$90,000.

“Teaching Next Generation Energy Concepts with Next Generation Science Standards,” with William Hunter, Matt Aldeman and Amy Bloom, Illinois State Board of Education, RSP # 13B170A, October, 2013, second year, \$159,954.

“Solar for Schools,” with Matt Aldeman, Illinois Green Economy Network, RSP # 13C280, August, 2013, \$66,072.

“Energy Learning Exchange Implementation Grant,” with William Hunter and Matt Aldeman, Illinois Department of Commerce and Economic Opportunity, Award Number 13-052003, June, 2013, \$350,000.

“Teaching Next Generation Energy Concepts with Next Generation Science Standards,” with William Hunter, Matt Aldeman and Amy Bloom, Illinois State Board of Education, RSP # 13B170, April, 2013, \$159,901.

“Illinois Sustainability Education SEP,” Illinois Department of Commerce and Economic Opportunity, Award Number 08-431006, March, 2013, \$225,000.

“Illinois Pathways Energy Learning Exchange Planning Grant,” with William Hunter and Matt Aldeman, Illinois State Board of Education (Source: U.S. Department of Education), RSP # 13A007, December, 2012, \$50,000.

“Illinois Sustainability Education SEP,” Illinois Department of Commerce and Economic Opportunity, Award Number 08-431005, June 2011, amended March, 2012, \$98,911.

“Wind for Schools Education and Outreach,” with Matt Aldeman, Illinois Department of Commerce and Economic Opportunity, Award Number 11-025001, amended February, 2012, \$111,752.

“A Proposal to Support Solar Energy Potential and Job Creation for the State of Illinois Focused on Large Scale Photovoltaic System,” with Jin Jo (lead PI), Illinois Department of Commerce and Economic Opportunity, Award Number 12-025001, January 2012, \$135,000.

Grants (cont'd)

“National Database of Utility Rates and Rate Structure,” U.S. Department of Energy, Award Number DE-EE0005350TDD, 2011-2014, \$850,000.

“Illinois Sustainability Education SEP,” Illinois Department of Commerce and Economic Opportunity, Award Number 08-431005, June 2011, \$75,000.

“Wind for Schools Education and Outreach,” with Matt Aldeman, Illinois Department of Commerce and Economic Opportunity, Award Number 11-025001, March 2011, \$190,818.

“Using Informal Science Education to Increase Public Knowledge of Wind Energy in Illinois,” with Amy Bloom and Matt Aldeman, Scott Elliott Cross-Disciplinary Grant Program, February 2011, \$13,713.

“Wind Turbine Market Research,” with Matt Aldeman, Illinois Manufacturers Extension Center, May, 2010, \$4,000.

“Petco Resource Assessment,” with Matt Aldeman, Petco Petroleum Co., April, 2010 amended August 2010 \$34,000; original amount \$18,000.

“Wind for Schools Education and Outreach,” with Anthony Lornbach and Matt Aldeman, Scott Elliott Cross-Disciplinary Grant Program, February, 2010, \$13,635.

“IGA IFA/ISU Wind Due Diligence,” Illinois Finance Authority, November, 2009, \$8,580 amended December 2009; original amount \$2,860.

“Green Industry Business Development Program, with the Shaw Group and Illinois Manufacturers Extension Center, Illinois Department of Commerce and Economic Opportunity, Award Number 09-021007, August 2009, \$245,000.

“Wind Turbine Workshop Support,” Illinois Department of Commerce and Economic Opportunity, June 2009, \$14,900.

“Illinois Wind Workers Group,” with Randy Winter, U.S. Department of Energy, Award Number DE-EE0000507, 2009-2011, \$107,941.

“Wind Turbine Supply Chain Study,” with J. Lon Carlson and James E. Payne, Illinois Department of Commerce and Economic Opportunity, Award Number 09-021003, April 2009, \$125,000.

“Renewable Energy Team Travel to American Wind Energy Association WindPower 2009 Conference, Center for Mathematics, Science and Technology, February 2009, \$3,005.

Grants (cont'd)

"Renewable Energy Educational Lab Equipment," with Randy Winter and David Kennell, Illinois Clean Energy Community Foundation (peer-reviewed), February, 2008, \$232,600.

"Proposal for New Certificate Program in Electricity, Natural Gas and Telecommunications Economics," with James E. Payne, Extended Learning Program Grant, April, 2007, \$29,600.

"Illinois Broadband Mapping Study," with J. Lon Carlson and Rajeev Goel, Illinois Department of Commerce and Economic Opportunity, Award Number 06-205008, 2006-2007, \$75,000.

"Illinois Wind Energy Education and Outreach Project," with David Kennell and Randy Winter, U.S. Department of Energy, Award Number DE-FG36-06GO86091, 2006-2010, \$990,000.

"Wind Turbine Installation at Illinois State University Farm," with Doug Kingman and David Kennell, Illinois Clean Energy Community Foundation (peer-reviewed), May, 2004, \$500,000.

"Illinois State University Wind Measurement Project," Doug Kingman and David Kennell, Illinois Clean Energy Community Foundation (peer-reviewed), with August, 2003, \$40,000.

"Illinois State University Wind Measurement Project," with Doug Kingman and David Kennell, NEG Micon matching contribution, August, 2003, \$65,000.

"Distance Learning Technology Program," Illinois State University Faculty Technology Support Services, Summer 2002, \$3,000.

"Providing an Understanding of Telecommunications Technology By Incorporating Multimedia into Economics 235," Instructional Technology Development Grant (peer-reviewed), January 15, 2001, \$1,400.

"Using Real Presenter to create a virtual tour of GTE's Central Office," with Jack Chizmar, Instructional Technology Literacy Mentoring Project Grant (peer-reviewed), January 15, 2001, \$1,000.

"An Empirical Study of Telecommunications Industry Forecasting Practices," with James E. Cox, College of Business University Research Grant (peer-reviewed), Summer, 1999, \$6,000.

"Ownership Form and the Efficiency of Electric Utilities: A Meta-Analytic Review" with L. Dean Hiebert, Institute for Regulatory Policy Studies research grant (peer-reviewed), August 1998, \$6,000.

Total Grants: \$5,536,583

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Strategic Economic Research, LLC

Economic Impact of the
Twin Forks Wind Farm Project



MEMORANDUM
MaROUS & COMPANY

DATE: March 25, 2015

TO: Michael S. Blazer, Attorney at Law

FROM: Michael S. MaRous, MAI, CRE
Alison Hastings, MAI

SUBJECT: Assessed Valuation Study

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In accordance with your request, interviews have been conducted with the supervisor of assessments or a staff member in 18 counties in Illinois in which wind farms currently are operational. The interview was intended to allow the assessment officials to share their experience regarding the wind farm(s) impact upon the market values and/or assessed values of surrounding properties.

**Overall Conclusions of the Study**

Based on these interviews,

- Without exception, the interviewees reported that there was no market evidence to support a negative impact upon residential property values as a result of the development of and the proximity to a wind farm facility.
- Exclusive of one tax appeal filing in Vermilion County, the assessor's offices have not experienced a tax appeal based upon wind farm-related concerns.
- As the available market data do not support the claim of a negative impact upon residential values, residential assessed values have fluctuated consistently countywide as influenced by market conditions, with no regard for proximity to a wind farm.
- Agricultural properties are taxed based upon a productivity formula that is not impacted by market data and external influences.

**Scope of Project**

Exclusive of Vermilion County, the supervisors of assessment were interviewed. Ms. Yvonne Robinson, a staff member in the Vermilion County Assessor's office was interviewed. The following is the list of County Supervisors of Assessment contacted:

|                      |                        |              |
|----------------------|------------------------|--------------|
| 1. Stephenson County | Mr. Ronald A. Kane     | 815-235-8260 |
| 2. DeKalb County     | Ms. Robin L. Brunschon | 815-895-7120 |
| 3. Lee County        | Ms. Wendy Ryerson      | 815-288-4483 |
| 4. Henry County      | Ms. Lindi M. Kernan    | 309-937-3570 |

MaRous & Company

|                       |                                          |              |
|-----------------------|------------------------------------------|--------------|
| 5. Bureau County      | Mr. Tom Sweeney                          | 815-875-6478 |
| 6. LaSalle County     | Ms. Linda Kendall                        | 815-434-8233 |
| 7. Grundy County      | Ms. Stephanie R. Kennedy                 | 815-941-3269 |
| 8. Stark County       | Ms. Renee Johnson                        | 309-286-7172 |
| 9. Marshall County    | Ms. Patricia Heath                       | 309-246-2350 |
| 10. Woodford County   | Ms. Mary Bell                            | 309-467-3708 |
| 11. Livingston County | Mr. Duane Kiesewetter                    | 815-844-7214 |
| 12. Tazewell County   | Mr. Gary Twist                           | 309-477-2275 |
| 13. McLean County     | Mr. Robert T. Kahman                     | 309-888-5131 |
| 14. Ford County       | Ms. Candice D. Short                     | 217-379-9430 |
| 15. Iroquois County   | Mr. Robert Yergler                       | 815-432-6978 |
| 16. Logan County      | Ms. Denise Martinek                      | 217-732-9635 |
| 17. Champaign County  | Mr. Stan Jenkins                         | 217-384-3762 |
| 18. Vermillion County | Mr. Matthew R. Long<br>(Yvonne Robinson) | 217-554-1940 |

A map indicating the location of the Assessor's office in each of these counties is included in this memorandum. A second map illustrates the location of the wind farms in each of these counties.

Each of the interviewees was familiar with the wind farm(s) located within their respective county. Livingston County Supervisor of Assessments, Mr. Duane Kiesewetter, formerly had lived within approximately 0.75 mile of a wind turbine. He stated that he was able to hear the wind turbine in the distance, but he had "no concerns".

Mr. Robert Kahman, the McLean County Supervisor of Assessments, reported to visit the area of the Twin Groves wind farm regularly for recreational purposes. He explained that the wind turbine sound varies between seasons, with the turbines being "whisper quiet" in the summer, and more audible in the winter.

## **Residential Market Values**

Without exception, the interviewees reported that there was no market evidence to support a negative impact upon residential property values as a result of the development of and the proximity to a wind farm facility. Either as a request by a county board, in an attempt to appropriately assess newly constructed residences, or to support current assessed values, the supervisors of assessments have been particularly attentive to market activity in the area of the wind farms.

Bureau County Supervisor of Assessments Mr. Tom Sweeney was asked by the county board to prepare an analysis to determine the impact upon market values of residential properties as a result of the development of wind farms within the county. Mr. Sweeney was able to find three properties and to

study their successive sales, both before and after the development of the wind farm. His findings included:

- Property #1 sold for significantly less than the previous sale. The property owner was adamantly opposed to the development of the wind farm. The seller no longer had a use or interest in owning the property after the development of the wind farm and sold it. Mr. Sweeney considered the sale price to be a statistical outlier that was heavily influenced by the conditions of sale.
- Property #2 sold for “a little more” than its previous sale before the development of the wind farm.
- Property #3 sold for more in the later sale than in the earlier sale, but for less than the assessor’s opinion of market value.

The findings were reported to the county board. The conclusion of the assessor and county board was that based upon the limited amount of market data available, there was no evidence of diminution in property values due to the wind farm.

In determining the assessed values of two residences constructed near the Rail Splitter wind farm, the Logan County Supervisor of Assessments Ms. Denise Martinek studied the sales of nine residential properties in the area. Exclusive of one property, the sale prices “stayed the same, or actually increased” in the later sales than in the earlier sales of the same properties. The exception, the residence that sold for less, was a foreclosure property in its later sale.

Champaign County Assessor Mr. Stan Jenkins reported that his office “has no evidence that the wind farms have had an impact on surrounding property values, positively or negatively”. He stated his understanding that his opinions and experiences with available market data regarding the wind farm’s impact upon surrounding property values was consistent with that of his counterparts in other counties. Similarly, Ms. Denise Martinek, the Logan County Assessor, reported that there has been discussion among Illinois county assessors and that there has been agreement that there is no proof one way or another that the wind farms have any impact upon property value.

### **Residential Assessed Values, Complaints/ Tax Appeal Filings**

Exclusive of one pending tax appeal filing in Vermilion County, the assessors reported that there have been no tax appeal filings based upon wind farm issues. The observations and experiences of the remaining 17 assessment officials regarding the impact of wind farms upon residential property values were consistent with that reported by Ford County Supervisor of Assessments, Ms. Candice D. Short. Ms. Short reported “no complaints” and “haven’t had any appeals” from residential property owners. Additionally, Ms. Short reported that since the completion of the Pioneer Trail wind farm, the sale prices of residences in the surrounding area have sold above the assessor’s opinion of market value.



McLean County Assessor Mr. Robert T. Kahman reported that property owners have come to his office presenting newspaper articles that claimed a negative impact upon property values due to wind farms. The articles are not accepted as evidence, but rather the property owners are invited to collect their own market data that supports their claim of a diminution in value. Thus far, no property owners have submitted market data that contradict the data collected by the assessor's office.

Mr. Kahman reported expecting complaints and/or tax appeal filings in regard to the wind turbine constructed on the Heartland Community College campus. No complaints or tax appeal filings have been submitted regarding the college's wind turbine. Both single-family and multifamily properties are located within 1,900 feet of the wind turbine. The following aerial photograph depicts the location of the Heartland Community College campus, its wind turbine, and the neighboring residential development.



Ms. Renee Johnson, Stark County Supervisor of Assessments, reported that the owner of a residence in the area of the Camp Grove wind farm had complained of the wind farm noise but did not file a tax appeal. Subsequently, the property sold in excess of the assessor's opinion of market value.

Consistently, the assessors reported that whatever initial concern there may have been regarding property values during the planning and approval stages of the various wind farms dissipated once the wind farm was constructed. Repeatedly, where there had been initial community opposition to the development of a wind farm, the resultant facility is no longer perceived as a negative influence upon property values. According to LaSalle County Assessor Ms. Linda Kendall, "initially, there had been consternation regarding the development of wind farms and the potential impact upon property values. The impact is no longer a concern". The public perception of a negative impact upon property values due to wind farms constructed as early as 2003 had not materialized, and the assessors have reported an absence of tax appeal filings based upon wind farm-related issues.

### **Agricultural Values/Assessed Values**

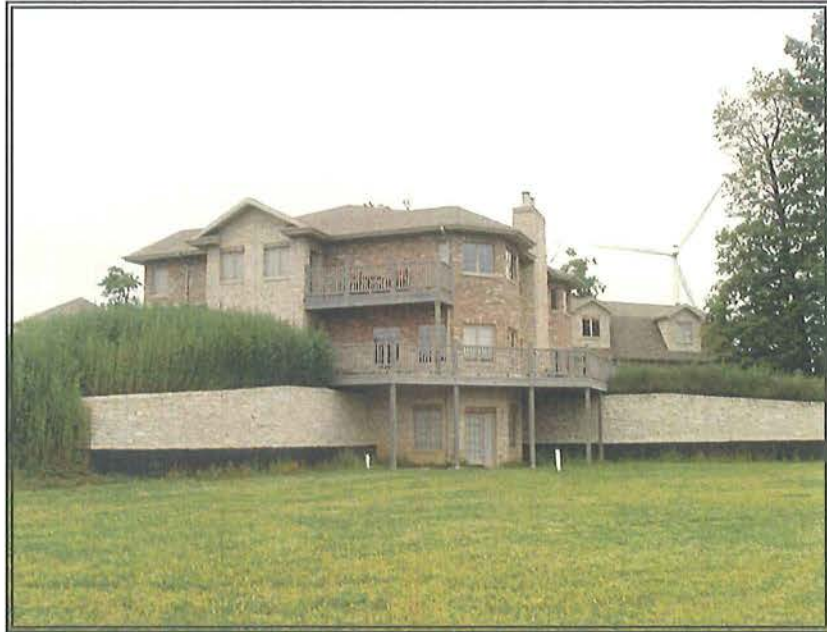
The assessed values of agricultural values are established based upon a productivity formula and are not driven by market data. Reportedly, assessed values of agricultural properties have been increased by 10 percent annually in recent years and are projected to continue increasing at that rate for the near future. The assessors reported that no complaints have been received and/or no tax appeal filings have been filed for agricultural properties within the wind farm footprint.

### **New Residential Construction**

Several assessors reported new residential development in the area of wind farms. The Lee County Supervisor of Assessments Ms. Wendy Ryerson reported that a subdivision of 11 improved residential lots was developed prior to the construction of the wind farm, and the lot sales and construction of the residences occurred after the announcement of the development of the wind farm.

There were several reports of construction of scattered large acreage farm house residences in the area of wind farm properties. The McLean County Assessor reported the construction of a 4,821-square-foot single-family residence in the area of Arrowsmith, Illinois. The residence, located at 8144 North 3100 East Road is located 1,113 feet from a wind turbine on an adjacent property. The residential building and surrounding site improvements including a swimming pool have an assessor's opinion of market value of \$878,467. The following photograph and aerial photograph depict the residence and the nearby wind turbine(s).





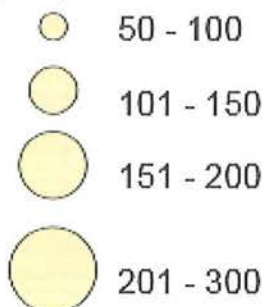




# Wind Projects and Wind Resources 2013

Note: As depicted on this map, the locations of certain wind farms are approximations. In some instances, the wind farms are incorrectly shown to be located in adjacent counties.

## Installed Capacity (MW)



## Avg Wind Speed 80-Meters

- High : 23 MPH
- Low : 12 MPH



Wind Project Data: IWVG  
 Wind Resource Data: IIRA  
 Mapping Provided by: IIRA  
 Projection: NAD83 IL State Plane West  
[www.RenewableEnergy.illinoisstate.edu](http://www.RenewableEnergy.illinoisstate.edu)  
[www.IIRA.org](http://www.IIRA.org)



## **QUALIFICATIONS**

### **Alison Hastings, MAI**

Alison Hastings has been active in real estate appraisal since 1985 and was designated a Member of the Appraisal Institute, Number 13690, in 2013. She is also a State of Illinois Certified General Real Estate Appraiser, License Number 553.001547 (9/15). Ms. Hastings has appraised a variety of types of properties in five states for financing, condemnation, estate planning, real estate tax appeal, acquisition, and disposition purposes.

### **Appraisal Experience**

- Heavy Industrial
- Warehouse-distribution Buildings
- Light Manufacturing
- Multitenant Office-flex space
- Mixed-use Properties
- Utility Corridors
- Shopping Centers
- Multitenant Office Buildings
- Gasoline Stations
- Automobile Dealerships
- Restaurants
- Big Box Retail
- Government Facilities
- Special-purpose Properties
- Proposed Construction
- Subdivision Analysis
- Matched-pairs Analysis
- Litigation Support
- Value Impact Studies
- Recreational Properties
- School Properties
- Cemeteries
- Self-Storage Facilities
- Commercial/residential Properties
- Multifamily Residential
- Vacant Land

### **Professional Designations and Affiliations**

Member, Appraisal Institute, Number 13690  
Illinois Certified General Appraiser, License Number 553-001547

### **Prior Employment History**

Prior to joining MaRous & Company, Ms. Hastings was an associate in real estate appraisal firms located within the Chicago metropolitan area as well as Hawaii, California and Arizona.

### **Education**

Bachelor of Science in Business Administration, Majors in Finance and Real Estate  
Continuing Education Seminars, Appraisal Institute

# **MICHAEL S. MAROUS**

## **STATEMENT OF QUALIFICATIONS**

Michael S. MaRous, MAI, CRE, is president and owner of MaRous and Company. He has appraised more than \$15 billion worth of primarily investment-grade real estate in more than 25 states. In addition to providing documented appraisals, he has served as an expert witness in litigation proceedings for many law firms; financial institutions; corporations; builders and developers; architects; local, state, county, and federal governments and agencies; and school districts in the Chicago metropolitan area. His experience in partial interest, condemnation, damage impact, easement (including aerial and subsurface), marital dissolutions, bankruptcy proceedings, and other valuation issues is extensive. He has provided highest and best use, marketability, and feasibility studies for a variety of properties. Many of the largest redevelopment areas and public projects, including Interstate 355, the O'Hare International Airport expansion, the Midway Airport expansion, and the McCormick Place expansion, are part of Mr. MaRous' experience. Also, he purchases and develops real estate for his own account.

### **APPRAISAL AND CONSULTATION EXPERIENCE**

|                                                                  |                                                                                                                                        |                                                                                          |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Business Parks<br>Distribution Centers                           | <b>Industrial Properties</b><br>Manufacturing Facilities<br>Research Facilities                                                        | Self-storage Facilities<br>Warehouses                                                    |
|                                                                  | <b>Commercial Properties</b><br>Gasoline Stations<br>Hotels and Motels<br>Office Buildings                                             | Restaurants<br>Shopping Centers<br>Theaters                                              |
| Auto Sales/Service Facilities<br>Banquet Halls<br>Big Box Stores | <b>Special-Purpose Properties</b><br>Lumber Yards<br>Nurseries<br>Riverboat Gambling Facilities<br>Schools<br>Stadium Expansion Issues | Tank Farms<br>Underground Gas Aquifers<br>Utility Corridors<br>Waste Transfer Facilities |
| Bowling Alleys<br>Cemeteries<br>Farms<br>Golf Courses            | <b>Residential Properties</b><br>Condominium Developments<br>Single-family Residences                                                  | Subdivision Developments<br>Townhouse Developments                                       |
| Apartment Complexes<br>Condominium Conversions                   | <b>Vacant Land</b><br>Easements<br>Industrial<br>Residential                                                                           | Right of Ways<br>Streets<br>Vacations                                                    |
| Agricultural<br>Alleys<br>Commercial                             | <b>Clients</b><br>Law Firms<br>Not-for-profit Associations                                                                             | Private Parties<br>Public Entities                                                       |
| Corporations<br>Financial Institutions                           |                                                                                                                                        |                                                                                          |

### **EDUCATION**

B.S., Urban Land Economics, University of Illinois, Urbana-Champaign  
Continuing education seminars and programs through the Appraisal Institute  
and the American Society of Real Estate Counselors and real estate brokerage classes

### **PUBLIC SERVICE**

Mayor, City of Park Ridge, Illinois (2003-2005)  
Alderman, City of Park Ridge, including Liaison to the Zoning Board of Appeals and Planning and Zoning and  
Chairman of the Finance and Public Safety Committees (1997-2005)

## PROFESSIONAL AFFILIATIONS AND LICENSES

Appraisal Institute, MAI designation, Number 6159  
American Society of Real Estate Counselors, CRE designation  
Illinois Certified General Real Estate Appraiser, License Number 553.000141 (9/15)  
Licensed Real Estate Broker (Illinois)

## PROFESSIONAL ACTIVITIES

Mr. MaRous is past president of the Chicago Chapter of the Appraisal Institute. He is former chair and vice chair of the National Publications Committee and has sat on the board of *The Appraisal Journal*. In addition, he has served on and/or chaired more than fifteen other committees of the Appraisal Institute, the Society of Real Estate Appraisers, and the American Institute of Real Estate Appraisers.

Mr. MaRous served as chair of the Midwest Chapter of the American Society of Real Estate Counselors in 2006 and 2007. He has sat on the Chicago Chapter Board of Directors, the Editorial Board of *Real Estate Issues*, and on various other committees.

Mr. MaRous also is past president of the Illinois Coalition of Appraisal Professionals. He has sat on the board of directors, has held office, and has served on numerous committees of many other professional associations, including the National Association of Security Dealers, the International Research Council, the Chicago Real Estate Board, the Northwest Suburban Real Estate Board, the National Association of Real Estate Boards, and the Northern Illinois Commercial Association of Realtors.

## PUBLICATIONS AND PROFESSIONAL RECOGNITION

Mr. MaRous has spoken at more than 20 programs and seminars related to real estate appraisal and valuation.

### Author

- "Low-income Housing in Our Backyards," *The Appraisal Journal*, January 1996
- "The Appraisal Institute Moves Forward," *Illinois Real Estate Magazine*, December 1993
- "Chicago Chapter, Appraisal Institute," *Northern Illinois Real Estate Magazine*, February 1993
- "Independent Appraisals Can Help Protect Your Financial Base," *Illinois School Board Journal*, November-December 1990
- "What Real Estate Appraisals Can Do For School Districts," *School Business Affairs*, October 1990

### Awards

- Chicago Chapter of the Appraisal Institute - F. Gregory Opelka Award, 2002
- Appraisal Institute - George L. Schmutz Memorial Award, 2001
- Chicago Chapter of the Appraisal Institute - Heritage Award, 2000
- Chicago Chapter of the Appraisal Institute - Herman O. Walther, 1987 (Distinguished Chapter Member)

### Reviewer or Citation in the Following Books

- Appraisal of Real Estate*, Twelfth Edition, 2001
- Appraisal of Real Estate*, Thirteenth Edition, 2008
- Subdivision Valuation*, 2008
- Real Estate Damages*, 2008
- Valuation of Apartment Properties*, 2007
- Valuation of Billboards*, 2006
- Appraising Industrial Properties*, 2005
- Valuation of Market Studies for Affordable Housing*, 2005
- Valuing Undivided Interest in Real Property: Partnerships and Cotenancies*, 2004
- Analysis and Valuation of Golf Courses and Country Clubs*, 2003
- Dictionary of Real Estate Appraisal*, Fourth Edition, 2002
- Valuing Contaminated Properties: An Appraisal Institute Anthology*, 2002
- Hotels and Motels: Valuation and Market Studies*, 2001
- Land Valuation: Adjustment Procedures and Assignments*, 2001
- Appraisal of Rural Property*, Second Edition, 2000
- Capitalization Theory and Techniques, Study Guide*, Second Edition, 2000
- Guide to Appraisal Valuation Modeling Land*, 2000
- Appraising Residential Properties*, Third Edition, 1999
- Business of Show Business: The Valuation of Movie Theaters*, 1999
- GIS in Real Estate: Integrating, Analyzing and Presenting Locational Information*, 1998
- Market Analysis for Valuation Appraisals*, 1995

## **REPRESENTATIVE WORK OF MICHAEL S. MAROUS**

### **Headquarters/Corporate Office Facilities in Illinois**

Fortune 500 corporation facility, 200,000 sq. ft., Libertyville  
Corporate headquarters, 300,000 sq. ft. and 500,000 sq. ft., Chicago  
Fortune 500 corporation facility, 450,000 sq. ft., Northfield  
Major airline headquarters, 1,100,000 million sq. ft. on 47 acres, Elk Grove Village  
Former communications facility, 1,400,000 million sq. ft. on 62 acres, Skokie and Niles  
Corporate Headquarters, 1,500,000+ sq. ft., Lake County  
Former Sears Headquarters Redevelopment Project, Chicago

### **Office Buildings in Chicago**

401 South LaSalle Street, 140,000 sq. ft.  
134 North LaSalle Street, 260,000 sq. ft.  
333 North Michigan Avenue, 260,000 sq. ft.  
171 West Randolph Street, 360,000 sq. ft.  
20 West Kinzie Street, 405,000 sq. ft.  
55 East Washington Street, 500,000 sq. ft.  
10 South LaSalle Street, 870,000 sq. ft.  
222 West Adams, 1,000,000 sq. ft.  
175 West Jackson Boulevard, 1,450,000 sq. ft.  
227 West Monroe, 1,800,000 sq. ft.  
10 South Dearborn Street, 1,900,000 sq. ft.

### **Hotels in Chicago**

10 E. Grand Avenue (Hilton Garden Inn)  
106 East Superior Street (Peninsula Hotel)  
140 East Walton Place (The Drake Hotel)  
676 North Michigan Avenue (Omni Chicago Hotel)  
One West Wacker Drive (Renaissance Chicago Hotel)  
320 North Dearborn Street (Westin Chicago River North)  
505 North Michigan Avenue (Hotel InterContinental)

### **Large Industrial Properties in Illinois**

Large industrial complexes, 400,000 sq. ft., 87th Street and Greenwood Avenue, Chicago  
Distribution warehouse, 580,000 sq. ft. on 62 acres, Champaign  
Publishing house, 700,000 sq. ft. on 195 acres, U.S. Route 45, Mattoon  
AM Chicago International, 700,000± sq. ft. on 41 acres, 1800 West Central, Mt. Prospect  
Nestlé distribution center, 860,000 sq. ft. on 153 acres, DeKalb  
Fortune 500 company distribution center, 1,000,000 sq. ft., Elk Grove Village  
U.S. Government Services Administration distribution facility, 860,000 sq. ft., 76th Street and Kostner Avenue, Chicago  
Self-storage facilities, various Chicago metropolitan locations

### **Vacant Land in Illinois**

|                                        |                                              |
|----------------------------------------|----------------------------------------------|
| 15 acres, office, Northbrook           | 450 acres, residential, Wauconda             |
| 20 acres, residential, Glenview        | 475± acres, various uses, Lake County        |
| 25 acres, Hinsdale                     | 650 acres, Hawthorne Woods                   |
| 55 acres, mixed-use, Darien            | 650 acres, Waukegan/Libertyville             |
| 75 acres, I-88 at I-355, Downers Grove | 800 acres, Woodridge                         |
| 100± acres, various uses, Lake County  | 900 acres, Matteson                          |
| 140 acres, Flossmoor                   | 1,000± acres, Batavia area                   |
| 142 acres, residential, Lake County    | 2,000± acres, Northern Lake County           |
| 160 acres, residential, Cary           | 5,000 acres, southwest suburban Chicago area |
| 200 acres, mixed-use, Bartlett         | Landfill expansion, Lake County              |
| 250 acres, Island Lake                 |                                              |

### **Business and Industrial Parks**

Chevy Chase Business Park, 30 acres, Buffalo Grove  
Carol Point Business Center, 300-acre industrial park, Carol Stream, \$125,000,000+ project  
Internationale Centre, approximately 1,000 acre-multiuse business park, Woodridge

### **Retail Facilities**

10 Community shopping centers, various Chicago, Metropolitan locations  
Big-box uses, various Chicago metropolitan locations  
Gasoline Stations, various Chicago metropolitan locations  
More than 30 single-tenant retail facilities larger than 80,000 sq. ft., various Chicago metropolitan locations

### **Residential Projects**

Federal Square townhouse development project, 118 units, \$15,000,000+ sq. ft. project, Dearborn Place, Chicago  
Marketability and feasibility study, 219 East Lake Shore Drive, Chicago  
Riverview II, Chicago, Old Town East and West, Chicago, Museum Park Lofts II, Museum Park Tower 4,  
University Commons, Two River Place, River Place on the Park, Chicago

### **Market Studies**

Impact of land fill on adjacent property values  
Impact of low-income housing on adjacent residential property values  
Impact of proposed quarry expansion on neighboring properties  
Impact of commercial and parking uses on adjacent residential property values  
Impact of significant zoning changes on residential property values  
Sanitary sewer value impact study  
Waste transfer facility impact study

### **Properties in Other States**

330,000 sq. ft., Newport Beach, California  
Former government depot/warehouse and distribution center, 2,500,000 sq. ft. on 100+ acres, Ohio  
Shopping Center, St. Louis, Missouri  
Office Building, Clayton, Missouri  
Condominium Development, New York, New York

### **Airport Related Properties**

Mr. MaRous has done valuations on more than 100 parcels in and around O'Hare International Airport,  
Chicago Midway Airport, Palwaukee Municipal Airport, Chicago Aurora Airport, DuPage Airport,  
and Lambert-St. Louis International Airport



## REPRESENTATIVE CLIENT LISTING OF MICHAEL S. MAROUS

### Law Firms

Botti Law Firm, P.C.  
Alschuler, Simantz & Hem, LLC  
Arnstein & Lehr LLP  
Steven B. Bashaw, P.C.  
Berger, Newmark & Fenchel P.C.  
Berger Schatz  
Carmody MacDonald P.C.  
Crane, Heyman, Simon, Welch & Clar  
Daley & Georges, Ltd.  
DLA Piper  
Drinker, Biddle & Reath LLP  
Figliulo & Silverman, P.C.  
Foley & Lardner LLP  
Foran, O'Toole & Burke LLC  
Franczek Radelet P.C.  
Freeborn & Peters LLP  
Goldberg Kohn  
Gould & Ratner LLP  
Graft & Jordan  
Greenberg Traurig LLP  
Helm & Wagner  
Robert Hill Law, Ltd.  
Hinshaw & Culbertson LLP

Holland & Knight LLP  
Jenner & Block  
Donald L. Johnson  
Kinnally, Flaherty, Krentz & Loran PC  
Kirkland & Ellis LLP  
Klein, Thorpe & Jenkins, Ltd.  
Locke Lord LLP  
McDermott, Will & Emery  
Mayer Brown  
McGuireWoods LLP  
Michael Best & Friedrich LLP  
Miller & Sweeney CO  
Morrison & Morrison, Ltd.  
Bryan E. Mraz & Associates  
Neal, Gerber & Eisenberg, LLP  
Neal & Leroy LLC  
O'Donnell Law Firm Ltd.  
O'Halloran Kosoff Geitner & Cook, LLC  
Owens, Owens & Rinn, Ltd.  
Prendergast & DelPrincipe  
Rathje & Woodward, LLC  
Raysa & Zimmermann, LLC  
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Rosenfeld Hafron Shapiro & Farmer  
Rosenthal, Murphey, Coblenz & Donahue  
Rubin & Norris, LLC  
Ryan and Ryan Attorneys at Law, P.C.  
Reed Smith LLP  
Sarnoff & Baccash  
Scariano, Himes & Petrarca, Chtd.  
Schiff Hardin LLP  
Schiller, DuCanto & Fleck LLP  
Schirott, Luetkehans & Garner, LLC  
Schuyler, Roche & Crisham, P.C.  
Sidley Austin LLP  
Sonnenschien, Nath & Rosenthal LLP  
Storino, Ramello & Durkin  
Thomas M. Tully & Associates  
Thompson Coburn, LLP  
Tuttle, Vedral & Collins, P.C.  
Vedder Price  
Wildman, Harrold, Allen & Dixon  
Winston & Strawn LLP  
Worsek & Vihon LLP

### Financial Institutions

AmericaUnited Bank and Trust  
Charter One  
Citibank  
Cole Taylor Bank  
Covest Banc  
First Bank of Highland Park  
First Midwest Bank

First Northwest Bank  
Glenview State Bank  
Harris Bank  
Itasca Bank and Trust  
Lake Forest Bank & Trust  
MB Financial Bank  
Midwest Bank & Trust Company

Northern Trust Bank  
Northview Bank & Trust  
Private Bank & Trust Co.  
State Financial Bank  
Winfield Community Bank  
Wintrust Bank Group

### Corporations

Advocate Health Care System  
American Stores Company  
Archdiocese of Chicago  
Arthur J. Rogers and Company  
BP Amoco Oil Company  
Christopher B. Burke Engineering, Ltd.  
Cambridge Homes  
Canadian National Railroad  
Capital Realty Services, Inc.  
Chicago Cubs  
Children's Memorial Hospital  
Chrysler Realty Corporation  
Citgo Petroleum Corporation

CorLands  
Edward R. James Partners, LLC  
Enterprise Development Corporation  
Enterprise Leasing Company  
Exxon Mobil Corporation  
Hamilton Partners  
Hewitt Associates LLC  
Hollister Corporation  
Imperial Realty Company  
Kenard Corporation  
Kimco Realty Corporation  
Kinder Morgan, Inc.  
Kmart Corporation  
Lakewood Homes

Loyola University Health System  
Marathon Oil Corporation  
Meijer, Inc.  
Mesirow Stein Real Estate, Inc.  
Prime Group Realty Trust  
Public Storage Corporation  
RREEF Corporation  
Shell Oil Company  
Stewart Warner Corporation  
Union Pacific Railroad Company  
United Airlines, Inc.  
United of America Insurance Company

**Public Entities**  
**Illinois Local Governments and Agencies**

|                              |                            |                                |
|------------------------------|----------------------------|--------------------------------|
| Village of Arlington Heights | Village of Glenview        | Village of Orland Park         |
| Village of Barrington        | Glenview Park District     | City of Palos Hills            |
| Village of Bartlett          | Village of Harwood Heights | City of Prospect Heights       |
| Village of Bellwood          | City of Highland Park      | City of Rolling Meadows        |
| Village of Brookfield        | Village of Hinsdale        | Village of Rosemont            |
| Village of Burr Ridge        | Village of Inverness       | City of St. Charles            |
| Village of Cary              | Village of Kildeer         | Village of Schaumburg          |
| City of Chicago              | Village of Lake Zurich     | Village of Schiller Park       |
| Village of Deer Park         | Leyden Township            | Village of Skokie              |
| City of Des Plaines          | Village of Lincolnshire    | Village of South Barrington    |
| Des Plaines Park District    | Village of Lincolnwood     | Village of Streamwood          |
| Downers Grove Park District  | Village of Morton Grove    | Metropolitan Water Reclamation |
| City of Elgin                | Village of Mount Prospect  | District of Greater Chicago    |
| Elk Grove Village            | Village of North Aurora    | City of Waukegan               |
| City of Elmhurst             | Village of Northbrook      | Village of Wheeling            |
| Village of Elmwood Park      | City of North Chicago      | Village of Wilmette            |
| City of Evanston             | Village of Northfield      | Village of Willowbrook         |
| Village of Forest Park       | Northfield Township        | Village of Winnetka            |
| Village of Franklin Park     | Village of Oak Brook       | Village of Woodridge           |

**County Governments and Agencies**

|                                        |                                    |                                       |
|----------------------------------------|------------------------------------|---------------------------------------|
| Boone County State's Attorney's Office | Forest Preserve District of DuPage | Lake County                           |
| Forest Preserve of Cook County         | County                             | Lake County Forest Preserve District  |
| Cook County State's Attorney's Office  | Kane County                        | Lake County State's Attorney's Office |
| DuPage County Board of Review          | Kendall County Board of Review     |                                       |

**State and Federal Government Agencies**

|                                       |                                        |                          |
|---------------------------------------|----------------------------------------|--------------------------|
| Federal Deposit Insurance Corporation | Illinois Housing Development Authority | Internal Revenue Service |
| U.S. General Services Administration  | Illinois State Toll Highway Authority  | The U.S. Postal Service  |

**Schools**

|                                    |                                        |                                   |
|------------------------------------|----------------------------------------|-----------------------------------|
| Argo Community High School         | Consolidated High School               | Morton College                    |
| District No. 217                   | District No. 230                       | Niles Elementary District No. 71  |
| Arlington Heights District No. 25  | Darien District No. 61                 | North Shore District No. 112,     |
| Township High School District No.  | DePaul University                      | Highland Park                     |
| 214, Arlington Heights             | Elmhurst Community Unit School         | Northwestern University           |
| Barrington Community Unit District | District No. 205                       | Rosalind Franklin University      |
| No. 220                            | Indian Springs School District No. 109 | Roselle School District No. 12    |
| Chicago Board of Education         | LaGrange School District No. 105       | Schaumburg Community Consolidated |
| Chicago Ridge District No. 127½    | Loyola University                      | District No. 54                   |
| College of Lake County             | Lyons Township High School District    | University of Illinois            |
| Community Consolidated School      | No. 204                                | Wheeling Community Consolidated   |
| District No. 146                   | Maine Township High School District    | District No. 21                   |
|                                    | No. 207                                | Wilmette District No. 39          |

**Twin Forks Wind Farm -  
Shadow Flicker Study**



Prepared for:  
Twin Forks Wind Farm, LLC  
Care of E.ON Climate and  
Renewables  
353 North Clark Street  
Chicago, Illinois 60654

Prepared by:  
Stantec Consulting Services Inc.  
1165 Scheuring Road  
De Pere, Wisconsin 54115

Project No: 193703747  
May 29, 2015

# TWIN FORKS WIND FARM - SHADOW FLICKER STUDY

May 29, 2015

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Appendix A – Receptors Expected to Receive Between 20 and 30 Hours of Annual Shadow

Figure 1 – Project Area Expected Shadow Flicker (V110-2.0)

# TWIN FORKS WIND FARM - SHADOW FLICKER STUDY

May 29, 2015

## 1.0 Introduction

Twin Forks Wind Farm, LLC, a wholly owned subsidiary of E.ON Climate Renewables (E.ON) is proposing to develop a wind power generation facility in Macon County, Illinois. The proposed Twin Forks Wind Farm Project (Twin Forks or Project) will consist of up to 140 wind turbine generators (WTG). Twin Forks Wind Farm, LLC retained Stantec Consulting Services Inc. (Stantec) to conduct a shadow flicker analysis for the proposed Project.

## 2.0 Shadow Flicker

Shadow flicker is a term used to describe the intermittent change in the intensity of light cast on an area resulting from the rotation of an operating wind turbine's blades. The presence and intensity of shadow flicker are dependent on many factors, including but not limited to the position of the sun in relation to the turbine and receptor, distance of receptor from turbine, physical characteristics of the turbine and blades, time of day, season of year and topography of the Project area. Shadow flicker will only occur during the day-time, when skies are not overcast or cloudy. Turbines must be operational, as the flicker effect is caused by rotation of the blades as they intercept the sunlight cast on a receptor. When a turbine is not operating it may cast a stationary shadow, similar to other objects such as trees or utility poles.

The amount of shadow flicker received in an area is dependent on the alignment of the rotor blades in relation to the sun and receptor. Maximum shadow flicker is received when both the sun and rotor plane are perpendicular to the receptor. This alignment occurs when the wind is blowing from a source turbine towards a receptor. At times when the wind is blowing from other directions, the shadow cast on the target receptor is diminished and the shadow flicker effect passes more quickly.

Shadow flicker also diminishes as the distance between the source turbine and receptor increases. It is generally accepted that flicker becomes imperceptible beyond approximately 1,500 meters. Between a distance of approximately 10 times the rotor diameter and 1,500 meters the flicker effect is less pronounced due to dissipation and the relative ratio of the turbine blade to the sun disk area.

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## 3.0 Shadow Flicker Analysis

The potential amount of shadow flicker on receptors within the Project area can be modeled using a software program that considers the attributes and positions of the wind turbines in relation to receptors within the area. The model also considers the sun position as it passes through each day, 365 days per year.

### 3.1 SHADOW FLICKER ANALYSIS METHODOLOGY

The potential total time of shadow flicker on each receptor was estimated for the Project area using the Shadow module of WindPRO Version 3.0 software. WindPRO is an industry accepted modeling program that calculates the number of hours per year that any given receptor will receive shadow flicker from the source turbines.

The results provided by WindPRO include both the “worst case” and “expected” amount of shadow flicker time. The worst case scenario calculates the shadow flicker that would fall on a receptor if the sun was always shining during daylight hours, with no obstructing cloud cover and the turbines were always aligned to cast the broadest shadow on each receptor. The results of the worst case scenario include the potential shadow hours per year, the shadow days per year that flicker is possible and the maximum hours per day that shadow could occur. As these conditions will not occur in the real world, the model also calculates the shadow flicker that is expected to occur, considering the climatological conditions of the Project area. The expected impact analysis includes consideration of the amount of sunshine expected to occur within the area and the alignment of turbine blades due to wind direction. These parameters are model inputs based on climatological information acquired from the National Climatic Data Center, regional meteorological stations and wind directional frequency collected by Twin Forks near the proposed Project site. The percentage of sunshine probability was acquired from a 52-year average at Springfield, Illinois, the closest station with a long-term record of this statistic.

The climatologically based expected hours of sunshine for the Project area are presented in Table 1. The frequency of wind expected in 12 compass directions is summarized in Table 2. The total number of hours that turbines are able to cause shadow flicker takes into account non-operational time due to low or high wind speeds and maintenance activities. The turbine type that Twin Forks proposes to use will generally operate when winds at hub-height are between 3 meters per second (m/s) and 20 m/s. The shadow flicker analysis uses a conservative 88 percent operational-time for purposes of calculating the potential expected hours of shadow flicker.

**Table 1 Sunshine Probability (sun hours/possible sun hours)**

| Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  |
|------|------|------|------|------|------|------|------|------|------|------|------|
| 0.48 | 0.52 | 0.51 | 0.56 | 0.63 | 0.68 | 0.71 | 0.70 | 0.68 | 0.63 | 0.48 | 0.44 |

## TWIN FORKS WIND FARM - SHADOW FLICKER STUDY

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**Table 2 Turbine Operational Time per Sector (hours per year)**

| N   | NNE | ENE | E   | ESE | SSE | S     | SSW | WSW | W   | WNW | NNW | TOTAL |
|-----|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----|-------|
| 409 | 349 | 467 | 442 | 500 | 656 | 1,070 | 889 | 711 | 696 | 913 | 607 | 7,709 |

The effect of shadow flicker is also dependent on the physical characteristics of the turbine model and the distance between the source turbine and shadow receptor. The potential shadow flicker analysis described in this report is based on the V110-2.0 wind turbine with a 95-meter tower height. The V110-2.0 turbine model has a rotor diameter of 110 meters (360.9 feet). Additional turbine parameters include: variable rotor speeds ranging from approximately 9.0 to 18.0 rotations per minute; cut-in speed of 3 m/s and cut-out speed of 20 m/s (based on 10-minute average wind speed). The individual locations of the wind turbines are based on the current design of the wind farm provided by E.ON. Elevations for turbines and receptors were calculated within the modelling application using the 1/3 arc-second U.S. National Elevation Dataset (NED).

Potential shadow receptors within the Project area include buildings expected to be inhabited or used for community activities. Google Earth and an aerial imagery service provided by Esri were used within a geographic information system (GIS) to identify the potential receptors within approximately 1.5 miles (2,400 meters) of the turbines. Approximately 488 receptors were identified and included within the analysis, including residential homes, two cemeteries and structures associated with two educational facilities.

Potential shadow flicker is modeled using a “greenhouse” approach which defines each receptor as a one-meter glass cube, representing a window able to receive shadow from all directions. Vegetation surrounding receptors will diminish the effect of shadow flicker. A conservative approach assuming that no vegetation is present was used in the analysis.

Shadow flicker is widely considered imperceptible at a distance greater than 1,500 meters; however, Stantec conservatively analyzed the impact at all distances when more than 20 percent of the sun would be covered by a turbine blade. Shadow flicker does not occur when the sun-angle is less than three degrees above the horizon, due to atmospheric diffusion.

### 3.2 SHADOW FLICKER ANALYSIS RESULTS

The amount of shadow flicker on receptors within the Project area was calculated based on the climatological history of wind speed, wind direction and percentage of sunshine for the proposed turbine model. Results of the analysis indicate that most residences within the Twin Forks project area are expected to receive between 0 and 10 hours of shadow flicker each year. Of the 488 potential receptors analyzed, approximately 54 residences are expected to receive between 10 and 20 hours of shadow flicker each year. Thirty-two residences are expected to receive between 20 and 30 total hours of shadow annually (Table 3). Appendix A provides a

## TWIN FORKS WIND FARM - SHADOW FLICKER STUDY

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summary list of receptors predicted to have greater than 20 hours of annual shadow. Figure 1 presents a map of the Project area along with the expected shadow flicker hours per year for the V110-2.0 turbine model.

### 4.0 Conclusion

The analysis of potential shadow flicker from the Twin Forks Project on inhabited residences and other sensitive receptors (e.g., schools and cemeteries) within approximately 1.5 miles (2,400 meters) was assessed using WindPRO's Version 3.0 Shadow Module software. The results indicate that shadow flicker received by residents within the Project area is expected to be minimal. There are no regulations or standards for the maximum acceptable hours of shadow flicker; however, 30 hours per year is an often cited benchmark within existing wind ordinances throughout the United States. No receptors within the Project area are expected to receive more than 30 hours of shadow flicker each year. Thirty-two of the receptors analyzed are expected to receive between 20 and 30 hours of shadow flicker per year. This analysis was performed using conservative model inputs and does not include the blocking of shadow flicker due to vegetation or other obstacles. Obstacles such as barns, garages or silos may further reduce the effect of shadow flicker on an individual receptor.



# **TWIN FORKS WIND FARM - SHADOW FLICKER STUDY**

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## **Appendix A**

***E.ON Twin Forks Wind Farm  
Annual Shadow Flicker  
(20 - 30 Annual Expected Hours)***

| Receptor ID | Expected Shadow<br>(hours per year) |  | Receptor ID | Expected Shadow<br>(hours per year) |
|-------------|-------------------------------------|--|-------------|-------------------------------------|
| R-120       | 27:08                               |  | R-323       | 27:49                               |
| R-126       | 23:00                               |  | R-324       | 26:37                               |
| R-140       | 24:35                               |  | R-328       | 21:10                               |
| R-141       | 29:50                               |  | R-330       | 23:59                               |
| R-142       | 27:02                               |  | R-351       | 26:34                               |
| R-156       | 28:58                               |  | R-356       | 25:20                               |
| R-157       | 24:11                               |  | R-370       | 23:40                               |
| R-164       | 21:35                               |  | R-371       | 21:52                               |
| R-173       | 21:40                               |  | R-375       | 20:18                               |
| R-175       | 22:46                               |  | R-381       | 22:29                               |
| R-176       | 27:29                               |  | R-382       | 22:23                               |
| R-203       | 27:21                               |  | R-383       | 22:16                               |
| R-204       | 23:45                               |  | R-386       | 28:52                               |
| R-313       | 22:42                               |  | R-387       | 29:55                               |
| R-317       | 29:54                               |  | R-388       | 22:15                               |
| R-322       | 28:24                               |  | R-389       | 27:50                               |

# **TWIN FORKS WIND FARM - SHADOW FLICKER STUDY**

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## **Figure 1**







# Wind Power GeoPlanner™

## Communication Tower Study

Twin Forks Wind Farm



Prepared on Behalf of  
E.ON

December 22, 2014



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| <b>3. Discussion of Separation Distances</b> | <b>- 4 -</b> |
| <b>4. Conclusions</b>                        | <b>- 5 -</b> |
| <b>5. Contact Us</b>                         | <b>- 5 -</b> |

## 1. Introduction

Our communication tower study was performed for Twin Forks Wind Farm in Macon and DeWitt Counties, Illinois to identify all communication signal towers, and their owners, within the project area. This information is useful in the planning stages of the wind energy facilities to identify turbine setbacks and to prevent disruption to the services provided by the tenants on the towers. This data can be used in support of the wind energy facilities communications needs in addition to avoiding any potential impact to the current communications services provided in the region.

## 2. Summary of Results

The communication towers in the study area were derived from a variety of sources including the FCC's Antenna Structure Registration (ASR) database, Universal Licensing System (ULS), national and regional tower owner databases, and the local planning and zoning boards. The data<sup>1</sup> was imported into GIS software and the structures mapped in the wind energy area of interest. Each tower location is identified with a unique ID number associated with detailed structure and contact information provided in a spreadsheet attachment.

Eight communication tower structures and eighteen active communication antennas were identified within or in close proximity of the Twin Forks Wind Farm project area using the data sources described in our methodology above. The communication antennas may be located on a variety of structure types such as guyed towers, monopoles, silos or rooftops. The specific type of structure would normally need to be determined by an on-site visit.

Detailed information about the tower structure and communication antennas is provided in Table 1 and Table 2 including location coordinates, structure height above ground level, and owner-operator name<sup>2</sup>. Some communication towers were found to have inaccurate coordinates in the FCC license. The coordinates have been corrected using aerial imagery.

A discussion of turbine setback distances is provided in section three.

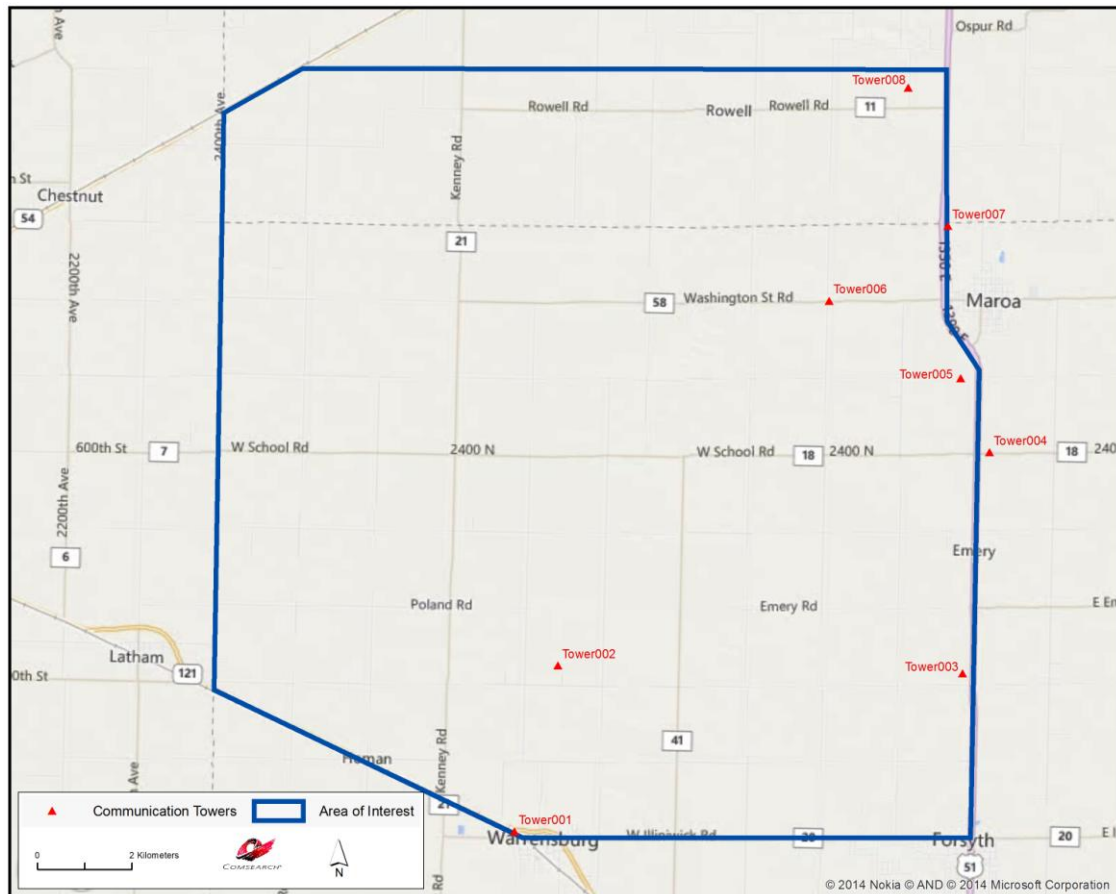
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<sup>1</sup> Comsearch makes no warranty as to the accuracy of the data included in this report beyond the date of the report. The data provided in this report is governed by Comsearch's data license notification and agreement located at [http://www.comsearch.com/files/data\\_license.pdf](http://www.comsearch.com/files/data_license.pdf).

<sup>2</sup> Please note that this report analyzes all known operators on the towers from data sources available to Comsearch. Unidentified operators may exist on the towers due to unlicensed or federal government systems, mobile phone operators with proprietary locations, erroneous data on the FCC license, and other factors beyond our control.

| Tower ID | ASR Number | Owner                              | Structure Height AGL (m) | City            | Latitude (NAD83) | Longitude (NAD83) |
|----------|------------|------------------------------------|--------------------------|-----------------|------------------|-------------------|
| Tower001 | 1256139    | UNITED STATES CELLULAR CORPORATION | 57.9                     | WARRENSBURG, IL | 39.934364        | -89.068712        |
| Tower002 | 1009084    | BURNS, MARY ELLEN DBA = WDKR RADIO | 151.1                    | WARRENSBURG, IL | 39.966107        | -89.058870        |
| Tower003 | 1207967    | SpectraSite Communications, Inc.   | 75.6                     | Forsyth, IL     | 39.966331        | -88.958724        |
| Tower004 | None       | Crown Castle International         | 59.4                     | Maroa, IL       | 40.008458        | -88.953196        |
| Tower005 | None       | US CELLULAR - TRANSITIONAL         | Unknown                  | Maroa, IL       | 40.022422        | -88.960781        |
| Tower006 | None       | Crown Castle International         | 45.7                     | Maroa, IL       | 40.036576        | -88.993808        |
| Tower007 | 1016052    | WICD Licensee, LLC                 | 110.1                    | CHAMPAIGN, IL   | 40.051328        | -88.964798        |
| Tower008 | None       | Crown Castle International         | 57.9                     | CLINTON, IL     | 40.077382        | -88.975369        |

*Table 1: Summary of Tower Structures*



*Figure 1: Towers within or near the Area of Interest*



| ID | Tower ID | Callsign | Service Type              | Licensee                          | Antenna Height AGL (m) | Latitude (NAD83) | Longitude (NAD83) |
|----|----------|----------|---------------------------|-----------------------------------|------------------------|------------------|-------------------|
| 1  | Tower001 | WQUK876  | Microwave                 | SprintCom, Inc.                   | 57.9                   | 39.934364        | -89.068712        |
| 2  | Tower002 | WDKR     | FM                        | WDKR, INC.                        | 146.0                  | 39.966107        | -89.058870        |
| 3  |          | WQOF249  | Microwave (3650-3700 MHz) | MR Systems Wireless, LLC          | 10.0                   | 39.989972        | -89.131306        |
| 4  |          | KTE868   | Land Mobile               | CORN BELT ENERGY CORPORATION      | 24.0                   | 39.993361        | -88.950639        |
| 5  |          | WNWB927  | Land Mobile               | MARSH, DANIEL H                   | 12.0                   | 40.005583        | -89.004250        |
| 6  | Tower004 | KNKA742  | Cellular                  | NEW CINGULAR WIRELESS PCS, LLC    | 59.4                   | 40.008458        | -88.953196        |
| 7  |          | WNRL266  | Land Mobile               | MAROA FORSYTH SCHOOL DISTRICT     | 34.0                   | 40.018639        | -88.955639        |
| 8  |          | WQOF249  | Microwave (3650-3700 MHz) | MR Systems Wireless, LLC          | 10.0                   | 40.020611        | -89.059389        |
| 9  |          | WQOF249  | Microwave (3650-3700 MHz) | MR Systems Wireless, LLC          | 10.0                   | 40.020611        | -89.054694        |
| 10 | Tower006 | KNKA778  | Cellular                  | Illinois SMSA Limited Partnership | 45.7                   | 40.036576        | -88.993808        |
| 11 |          | WQOF249  | Microwave (3650-3700 MHz) | MR Systems Wireless, LLC          | 24.0                   | 40.039889        | -88.966361        |
| 12 |          | KNNN572  | Land Mobile               | ZELHART, DAVID                    | 26.0                   | 40.046972        | -88.981194        |
| 13 |          | WQOF249  | Microwave (3650-3700 MHz) | MR Systems Wireless, LLC          | 10.0                   | 40.068833        | -89.013417        |
| 14 |          | WQOF249  | Microwave (3650-3700 MHz) | MR Systems Wireless, LLC          | 10.0                   | 40.070917        | -89.069306        |
| 15 |          | WQOF249  | Microwave (3650-3700 MHz) | MR Systems Wireless, LLC          | 10.0                   | 40.072333        | -89.041778        |
| 16 |          | WQOF249  | Microwave (3650-3700 MHz) | MR Systems Wireless, LLC          | 24.3                   | 40.072778        | -89.042222        |
| 17 | Tower008 | WQRC251  | Microwave                 | NEW CINGULAR WIRELESS PCS, LLC    | 102.1                  | 40.077382        | -88.975369        |
| 18 | Tower008 | KNKN468  | Cellular                  | NEW CINGULAR WIRELESS PCS, LLC    | 102.1                  | 40.077382        | -88.975369        |

*Table 2: Summary of Communication Antennas*

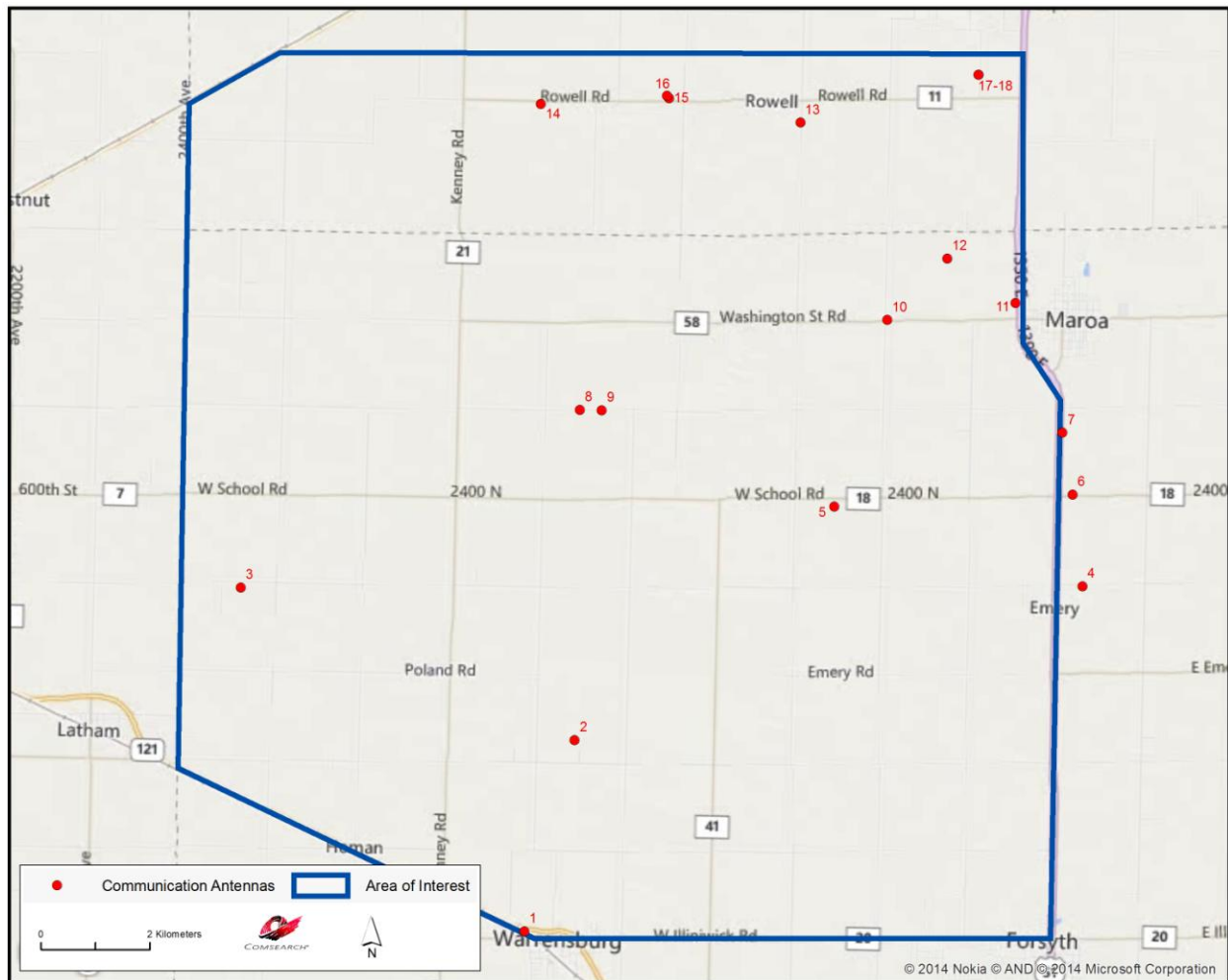


Figure 2: Communication Antennas within or near the Area of Interest

### 3. Discussion of Separation Distances

In planning the wind energy turbine locations, a conservative approach would dictate not locating any turbines in close proximity to existing tower structures to avoid any possible impact to the communications services provided by the structures. Reasonable distance between communication towers and wind turbine towers is a function of two things: (1) the physical turning radius of the wind turbine blades and (2) the characteristics of the communication systems on the communication tower.

Since wind turbine blades can rotate 360°, the first consideration of separation distance to other structures is clearance of the blades. If the blade radius is 50 meters, then a separation distance greater than 50 meters is necessary. From a practical standpoint, a setback distance

greater than the maximum height of the turbine is necessary to insure a “fall” safety zone in the unlikely event of a turbine tower failure. Setback requirements for “fall” safety are typically specified by the local zoning ordinances.

The required separation distance based on the characteristics of the communication systems will vary depending on the type of communication antennas that are installed on the tower. For example, for land mobile and mobile phone systems, setback distances are based on FCC interference emission limits from electrical devices in the land mobile and mobile phone frequency bands.

Finally, the tower structures identified could be a potential benefit in support of communications network needs for the wind energy facility. An example would be the implementation of a Supervisory Control and Data Acquisition (SCADA) system that monitors and provides communications access to the wind energy facility.

## **4. Conclusions**

Our study identified 8 tower structures and 18 active communication antennas within or in the close proximity to the project area. They are used for a variety of wireless services including microwave, land mobile, cellular and FM services. The wind turbines associated with the Twin Forks wind farm project should be sited so as to avoid or minimize impacts to normal operation of these communication systems.

## **5. Contact Us**

For questions or information regarding the Communication Tower Study, please contact:

|                 |                                                                  |
|-----------------|------------------------------------------------------------------|
| Contact person: | Denise Finney                                                    |
| Title:          | Account Manager                                                  |
| Company:        | Comsearch                                                        |
| Address:        | 197 Janelia Farm Blvd., Ashburn, VA 2147                         |
| Telephone:      | 73-726-565                                                       |
| Fax:            | 73-726-5595                                                      |
| Email:          | <a href="mailto:dfinney@comsearch.com">dfinney@comsearch.com</a> |
| Web site:       | <a href="http://www.comsearch.com">www.comsearch.com</a>         |

## COOPERATION AND RELEASE AGREEMENT

THIS COOPERATION AND RELEASE AGREEMENT ("Agreement") is made this 15<sup>th</sup> day of June, 2015, between TWIN FORKS WIND FARM, LLC ("Developer") and the CITY OF MAROA, an Illinois Municipal Corporation ("City") (individually Developer and the City are each a "Party" and collectively are the "Parties").

WHEREAS, Developer intends to construct, own and operate a wind-powered electric generation facility (the "Project") in Macon County, Illinois and will present to the City preliminary drawings and plans describing the location of the Project facilities; and

WHEREAS, the City acknowledges and agrees that Developer has adequately consulted with it and accommodated it with respect to all aspects of the Project and expressly acknowledges, covenants and confirms that this Agreement serves as its consent, approval and support of the Project as described by Developer; and

NOW THEREFORE, in consideration of the premises and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

1. (A) Developer shall not place or site any specific wind turbine within one-quarter mile of a City boundary, as such boundaries exist as of the date of this Agreement and as depicted on Exhibit A; and

(B) Contingent upon (i) the commencement date for commercial operation for electricity production for sale by the Project (and excluding the production of any "test" energy) (such date "COD") and (ii) the placement of a minimum of at least one (1) Project wind turbine within one and one-half miles (1.5 miles) of a City boundary, as such boundaries exist as of the date of this Agreement, Developer shall make payments to the City, per installed wind turbine, in accordance with Exhibit B attached hereto.

(C) Notwithstanding the payment terms in Exhibit B, in the event Developer enters into a cooperation and release agreement with another municipality within fifty (50) miles of the corporate limits of the City that provides for per turbine payments at a rate higher than that provided for herein, this Agreement shall be revised to incorporate that higher rate.

Notwithstanding the foregoing, such payment obligation shall cease upon the Project's decommissioning.

2. The City hereby specifically waives and relinquishes its zoning and building authority over the Project within one and one-half miles (1.5 miles) of a City boundary, as such boundaries exist as of the date of this Agreement or thereafter, as otherwise provided by 65 ILCS 5/11-13-26, and hereby further defers to Macon County with respect to all requisite zoning and building approvals and permits.

3. The City further agrees that it will not:

(A) Obstruct, delay, frustrate or oppose the Project in any way or encourage any other party to do so; or

(B) Take any action, directly or indirectly, or encourage another party to take any action, directly or indirectly, with any governmental authority, to oppose the issuance to Developer of any permit, grant, right, application or similar governmental action related to the Project in any way. The City also expressly agrees that it will not oppose the placement by Developer of any Project infrastructure, including, but not limited to: transmission systems, substations, underground electrical collection systems or access roads, regardless of the distance of any portion of such system from a City boundary.

4. If the City breaches the terms of this Agreement, then, in addition to any other remedies available to Developer at law or in equity, the City shall, within ten (10) business days of notice of such breach from Developer, refund to Developer all amounts paid by Developer to City pursuant to this Agreement.

5. The Parties agree to keep the terms of this Agreement strictly confidential other than as necessary to enforce any continuing obligations of the Parties under the Agreement or as required by law.

6. This Agreement shall inure to the benefit of and be binding upon the respective heirs, executors, administrators, assigns and successors of each Party.

7. This Agreement may be executed in one or more counterparts, each of which so executed shall be deemed to be an original and such counterparts together shall constitute one and the same instrument.

8. Any written communication as aforesaid, if delivered or sent by facsimile or any other means of instant written telecommunication, will be deemed to have been given or made on the day on which it was delivered or sent as aforesaid if it is received at or before 16:00 on the day in question or, if such day is not a business day or if such written communication is received after 16:00, then delivery will be deemed to have occurred on the next following business day. Either Party may from time to time change its address for service hereunder by notice to the other Party. Any notice, request, demand or other instrument which may be required or permitted to be delivered, given or served upon either Party will be sufficiently delivered, given or served upon the Party in question, if in writing, and if either delivered by hand, by facsimile or by any other means of instant written telecommunication, in each case addressed as referenced below:

(A) In the case of City to:

Maroa City Hall  
Attention: City Clerk  
120B S Locust St  
Maroa, IL 61756

With a copy to:  
Michael L. Antoline, P.C.  
2714 N. Mattis Avenue, Suite A  
Champaign, IL 61822  
Facsimile: (217) 352-4344

(B) And in the case of Developer to:

Twin Forks Wind Farm, LLC  
353 N. Clark Street, 30th Floor  
Chicago, IL 60654  
Attn: Brad King  
Facsimile: (312) 923-9469

With a copy to:

Michael S. Blazer  
Jeep & Blazer, LLC  
24 N. Hillside Avenue, Suite A  
Hillside, IL 60162  
Facsimile: (708) 236-0828

9. Each Party acknowledges having obtained its own independent legal advice with respect to this Agreement and the transactions contemplated hereby to the fullest extent deemed necessary by each Party prior to its execution and delivery. There will be no presumption that any ambiguity in this Agreement and any documents contemplated hereby be resolved in favour of either of the Parties. The execution, delivery and performance by the Parties of this Agreement has been duly authorized by all necessary action and there are no approvals, authorizations, consents, or other action necessary to authorize either Party's execution and delivery of this Agreement.

10. This Agreement shall be governed by and be construed in accordance with the laws of the State of Illinois.

**IN WITNESS WHEREOF**, this Agreement is executed effective as of the day and year first above written.

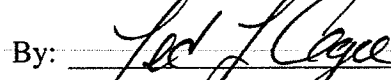
**TWIN FORKS WIND FARM, LLC**

By: 

Name: BRADFORD H. KING

Title: VP, MIDWEST/NORTHEAST  
DEVELOPMENT

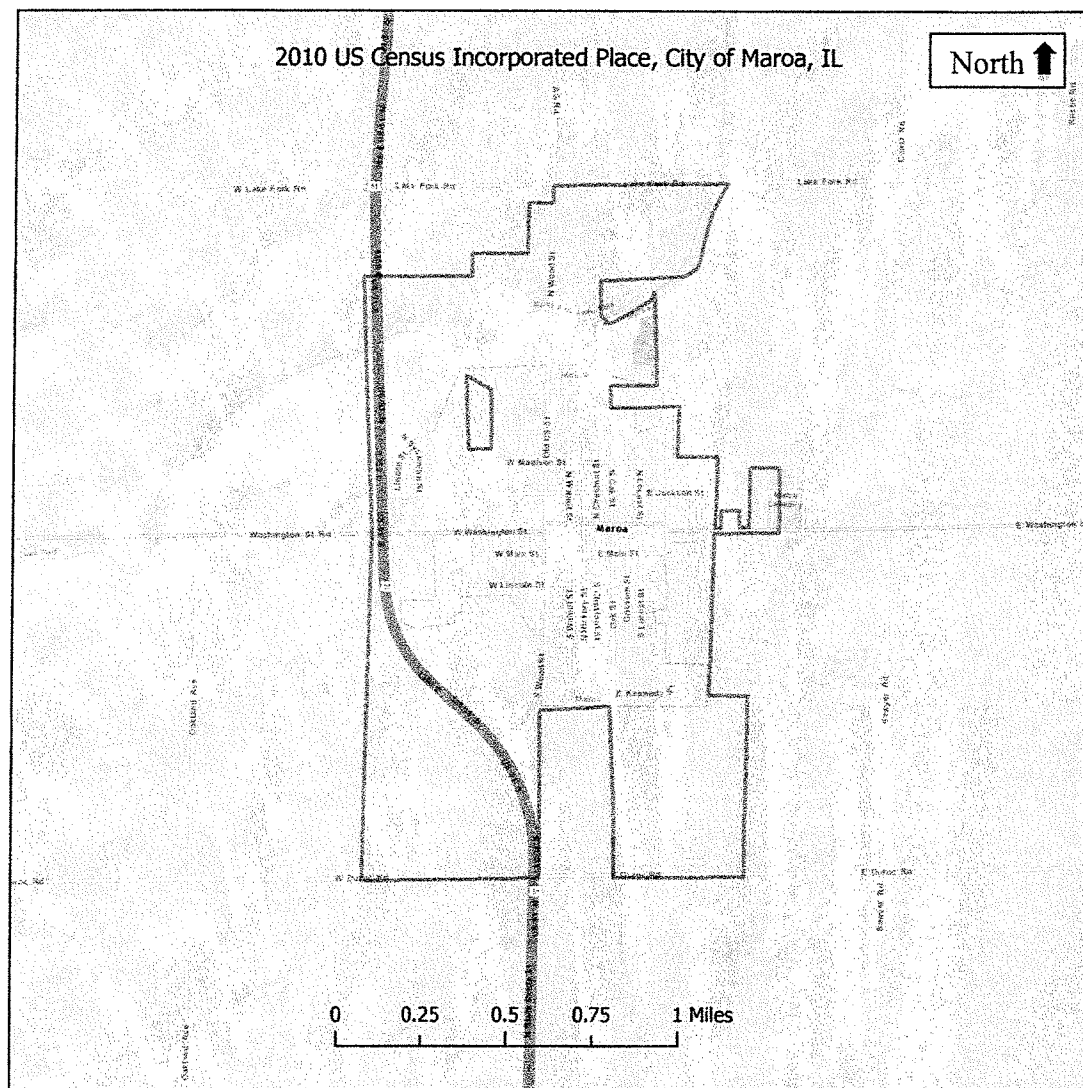
**CITY OF MAROA**

By: 

Name: TED L AGEE

Title: MAYOR

## CITY OF MAROA MUNICIPAL BOUNDARY



## **EXHIBIT B**

### **PAYMENT SCHEDULE**

\$1500 per wind turbine located within one and a half (1.5) miles of the boundary of the City of Maroa, as such boundaries exist as of the date of this Agreement and as depicted on Exhibit A. The amounts paid under this Exhibit B shall be for thirty (30) years, with the Developer's option to extend for two consecutive periods of ten (10) years each immediately following the initial thirty (30) year term. The amounts paid under this Exhibit B shall increase by two percent (2.0%) annually effective on each anniversary date of this Agreement.



**VILLAGE OF WARRENSBURG, ILLINOIS**

**ORDINANCE NO. 699**

**AN ORDINANCE  
AUTHORIZING AND APPROVING  
A COOPERATION AND RELEASE AGREEMENT  
WITH TWIN FORKS WIND FARM, LLC**

---

**ADOPTED BY THE  
BOARD OF TRUSTEES  
OF THE VILLAGE OF WARRENSBURG**

**this 1<sup>st</sup> DAY OF JUNE, 2015**

---

**Published in pamphlet form by authority of the Board of Trustees of  
the Village of Warrensburg, Macon County, Illinois,  
this 1<sup>st</sup> day of June, 2015**

**ORDINANCE NO. 699**

**AN ORDINANCE  
AUTHORIZING AND APPROVING  
A COOPERATION AND RELEASE AGREEMENT  
WITH TWIN FORKS WIND FARM, LLC**

BE IT ORDAINED BY THE PRESIDENT AND THE BOARD OF TRUSTEES OF THE  
VILLAGE OF WARRENSBURG, ILLINOIS:

**SECTION I.** That the Cooperation and Release Agreement dated the 1<sup>st</sup> day of June, 2015, between the Village of Warrensburg, Illinois, an Illinois Municipal Corporation, and Twin Forks Wind Farm, LLC, a copy of which is attached hereto and made a part hereof as Exhibit "A", is authorized and approved.

**SECTION II:** That the President of the Board of Trustees, or his designee, is authorized to execute the Cooperation and Release Agreement.

**SECTION III:** That this Ordinance, after its passage and approval, shall be published in pamphlet form and shall be in full force and effect on June 1, 2015, after such publication, in the manner, form, and time as provided by the laws of the State of Illinois.

Ayes: 6 Namely: S. Mills, F. MusicK, D. Fisher  
K. MusicK, L. Hackl, T. Werrin

Nayes: -0- Namely: \_\_\_\_\_  
\_\_\_\_\_

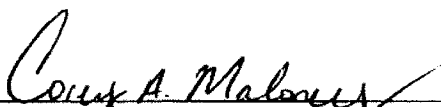
PRESENTED this 1<sup>st</sup> day of June, 2015.

PASSED this 1<sup>st</sup> day of June, 2015.

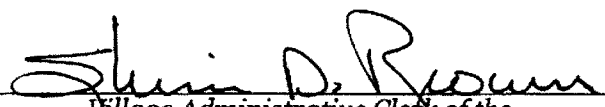
APPROVED this 1<sup>st</sup> day of June, 2015.

RECORDED this 1<sup>st</sup> day of June, 2015.

Approved:

  
\_\_\_\_\_  
President of the Board of Trustees of the  
Village of Warrensburg, Illinois

ATTEST:

  
\_\_\_\_\_  
Village Administrative Clerk of the  
Village of Warrensburg, Illinois

## COOPERATION AND RELEASE AGREEMENT

**THIS COOPERATION AND RELEASE AGREEMENT ("Agreement")** is made this 1<sup>st</sup> day of June, 2015, between **TWIN FORKS WIND FARM, LLC ("Developer")** and the **VILLAGE OF WARRENSBURG, an Illinois Municipal Corporation ("Village")** (individually Developer and the Village are each a **"Party"** and collectively are the **"Parties"**).

**WHEREAS**, Developer intends to construct, own and operate a wind-powered electric generation facility (the **"Project"**) in Macon County, Illinois and has presented to the Village preliminary drawings and plans describing the location of the Project facilities; and

**WHEREAS**, the Village acknowledges and agrees that Developer has adequately consulted with it and accommodated it with respect to all aspects of the Project and expressly acknowledges, covenants and confirms that this Agreement serves as its consent, approval and support of the Project as described by Developer in said preliminary drawings and plans furnished to it by Developer; and

**NOW THEREFORE**, in consideration of the premises and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

1. (A) Developer shall not place or site any specific wind turbine within one-half mile of a Village boundary, as such boundaries exist as of the date of this Agreement and as depicted on Exhibit A; and

(B) Contingent upon (i) the commencement date for commercial operation for electricity production for sale by the Project (and excluding the production of any "test" energy) (such date **"COD"**) and (ii) the placement of a minimum of at least one (1) Project wind turbine within one and one-half miles (1.5 miles) of a Village boundary, as such boundaries exist as of the date of this Agreement, Developer shall make payments to the Village, per installed wind turbine, in accordance with Exhibit B attached hereto.

(C) Notwithstanding the payment terms in Exhibit B, in the event Developer enters into a cooperation and release agreement with another municipality within fifty (50) miles of the corporate limits of the Village that provides for per turbine payments at a rate higher than that provided for herein, this Agreement shall be revised to incorporate that higher rate.

Notwithstanding the foregoing, such payment obligation shall cease upon the Project's decommissioning.

2. The Village hereby specifically waives and relinquishes its zoning and building authority over the Project within one and one-half miles (1.5 miles) of a Village boundary, as such boundaries exist as of the date of this Agreement or thereafter, as otherwise provided by 65 ILCS 5/11-13-26, and hereby further defers to Macon County with respect to all requisite zoning and building approvals and permits.

EXHIBIT "A"

3. The Village further agrees that it will not:

(A) Obstruct, delay, frustrate or oppose the Project in any way or encourage any other party to do so; or

(B) Take any action, directly or indirectly, or encourage another party to take any action, directly or indirectly, with any governmental authority, to oppose the issuance to Developer of any permit, grant, right, application or similar governmental action related to the Project in any way. The Village also expressly agrees that it will not oppose the placement by Developer of any Project infrastructure, including, but not limited to: transmission systems, substations, underground electrical collection systems or access roads, regardless of the distance of any portion of such system from a Village boundary.

4. If the Village breaches the terms of this Agreement, then, in addition to any other remedies available to Developer at law or in equity, the Village shall, within ten (10) business days of notice of such breach from Developer, refund to Developer all amounts paid by Developer to Village pursuant to this Agreement.

5. This Agreement shall inure to the benefit of and be binding upon the respective heirs, executors, administrators, assigns and successors of each Party.

6. This Agreement may be executed in one or more counterparts, each of which so executed shall be deemed to be an original and such counterparts together shall constitute one and the same instrument.

7. Any written communication as aforesaid, if delivered or sent by facsimile or any other means of instant written telecommunication, will be deemed to have been given or made on the day on which it was delivered or sent as aforesaid if it is received at or before 16:00 on the day in question or, if such day is not a business day or if such written communication is received after 16:00, then delivery will be deemed to have occurred on the next following business day. Either Party may from time to time change its address for service hereunder by notice to the other Party. Any notice, request, demand or other instrument which may be required or permitted to be delivered, given or served upon either Party will be sufficiently delivered, given or served upon the Party in question, if in writing, and if either delivered by hand, by facsimile or by any other means of instant written telecommunication, in each case addressed as referenced below:

(A) In the case of Village to:

Village of Warrensburg  
Attn: Village Administrative Clerk  
155 E. Main Street  
PO Box 350  
Warrensburg, IL. 62573  
Facsimile: (217) 672-3771

With a copy to:

James Jankowicz.

Record & Jankowicz  
101 S Main St Ste 505  
Decatur, IL 62523  
Facsimile: (217) 428-6667

(B) And in the case of Developer to:

Twin Forks Wind Farm, LLC  
353 N. Clark Street, 30th Floor  
Chicago, IL 60654  
Attn: Brad King  
Facsimile: (312) 923-9469

With a copy to:

Michael S. Blazer  
Jeep & Blazer, LLC  
24 N. Hillside Avenue, Suite A  
Hillside, IL 60162  
Facsimile: (708) 236-0828

8. Each Party acknowledges having obtained its own independent legal advice with respect to this Agreement and the transactions contemplated hereby to the fullest extent deemed necessary by each Party prior to its execution and delivery. There will be no presumption that any ambiguity in this Agreement and any documents contemplated hereby be resolved in favour of either of the Parties. The execution, delivery and performance by the Parties of this Agreement has been duly authorized by all necessary action and there are no approvals, authorizations, consents, or other action necessary to authorize either Party's execution and delivery of this Agreement.

9. This Agreement shall be governed by and be construed in accordance with the laws of the State of Illinois.

IN WITNESS WHEREOF, this Agreement is executed effective as of the day and year first above written.

TWIN FORKS WIND FARM, LLC

By: 

Name: BRADFORD H. KING

Title: VP, MIDWEST/NORTHEAST  
DEVELOPMENT

CITY OF WARRENSBURG

By: 

Name: Corey A. Maloney

Title: President

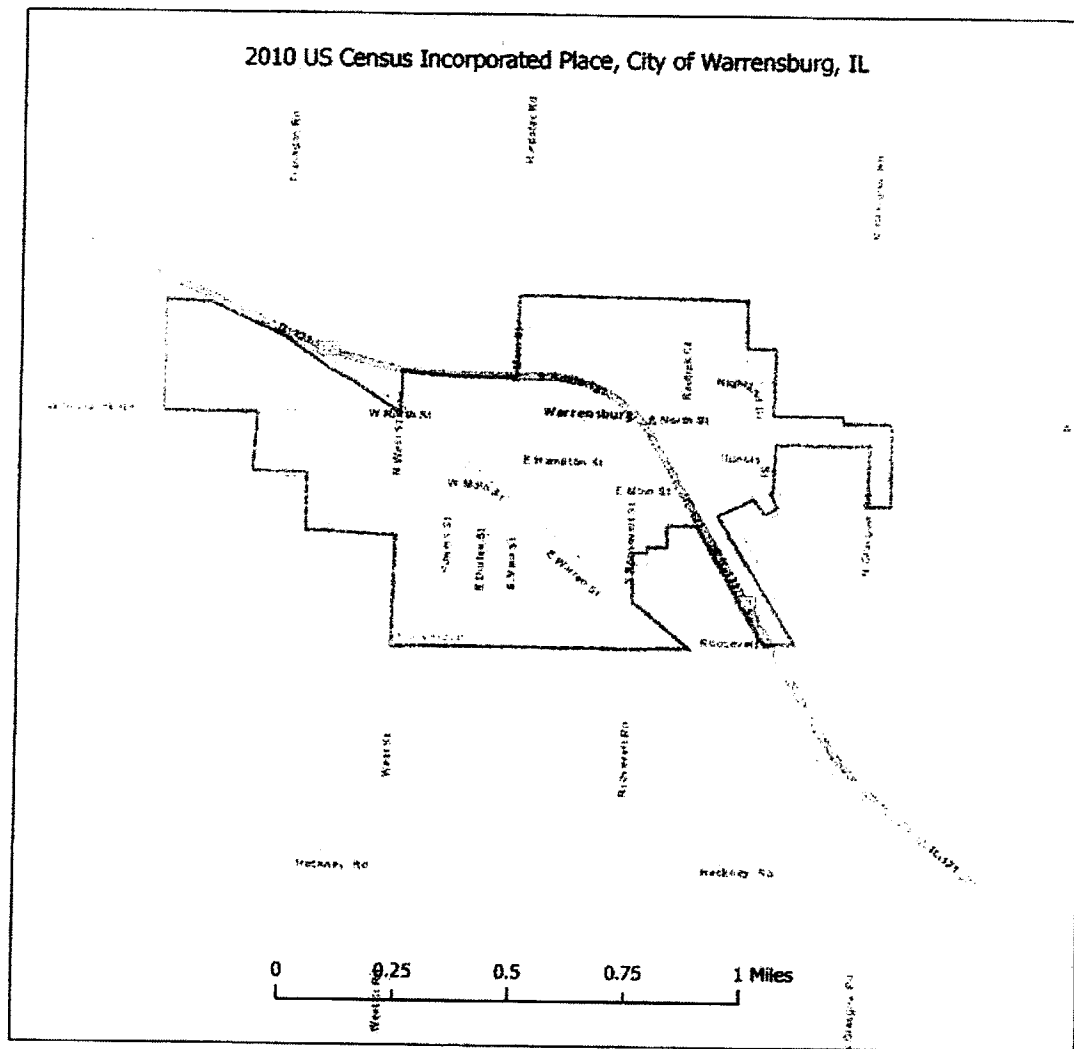
2010 US Census Incorporated Place, City of Warrensburg, IL

Map showing the City of Warrensburg, IL, with major roads and a scale bar (0 to 1 mile).

Major roads shown include:

- US Highway 160
- US Highway 151
- US Highway 152
- W. Main St.
- E. Main St.
- E. Washington St.
- E. Warren St.
- E. Harrison St.
- E. Lincoln St.
- E. Jackson St.
- E. Madison St.
- E. Taylor St.
- E. Franklin St.
- E. Adams St.
- E. Jones St.
- E. Smith St.
- E. Brown St.
- E. Green St.
- E. White St.
- E. Black St.
- E. Gray St.
- E. Blue St.
- E. Red St.
- E. Yellow St.
- E. Orange St.
- E. Purple St.
- E. Pink St.

Scale: 0 to 1 mile.



## **EXHIBIT B**

One thousand five hundred dollars (\$1500.00) per wind turbine located within one and a half (1.5) miles of the Village boundary, as such boundaries exist as of the date of this Agreement and as depicted on Exhibit A. The amounts paid under this Exhibit B shall be for thirty (30) years, with the Developer's option to extend for two consecutive periods of ten (10) years each immediately following the initial thirty (30) year term. The amounts paid under this Exhibit B shall increase by two percent (2.0%) annually effective on each anniversary date of this Agreement.




STATE OF ILLINOIS        }  
COUNTY OF MACON        } ss

I, SHERRIE BROWN, certify that I am the duly appointed Village Administrative Clerk of the Village of Warrensburg, Macon County, Illinois.

I further certify that on the 1<sup>st</sup> day of June, 2015 the President and Board of Trustees of the Village of Warrensburg passed and approved Ordinance No. 699, entitled "An Ordinance Authorizing and Approving a Cooperation and Release with Twin Forks Wind Farm, LLC, which provided by its terms that it should be published in pamphlet form.

The pamphlet form of Ordinance No. 699, including Ordinance and cover sheet thereof was prepared, a copy of such Ordinance was posted in the Warrensburg Village Hall, the Warrensburg Public Library, and Casey's, commencing June 2<sup>nd</sup>, 2015, and continuing for at least 10 days thereafter. Copies of such Ordinance were also available for public inspection upon request in the office of the Village Administrative Clerk.

DATED at Warrensburg, Illinois this 2<sup>nd</sup> day of June, 2015.

  
Village Administrative Clerk of the  
Village of Warrensburg, Illinois