



TESTIMONY

To: State Representative Eric Allan Koch, Chair of the Indiana House of Representatives Utilities, Energy and Telecommunications Committee

Cc: Luke Wilson, Staff Assistant for the Indiana House of Representatives Utilities, Energy and Telecommunications Committee

From: Seth Kaplan, Senior Manager for Regional Government Affairs, EDP Renewables North America

Date: January 27, 2016

Re: Support of HB 1377, re competitive procurement standards for utilities

Chairman Koch, Vice-Chair VanNatter, Ranking Member Hale and members of the committee: My name is Seth Kaplan, and I am the responsible for Government Affairs for the Eastern United States for EDP Renewables and I am here today to testify in support of HB 1377.

EDP Renewables North America has developed over 4,200 Megawatts of Wind Farms across the United States and Canada and is the largest operator of Wind Farms here in Indiana with a busy office just a few blocks from the Capitol. We are proud to be a part of the economy and life of Indiana and want nothing more than more opportunities to compete, offering the best price on the best terms in competition with other companies, to provide Indiana businesses and residents the power they need.

The bill before you today offers an opportunity to further free market principles, increase the diversity and reliability of the electric system, harvest a natural resource, make use for Hoosiers of a federal tax benefit that is being phased out and create local jobs and property tax revenue while putting downward pressure on electricity prices.

Our success in Indiana has been built on our ability to compete in the kind of process that this bill would establish. And our success has brought tangible benefit to local communities. Our Meadow Lake Wind Farm in White County, a familiar site to anyone who has ventured north of Lafayette on I-65, has paid over \$2.5 Million in taxes to the County with more than \$1 Million of that flowing to schools and Meadow Lakes' tax payments are roughly a quarter of all commercial property tax payments to White County and we estimate that over the course of its



life Meadow Lake will pay over \$50 Million to the County. And of course, the tax payments are not the whole story as we make substantial lease payments to the farmers of White County and have made improvements (like an entire network of paved roads) that have been very well received. Similarly, our Headwaters Wind Farm across the state in Randolph County pays substantial property taxes and lease payments while creating 14 full-time permanent jobs. Headwaters, which began commercial operation in December 2014, has become a popular local landmark and the theme of Randolph County Ag Days in 2015 was “Harvesting the Wind.”

Passage of HB 1377 would create a cohesive framework for the kind of competition that will get more projects like Meadow Lake and Headwaters built and create tangible value for the host communities. Meadow Lake and Headwaters have been selling their power largely to out-of-state utilities or utilities that straddle the border (like Indiana & Michigan Power) due to a “one-off” unique arrangement. Hoosiers deserve the systematic downward pressure on electricity prices that will come from the competitive process for in-state procurement that HB 1377 will put in place

Thank you for your time, focus and work on this critical issue. We look forward to working with you, your staff and your colleagues in moving forward HB 1377 and competitively bid clean power projects that will bring local benefit to Indiana’s communities. If you have any questions please do not hesitate to contact me at seth.kaplan@edpr.com.

Yours Sincerely,

A handwritten signature in blue ink, appearing to read "Seth Kaplan", is written over a horizontal dotted line.

Seth Kaplan
Senior Manager, Regional Government Affairs
EDP Renewables

Indiana Meadow Lake

Location

Meadow Lake Wind Farm is located in northwestern Indiana in White County. The site offers many advantages as a location for a modern wind power project, including a strong, proven wind resource, excellent access to a transmission line, compatibility with existing land uses and proximity to power markets. The wind farm co-exists well with the agricultural land use in the area, allowing farmers to continue growing crops while generating revenue from the wind turbines.

Energy Output

Meadow Lake I Wind Farm has an installed capacity of 199.65 megawatts (MW), Phase II has an installed capacity of 99 MW and Phase III has an installed capacity of 103.5 MW, and Phase IV has an installed capacity of 98.7 MW. The wind farms generate enough clean, renewable energy to power approximately 169,000 average Indiana homes each year.¹ EDP Renewables North America's is developing additional phases with a potential installed capacity of up to 500 megawatts in White and Benton Counties.

Benefits to the Community

The four phases of Meadow Lake Wind Farm yield significant economic benefits to the community in the form of payments to landowners, local spending and annual community investment. In addition, the development, construction and operation of the wind farms have generated a significant number of jobs. During construction, more than 1,000 contractors were hired.

The wind farm helps provide energy security to the United States by diversifying the electricity generation portfolio, protecting against volatile natural gas spikes and utilizing a renewable, domestic source of energy.

Environmental Benefits

Meadow Lake Wind Farm prevents the annual emission of carbon dioxide, a contributor to climate change; nitrogen oxide, which causes smog and sulfur dioxide, which causes acid rain. The annual environmental benefits are equivalent to taking approximately 183,000 cars off of the road.²



Landowners

Over 400 supportive landowners participate in the first four phases of the wind farm under long-term lease and easement agreements that cover turbines, access roads and transmission corridors.

Power Purchasers

Ameren Illinois Utilities and Commonwealth Edison began purchases 75 MW of the clean, renewable energy generated by the four phases wind farm in 2012, (Commonwealth Edison purchases 50 MW from Meadow Lake I; Commonwealth Edison purchases 25 MW and Ameren Illinois Utilities will purchase 25 MW from Meadow Lake II; Ameren Illinois Utilities purchases 25 MW from Meadow Lake III; and Ameren Illinois Utilities purchases 25 MW from Meadow Lake IV).

Technology

These modern wind turbine generators are robust, sophisticated, high-tech machines designed to capture the kinetic energy of the wind and convert it into electricity. Wind turbines consist of three main parts: the tower, the blade and the nacelle. Most of the action takes place inside the nacelle, where the motion of the wind turning the blades is converted into electricity. The blades are attached to a shaft that runs into a gearbox. The gearbox steps up the speed of rotation, which then turns the generator producing AC electricity. Electricity must be produced at just the right frequency and voltage to be compatible with the utility grid.

EDPR NA has installed meteorological towers, and continues to monitor the wind characteristics in White and Benton Counties. The first phase of Meadow Lake Wind Farm consists of 121 Vestas V82 1.65 MW turbines. The second phase consists of 66 Acciona AW-82 turbines. The third phase consists of 69 GE SLE 1.5 MW turbines. Phase IV consists of 47 Suzlon S88 2.1 MW turbines.



1,535,606
MWh of clean
energy generated
annually



Meadow Lake
has supported
hundreds of
local jobs



17,466,047
metric tons of
CO2 displaced
over the farm's
lifetime

About Us

EDP Renewables North America ("EDPR NA") and its subsidiaries develop, construct, own and operate wind farms throughout North America. Based in Houston, Texas with 34 wind farms and over 10 offices across the United States and Canada, EDPR NA has developed more than 4,200 megawatts (MW) and operates over 4,000 MW of wind farms. With approximately 300 employees, EDPR NA's highly qualified team has a proven capacity to execute projects across the continent

EDPR NA is owned by EDP Renováveis, S.A. ("EDP Renewables" or "EDPR"), a global leader in the renewable energy sector that develops, constructs, owns and operates renewable generation facilities. With a sound development pipeline, first class assets and market-leading operating capacity, EDPR has grown extensively in recent years. The company's long-term growth is driven by favorable renewable energy market conditions. EDPR is committed to renewable energy generation which has become reliable and competitive due to technological advancements that have led to greater efficiencies. The company operates in the most attractive markets, continuously expanding to new areas of the world. EDPR is currently present in the United States, Spain, Belgium, Brazil, Canada, France, Italy, Poland, Portugal, Romania, and the United Kingdom. EDPR is listed on the Euronext Lisbon Stock Exchange (NYSE Euronext: EDPR).

For more information, visit www.edprwindfarms.com or www.edpr.com.

¹Figure based on 2013 EIA Household Data monthly average consumption by state multiplied by 12 months to calculate yearly figure based upon monthly averages.

²2010 eGRID figure, data and carbon equivalency conversion provided by the Environmental Protection Agency (EPA), and assuming 19,599 lbs of carbon dioxide emitted per gallon of gasoline for the average combined fuel economy of cars and light trucks, which get 21.4 miles per gallon; and assuming the average American drives 11,318 miles per year.

Indiana | Headwaters

Location

Located 70 east of Indianapolis along the Ohio boarder in Randolph County, the Headwaters Wind Farm supplies emission free electricity to Indiana Michigan Power, a subsidiary of American Electric Power (AEP), through a long-term power purchase agreement. It employs the latest in turbine technology to generate 200 Megawatts (MW) of domestic, renewable electricity.

Energy Output

Headwaters Wind Farm has an installed capacity of 200 megawatts (MW) – enough to power more than 51,000 average Indiana homes with clean energy each year. This electricity is delivered to the grid through an interconnection with a 345 kilovolt transmission line owned and operated by AEP.¹

Benefits to the Community

Headwaters Wind Farm contributes significant economic benefits to the surrounding community in the form of payments to land owners, local spending, and annual community investment. The development, construction, and operation of the wind farm also generated more than 250 jobs at the peak of construction and created 14 full-time, permanent jobs in the area. The Headwaters Wind Farm helps provide energy security to the United States by diversifying the electricity generation portfolio, protecting against volatile natural gas spikes, and utilizing a renewable, domestic source of energy.

Environmental Benefits

Headwaters prevents the emission of many tons of carbon dioxide, a contributor to climate change; nitrogen oxide, which causes smog; and sulfur dioxide, which causes acid rain. The annual environmental benefits of the 332,000 tons of CO₂ not emitted do to our clean energy generation is equivalent to taking approximately 183,000 cars off of the road.²



¹ Figure based on metrics provided by the U.S. Energy Information Administration residential load data for 2013.

Landowners

More than 200 supportive landowners are participating in long-term lease and easement agreements that cover turbines, access roads, and transmission corridors.

Technology

The Headwaters Wind Farm will incorporate 100 Vestas V110 turbines rated at 2 MW each. These modern wind turbine generators are robust, sophisticated, high-tech machines designed to capture the kinetic energy of the wind and convert it into electricity. Wind turbines consist of three main parts: the tower, the blade and the nacelle. Most of the action takes place inside the nacelle, where the motion of the wind turning the blades is converted into electricity. The blades are attached to a shaft that runs into a gearbox. The gearbox steps up the speed of rotation, which then turns the generator producing AC electricity. Electricity must be produced at just the right frequency and voltage to be compatible with the utility grid.



560,640
MWh of clean
energy generated
annually



Headwaters
has supported
hundreds of
local jobs



6,643,584
metric tons of CO2
displaced over the
farm's lifetime

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² Figure based 2007 eGRID data and carbon equivalency conversions provided by the Environmental Protection Agency (EPA), and assuming 19.546 lbs of carbon dioxide are emitted per gallon of gasoline for an average light truck, which gets 17.6 miles per gallon; and assuming the average American drives

EDP Renewables | Indiana

EDP Renewables is a wind industry leader in Indiana. The company's footprint in Indiana includes the four phases of Meadow Lake Wind Farm and Headwaters Wind Farm.

Our Presence in the State

EDP Renewables North America (EDPR) is the largest developer of wind energy in Indiana, and now generates 701 megawatts (MW) of electricity in the Hoosier state. EDPR constructed and owns the Meadow Lake Wind Farm in White County, and is finishing construction on the 200MW Headwaters Wind Farm in Randolph County. EDPR also continues to develop other wind farms in the state, and looks to move these projects into construction in the coming years. Each of these projects has and will continue to contribute to the state and local economies in both dollars spent by EDPR and jobs for residents. These wind farms also increase US energy independence and security.

EDPR has employed Hoosiers in our Indianapolis office since 2008 and an operations office in White County since 2009. A development office was opened in Randolph County and will remain open during the development and construction of the Headwaters Wind Farm. EDPR is active across the state and looks forward to being a good local and state partner for decades to come.

An Investment in Jobs

- The four phases of the operating Meadow Lake Wind Farm represent capital expenditures of over one billion dollars on clean, domestic energy for the state of Indiana
- Nearly \$50 million of supplier spending and landowner lease payments in the community surrounding Meadow Lake, as well as state-wide
- An additional \$250 million spent with Indiana-based businesses and landowners over the past four years to support the development, construction, and operation of these wind farms
- Headwaters Wind Farm represents an additional \$400 million in capital expenditures, of which a significant portion will remain in the local community through immediate construction jobs and spending, as well as more long-term landowner payments, taxes, and maintenance wages

Environmental Benefits

EDPR's Indiana wind farms:

- Produces enough electricity to power more than 237,000 average Hoosier households
- Avoid producing more than 1,222,000 metric tons of carbon dioxide every year, the equivalent of removing 257,000 cars from the road
- Produce electricity without the use of water, conserving a valuable resource for the state



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Our wind farms don't impede land use for Indiana farmers



EDPR NA's Indiana wind farms generate **701 MW** of domestic, renewable energy

Equivalent to **280,440 tons** of coal fuel being displaced



EDPR NA Indiana Map

- ★ EDPR Indiana Office
- Counties with Operational Wind Farms
- Counties with Proposed Wind Farms



EDP Renewables | About Us

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Job Creation

When EDPR NA builds new wind farms, the projects create numerous wind industry jobs, supporting hundreds of engineering, environmental, and energy-related positions associated in development, construction and operation. When possible, EDPR NA works with turbine suppliers and contractors who produce turbines and components in the United States.



EDPR's wind farms bring diversity to the U.S. energy portfolio



Land remains productive for farmers and ranchers



EDPR NA displaces the equivalent of **7,379,043** metric tons of CO₂ annually

Wind Farms

EDPR NA, ranked third in the United States in terms of net installed capacity, has more than 2,300 turbines in operation and more than 40 million hours of wind turbine operational history. EDPR NA operates wind farms in eleven states across the country.

Community Partnerships

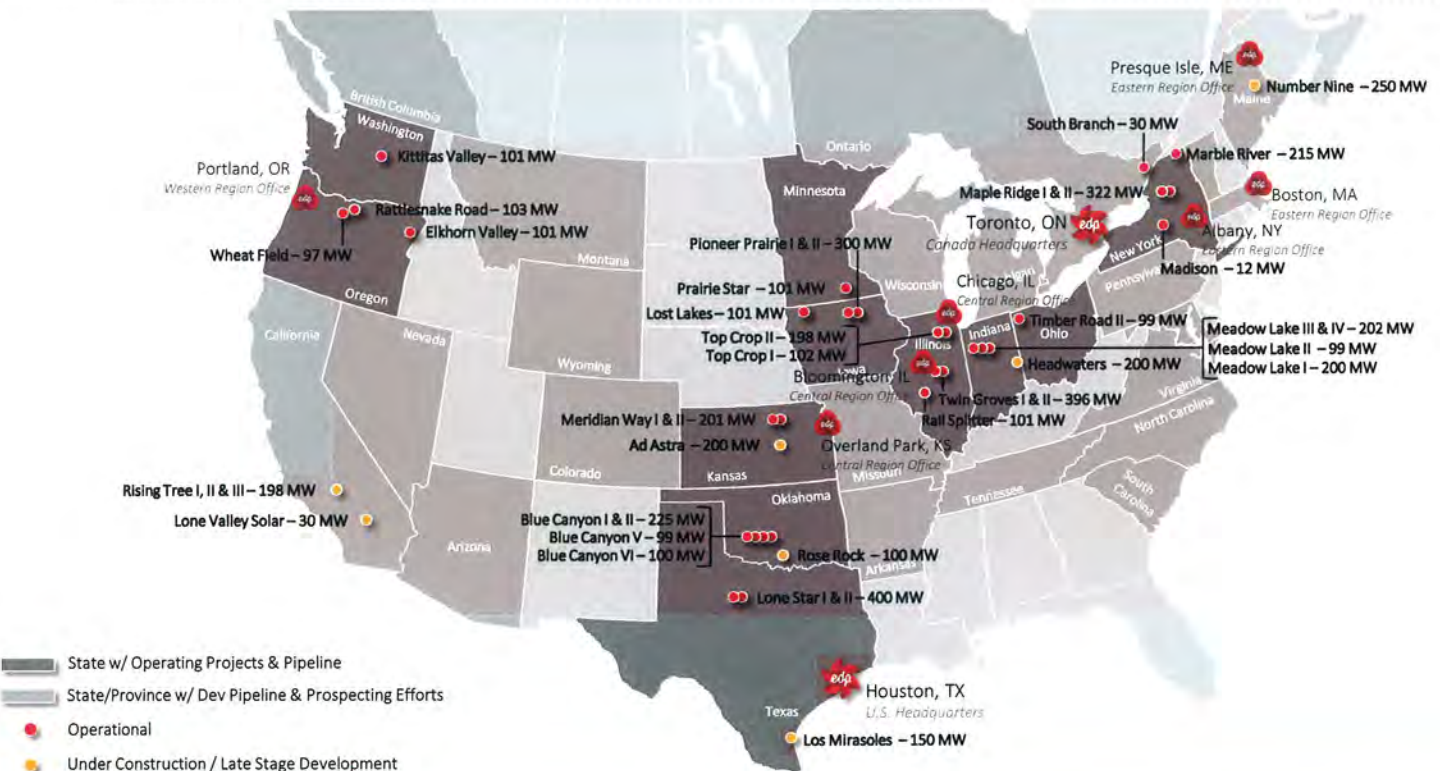
EDPR NA conducts the majority of its business in rural communities. Obtaining and maintaining credibility and the trust of landowners, town officials and other stakeholders is a crucial aspect of building successful wind farms. At EDPR NA, our community relationships represent more than business transactions. EDPR NA strives to be a valued part of the community, shares a mutual respect and concern for the land. EDPR NA values its strong relationships with landowners and communities who see the possibilities of conscientious land stewardship and the potential to contribute to a clean energy future.

The property taxes generated by EDPR NA's wind farms provide new tax revenue for schools, local roads, police, fire protection and other government services. Additionally, EDPR NA's wind farms yield significant economic benefits to communities in the form of direct and indirect jobs, payments to landowners and increased local spending. EDPR NA purchases many materials and services locally, and employee wages and landowner royalty payments are spent in local communities.

Corporate History

Throughout its history, EDPR NA transitioned through several stages and business models. The company began in 1998 as a "build-transfer" developer known as Zilkha Renewable Energy, followed by a period of ownership by Goldman Sachs as a "developer-owner-operator" beginning in 2005. Following its acquisition in July 2007 by Energias de Portugal, S.A. ("EDP"), the company became an integrated strategic renewable energy company. In December 2007, EDPR was incorporated to hold and operate the growing renewable energy assets and activities of EDP.

Energias de Portugal, S.A. ("EDP"), the parent company of EDPR, is a vertically-integrated utility headquartered in Lisbon, Portugal. EDP is the largest generator, distributor and supplier of electricity in Portugal, the third largest energy company in the Iberian Peninsula and the largest Portuguese organization in terms of market capitalization. The company holds, through its various constituent businesses, significant electricity and gas operations in the United States, Europe and Brazil.



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