

# Delivering For You



**About the Cover:**

Butler Ridge Wind Energy Center in Wisconsin is capable of generating enough electricity to power approximately 13,500 homes.

NextEra Energy Resources is a clean energy leader and is the largest generator of wind energy in North America.



# Wind energy helps our nation



Butler Ridge Wind Energy Center, Wisconsin

## Clean, reliable and affordable wind energy

Our society confronts unprecedented challenges. Three of the most critical issues we face are the need for economic strength and vitality; the need to slow or reverse the effects of global climate change; and the need for affordable, reliable energy.

For nations and communities to thrive, we must have an affordable, reliable, clean supply of energy. NextEra Energy Resources, LLC, is helping to address this issue as the largest generator of both wind and solar energy in North America. We believe wind and other clean energy sources can help reduce our use of fossil fuels while at the same time empowering a new era of economic growth.

Wind energy is clean, relying solely on the wind to generate electricity.

Wind energy provides diversified income to farmers and ranchers, enabling them to continue using their land as they always have to help feed the world. With wind energy, they're also helping power North America with clean, renewable electricity.

Wind energy provides much-needed tax income to rural communities – to schools, libraries and other public services, benefiting the entire community.

Clean energy from the wind is homegrown. It doesn't get much more homegrown than electricity generated in your own community to benefit your own community.

## Leading the wind industry

Commercial wind generation has existed in the United States for approximately 30 years. NextEra Energy Resources entered the wind generation business in 1989 with the acquisition of several existing wind projects in Southern California and, in 1998, built its first wind plant in Oregon. The next 10 years were marked by significant growth, including the development or acquisition of wind projects in Canada.

Today, NextEra Energy Resources operates approximately 100 wind projects.

## Why wind?

NextEra Energy Resources isn't just a wind company. We operate nuclear plants, natural gas plants, and solar plants. Our portfolio of power plants is overwhelmingly clean and renewable.

Our clean energy strategy is a response to our continuing concern about the consequences of climate change. Renewable resources, such as wind, provide a viable option in offsetting air emissions and helping reduce the effects of climate change.

While no energy source is perfect, we believe the benefits of wind energy far outweigh the negatives. Wind power plants, of course, only generate electricity when the wind is blowing, which is why we seek out very windy locations to build. This intermittent supply is factored into power grid operations.

Yet, the benefits of NextEra Energy Resources' focus on wind are considerable:

- » Creates no greenhouse gases or other air pollutants
- » Uses no water resources to generate electricity
- » Allows landowners to use their land as before
- » Provides a renewable fuel supply
- » Creates no waste by-products for disposal
- » Results in no hazardous cleanup at the end of a project's productive life



Cimarron Wind Energy Center, Kansas

# Partnerships are forged with landowners

## Helping their communities

NextEra Energy Resources' wind generation plants are built on land owned by other people. We don't buy the land where our turbines sit; we enter into lease agreements with landowners who volunteer to participate in a project.

We want landowners to continue using their land as they always have – for farming, ranching, logging, mining, hunting, recreation – and we work closely with landowners in positioning turbines on their property.

Landowners who host wind turbines on their land are making a commitment to their families, their communities and the future. Our commitment is to be a caring co-steward of the land with our hosts to help preserve and maintain it for future generations.

## Vital landowner relationships

Most landowners at our wind projects are individuals or families. Some are businesses or government agencies. All are committed to preserving the quality and value of their land and continuing to use the land as they always have. Each turbine and access road takes about an acre of land out of production.

In an area we think would support a wind project, our relationship with landowners begins with a call or visit from a land services representative, who will introduce the landowner to the company and the idea of a wind project. Often, landowners contact us, offering their land for a wind project.

If an area is promising after our initial assessment, NextEra Energy Resources will enter into a land use option agreement with landowners, which may provide additional time for further evaluation of the property for the possibility of wind development. It can be several years from our first conversation to the point that the company is ready to begin construction on a wind project. Before work may begin, landowners will sign a confidential contract.

Landowners receive easement payments for each wind turbine on their land, but landowners are not the only beneficiaries. Their decision to host wind turbines brings additional jobs to the area, increased tax revenue, the company's support of local community activities and our purchases of local goods and services.

Easement payments are based on the number of wind turbines on their land. The payments are established in a contract between the company and the landowner. Payments per turbine vary from site to site and are based on the quality of the wind resource, proximity to existing transmission lines and current market conditions in the area for electricity.

NextEra Energy Resources pays all project-related taxes required by state and local governments. The amount of tax payments depends upon taxation laws in the host state or county. The company pays any taxes assessed against the wind turbines on the landowner's property.

## Environmental Stewardship

- » NextEra Energy Resources works closely with federal, state and local environmental organizations.
- » Environmental assessments determine suitability of prospective wind sites.
- » Land and wildlife are respected and protected during construction and operations.
- » Land is restored after construction.

## Developing a wind project

Siting a wind project is challenging work – finding the right combination of wind conditions, power transmission lines and land. While our land agents work with landowners to familiarize them with the process and what to expect, our developers are busy on a wide range of issues related to developing a wind site, including:

- » Meeting with and providing information to local officials on project progress
- » Conducting environmental assessments
- » Completing historical and archaeological reviews
- » Arranging to connect to the local power grid
- » Securing customers for the site's electricity
- » Attending public meetings to gain approval for building
- » Obtaining approval from the Federal Aviation Administration
- » Procuring equipment



Blackwell Wind Energy Center, Oklahoma

# Crews are experienced in construction



Ghost Pine Wind Energy Center in Canada's Alberta province

## Construction is carefully planned

NextEra Energy Resources' construction team has built dozens of wind energy projects around the country, including one of the world's largest wind farms in Texas. When all approvals are in place and landowners have signed their contracts, construction can begin. Our construction managers and engineers oversee and are responsible for all work and all contractors at a construction site. They, and often their families, live in the community during construction.

Approximately 200 contractors can be involved in a typical wind construction project. Our goal is to have our general contractor hire as many workers from the area as possible. We are looking for heavy equipment operators, electricians, laborers, security and others.

Construction typically takes between six and nine months. NextEra Energy Resources has a carefully designed plan for turbine placement, but works closely with landowners to ensure the turbine location is compatible with other land uses. Our construction manager and his staff stay in close contact not only with landowners, but with local government, to keep interested

parties apprised of progress and to ensure adherence to all local building code requirements.

- » The first step in construction is to put in high-quality gravel roads to accommodate our heavy equipment.
- » Underground electrical cabling is then laid beside the access roads.
- » Wind turbine foundations are dug and poured.
- » Work will begin on a substation and an operations and maintenance building.
- » Turbine equipment arrives.
- » Cranes begin erecting the turbines.
- » The completed turbines are tested and commissioned.
- » When construction is complete, the land is reclaimed and deep tilled to return it to crop production or reseeded with native grasses.

When construction is complete and the plant has begun commercial operation, the site is turned over to our Operations staff who will operate and maintain the wind plant.

# Wind team focuses on operational excellence

## Attention to safety and training

In 2008, NextEra Energy Resources' Gray County Wind Energy Center in Montezuma, Kansas, became the first wind project in the nation to earn the Occupational Safety and Health Administration's top safety award, the Voluntary Protection Program Star Status.

Gray County was just the first. Our Operations team is engaged in an ongoing project as part of its overall safety program to achieve Star Status for each of our wind projects.

Right behind safety is training. NextEra Energy Resources' wind technician training includes online learning, classroom training and field training. Our company also has working partnerships with two colleges – one in Texas and one in Iowa – to provide onsite training for our technicians. Additionally, through courses taught at the colleges and supported through our partnerships, the colleges serve as pipelines for future wind technicians. Support for other technical colleges is also provided.

Each wind turbine in the fleet is controlled by a computer that can automatically turn the blades into the prevailing wind, adjust the angle of the blades to compensate for changing wind speeds, and shut a turbine down or restart it again. The computer system can be remotely controlled by operators anywhere in the country.

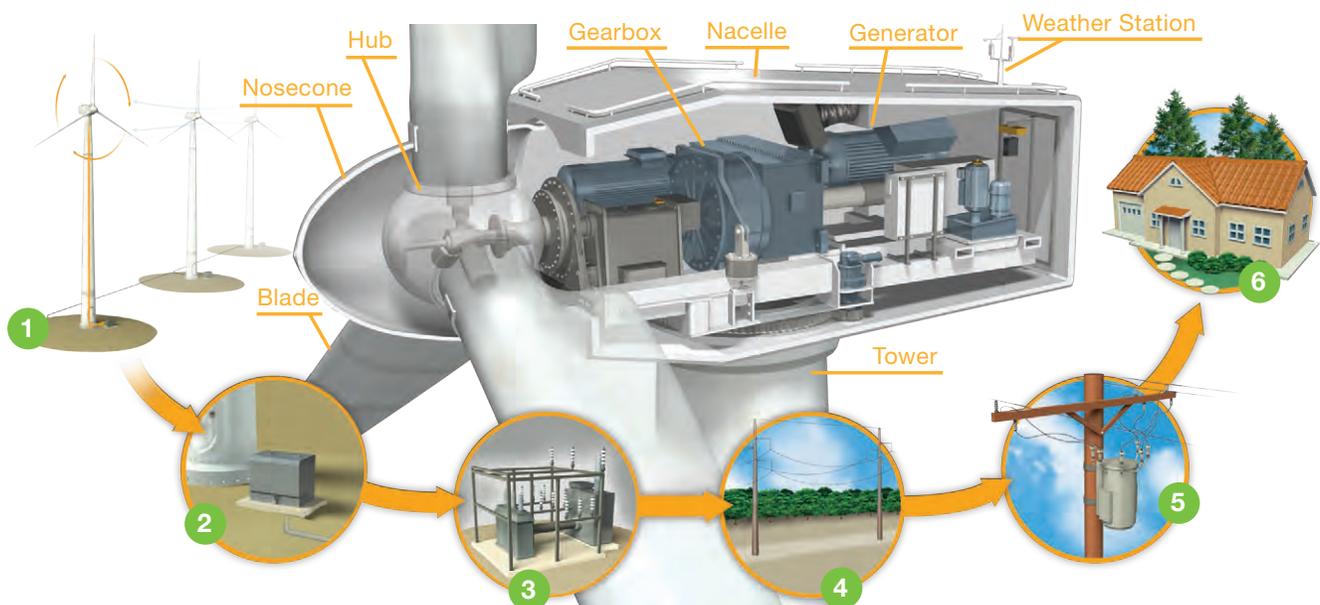
Our state-of-the-art operations command center is one of a few in the U.S. wind industry and has a major role in remotely managing wind turbine operation. The Fleet Performance and Diagnostic Center maintains continuous oversight of wind turbines at our sites. When our site personnel have gone home for the evening, the command center staff is monitoring their wind turbines and can run diagnostic tests on turbines or adjust operations as needed. The center collects data that enables NextEra Energy Resources to schedule predictive maintenance to help ensure efficient operation.



North Sky River Wind Energy Center, California

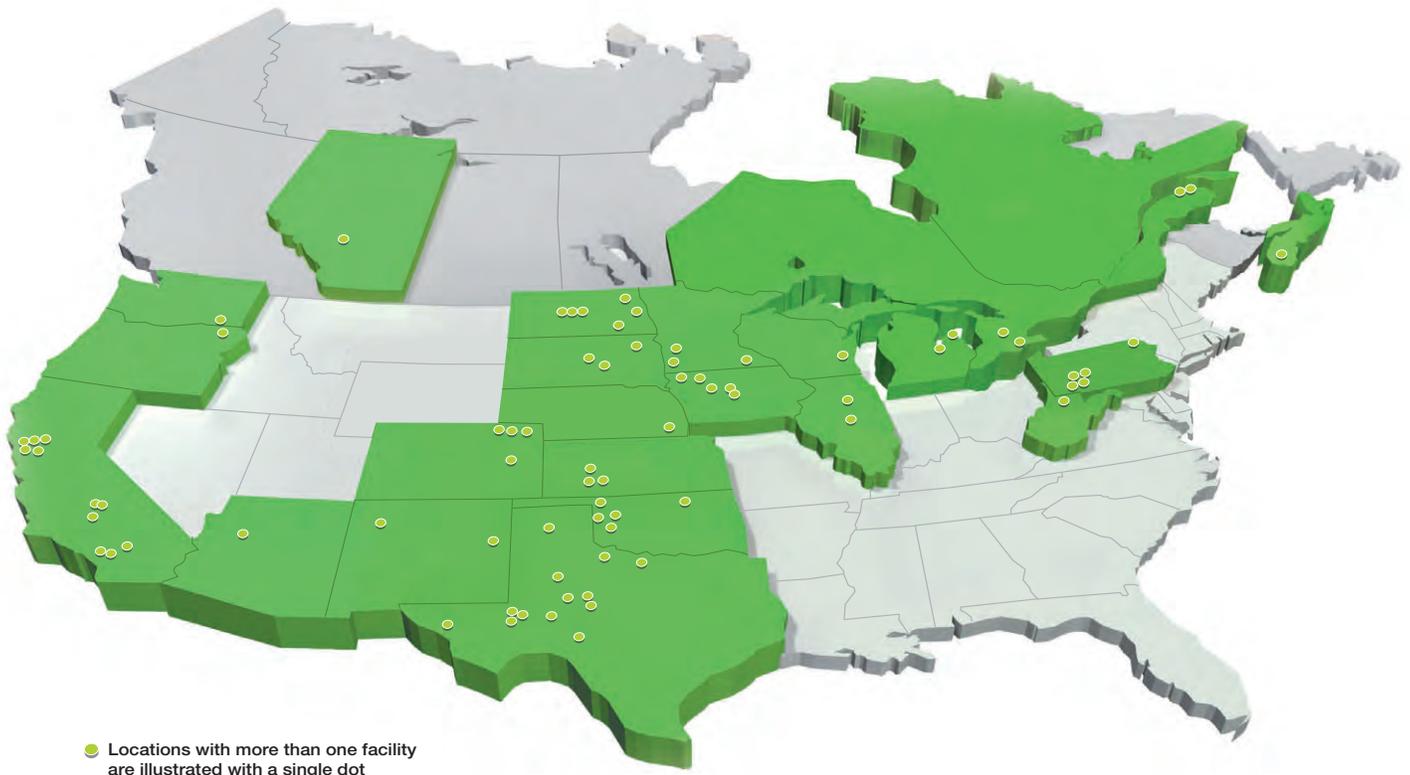
## How a wind turbine works

- 1 A computer turns the nacelle and the rotor (which consists of three blades and a hub) to face into the wind. The wind causes the turbine blades to turn a generator to produce electricity. For safety purposes, the turbine shuts down automatically if the wind speed exceeds 55 miles per hour.
- 2 The electricity travels down the inside of the tower through electrical cables to a transformer at the base of the wind tower.
- 3 From the transformer, the electricity flows through an underground collection cable to an on-site substation.
- 4 From the substation, overhead electrical cables take the electricity to an off-site substation and into high-voltage transmission lines.
- 5 The electricity goes from the high-voltage transmission lines into local distribution lines.
- 6 The electricity is then distributed to homes, schools, businesses and other consumers.



## NextEra Energy Resources Wind Portfolio

As of 1/1/14



## Highlights of Wind Operations

- » 100 wind projects in 19 states and Canada with more than 10,200 megawatts of wind generation in operation
- » More than 9,200 wind turbines
- » Capable of generating enough electricity to power more than 2.5 million homes
- » Enable our customers who have purchased the renewable attributes to reduce 2013 emissions that otherwise would have been released into the environment, including more than 25.5 million tons of carbon dioxide; more than 54,800 tons of sulfur dioxide and more than 35,900 tons of nitrogen oxide
- » More than 700 employees

As of 1/1/14



Perrin Ranch Wind Energy Center, Arizona

NextEra Energy Resources, LLC  
700 Universe Boulevard  
Juno Beach, Florida 33408

For more information, go to:  
[NextEraEnergy.com](http://NextEraEnergy.com)  
[NextEraEnergyResources.com](http://NextEraEnergyResources.com)