# **Green Power Partners: Twin Ridges Wind Farm**

**November 10, 2011** 



# **Green Power Partners and New Pennsylvania Wind**

- Before Renewable Portfolio Standards (RPSs) and Green-e Renewable Energy Credits (RECs) existed, companies and
  universities who wanted to foster the growth of the wind industry entered into long-term contracts which allowed for
  the financing of new wind farms.
- Currently 29 States and the District of Columbia have passed RPS legislation. In these jurisdictions market forces determine the price that companies and universities pay for RECs.
- The recession and ample supply of natural gas have caused a significant reduction in power prices. The opportunity exists to lock in long-term wind contracts, often referred to as Power Purchase Agreements (PPAs), at extremely attractive prices.
- The US Treasury 1603 Cash Grant, subsidizing the construction of wind farms, will expire at the end of 2012. This is another important factor enabling buyers to get the most value for their dollar by locking-in long term contracts now.
- EverPower applauds the Green Power Purchasers for your commitment to the environment. Take that commitment a step further, consider a local long-term purchase of renewable energy!
  - Enable the construction of a new wind farm
  - Preserve and create jobs in your state
  - Displace high emission generators to increase the local air quality and improve health
  - Keep hundreds of millions of new investment dollars in your state



# Pennsylvania Wind Energy - Local Resource

- Where is your renewable energy sourced?
  - Know the fuel or blend
  - Know the facility
- We offer products specifically sourced from our Twin Ridges Wind Farm.

Location: Somerset County, Pennsylvania

- Size: 139.4 MW

Status: Permitting, construction has begun, COD expected in 2012,

~7,700 acres committed for leases, easements, or waivers

Interconnection: Interim ISA signed by PJM and Penelec, CSA is currently

under negotiation

Debt: We are pursuing non-recourse debt at the project level

LLC. There are challenges for facilities lacking long-term

contracted revenues especially when there aren't standards for underwriting against forward REC prices. Long-term REC contracts enable additional financing which provides essential capital to build new facilities.

Offtake: Flexible on size, term and structure including REC only

purchases, bundled energy, capacity, and RECs in a PPA, or

working with a retail energy supplier to offer energy

products to their customers.



# Air Quality: Pennsylvania Needs You

- Pittsburgh: American Lung Association State of the Air 2011
  - 3<sup>rd</sup> worst US city by short-term particle pollution
  - 7<sup>th</sup> worst US city by year-round particle pollution
  - Source: http://www.stateoftheair.org/
- Ozone and particle pollution are the most widespread air pollutants—and among the most dangerous.
  - Lower levels of ozone and particle pollution pose bigger threat than previously thought causing asthma, pneumonia, and COPD.
- Pennsylvania accounted for 6.4 percent of nationwide mercury emissions from electric generators, second only to Texas.
  - For fetuses, infants, and children, the primary health effect of methyl mercury is impaired neurological development.
  - Coal-fired power plants are the single largest source of mercury air pollution in the United States.
  - 5 of Top 50 Dirtiest Power Plants for Mercury by Total Pounds located in Pennsylvania
  - Source: US EPA



### Nation's Most Polluted Cities:

#### 10 Cities Most Polluted by Short-term Particle Pollution

- » 1. Bakersfield-Delano, Calif.
- » 2. Fresno-Madera, Calif.
- » 3. Pittsburgh-New Castle, Pa.
- \* 4. Los Angeles-Long Beach-Riverside, Calif.
- » 5. Salt Lake City-Ogden-Clearfield, Utah
- » 6. Provo-Orem, Utah
- » 7. Visalia-Porterville, Calif.
- » 8. Birmingham-Hoover-Cullman, Ala.
- » 9. Hanford-Corcoran, Calif.
- » 9. Logan, Utah-Idaho
- » 9. Sacramento-Arden-Arcade-Yuba City, Calif.-Nev.

#### 10 Cities Most Polluted by Year-Round Particle Pollution

- » 1. Bakersfield-Delano, Calif.
- » 2. Los Angeles-Long Beach-Riverside, Calif.
- » 2. Phoenix-Mesa-Glendale, Ariz.
- » 2. Visalia-Porterville, Calif.
- » 5. Hanford-Corcoran, Calif.
- » 6. Fresno-Madera, Calif.
- » 7.Pittsburgh-New Castle, Pa.
- » 8. Birmingham-Hoover-Cullman, Ala.
- » 9. Cincinnati-Middletown-Wilmington, Ohio-Ky.-Ind.
- » 10.Louisville-Jefferson County-Elizabethtown-Scottsburg, Ky.-Ind.
- » 10.Modesto, Calif.



## **Economic and Environmental Benefits**

- Local Economic Benefits to Pennsylvania from EverPower's Twin Ridges Wind Farm.
  - Construction Jobs Approximately 200 full- and part-time workers
  - In-state Purchases Total spending on local services and construction materials is expected to exceed \$5 million.
  - Long-term economic benefits include landowner payments, township payments, school district payments, and employment of approximately ten full-time employees to maintain the operations of the facility.
- Local Environmental Benefits of one 139.4 MW wind farm in southwest Pennsylvania
  - Offsets 391,365 metric tons of carbon dioxide emissions which is equivalent to:
    - The greenhouse gas emissions from 76,738 passenger vehicles each year;
    - The carbon dioxide emissions from 43,875,000 gallons of gasoline consumed;
    - The carbon dioxide emissions from 910,151 barrels of oil consumed;
    - The carbon dioxide emissions from burning 2,131 railcars of coal; or
    - The carbon dioxide emissions from the electricity use of 48,799 average American homes for one year.
    - All calculations based on 391 million kwh per year of production at Twin Ridges using EPA's Green Power Equivalency Calculator.
- EverPower has leveraged relationships with wind turbine manufacturers to introduce local PA suppliers of wind turbine components into the facility.
- Buying wind renewable energy credits gives you the unique opportunity to foster development thus creating local jobs and economic growth.
- Total EverPower investment of \$700 M by 2013 for a total of 275 MW in Pennsylvania.



# **Recognition & Competition**

- National recognition from EPA Green Energy Partnership
  - On right, the top national purchasers are listed.
- State recognition from Choose PA Wind and its sponsors
- Purchase counts towards L.F.F.D. certification
  - L.E.E.D. is an international recognized green building certification program.
  - Purchase renewable, local energy for 2 years and 2 points in the Energy and Atmosphere category
- Stakeholder Relations
  - Corporate Sustainability Report
  - Environmental endorsements
- Government and Environmental Support
  - In addition to various local and state agencies, Choose PA Wind is seeking the endorsement of numerous local civic and environmental agencies such as the Clean Air Council, The Heinz Endowments, The American Lung Association, and many others.



#### National Top 50 Partner List (as of October 5, 2011)



Combined, these top 50 largest purchases amount to more than 14 billion kilowatt-hours annually, which represents nearly 70 percent of the green power commitments made by all EPA Green Power Partners.

Annual Green Power Usage (kWh)	GP % of Total Electricity Use*	Organization Type	Providers (listed in descending order by kWh supplied to Partner)	Green Power Resources
1. Intel Corporation				
2,502,052,000	88%	Information Technology	Sterling Planet°, PNM, On-site Generation	Solar, Wind
2. Kohl's Department Stores				
1,420,080,000	101%	Retail	3Degrees°, Sterling Planet°, Nexant°, On-site Generation	Solar, Wind
3. Whole Foods Market				
752,257,623	100%	Retail	3Degrees°, NextEra Energy Resources°, Renewable Choice Energy°, On-site Generation	Solar, Wind
4. <u>City of Houston, TX</u>				
438,000,000	34%	Govt. (Local, Municipal)	Reliant Energy	Wind
5. Starbucks				
421,921,000	52%	Restaurants & Food Srvcs.	3Degrees°, Nexant°	Wind



## **Choose PA Wind**

- Choose PA Wind is a program that EverPower initiated to encourage consumer support for new Pennsylvania wind farms. The program's main goal is to educate buyers and sellers on the environmental and economic benefits of purchasing wind energy sourced from new, local facilities.
- Strong support from Harrisburg in the Governor's Office and Pennsylvania Public Utility Commission
- The main platform will be a website, ChoosePAWind.com.
  - Listing of all in-state wind developers and developments
  - Recognition of in-state companies purchasing new, in-state wind energy
  - State government endorsements from Harrisburg
  - Environmental endorsements from leading agencies
- We have teamed with The Energy Cooperative to offer new, Pennsylvania wind energy to consumers in the Philadelphia area through their 100% renewable EcoChoice100 product. Go to <a href="https://www.theenergy.coop">www.theenergy.coop</a> for more info.







# Pennsylvania Wind Energy - How it Works

- Three Choices
  - A. Purchase RECs only
  - B. Wholesale Power Purchase Agreement
  - C. Retail purchases of green energy products
- Quantity and Term
  - Match up to 100% of consumption
  - Terms are flexible with durations up to 20 years
- Billing
  - REC only purchases will be billed directly from EverPower: billing and payment separate from existing electric purchases
- Certification
  - All renewable energy certificates will be tracked by the regional power pool and Pennsylvania certification will be provided to the buyer.
  - Additional state certifications available in Ohio, Maryland, New Jersey, Delaware, and Illinois







## **About us**

- About EverPower
  - EverPower is a wind development business headquartered in New York, with an attractive pipeline of approximately 4,500 MW spread across 12 states.
  - The company's largest office, employing 35 professionals, is located in Pittsburgh, PA, and is the focal point of the of engineering and development activity. We continue to be heavily invested in Pennsylvania.
  - The Highland Wind Farm in Cambria County has been operational since August 2009.
  - The Highland North Wind Farm in Cambria County, PA and the Howard Wind Farm in Steuben County, NY will be operational by the end of 2011.
  - The Twin Ridges Wind Farm in Somerset County will be operational by the end of 2012.
- For more information, contact Katie Bellezza at KBellezza@everpower.com or (646) 442-9103.





