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Strategic Pivot to Wind

Southern Power is in a position to be a major force for renewable energy.

By Lizzy Yates



Southern Power owns eight wind facilities capable of generating more than 1,440 MW in Maine, Oklahoma, and Texas. (Courtesy: Southern Power)

There is a place where you will find a growing, clean energy portfolio bound by a strategic business approach. Southern Power, the wholesale subsidiary of Southern Company, is home to more than 12,600 MW, a third of which are renewable and have been built or acquired over the past few years alone. In that mix is more than 1,400 MW of wind power, a number the company expects to double by 2020.

Southern Power, which was started in 2001 with a primary focus on natural gas, first made the pivot to renewables in 2010 with the acquisition of the 30-MW Cimarron Solar Facility in New Mexico. Until that point, the company's fleet had consisted of approximately 8,000 MW of natural gas-fired generation in the Southeast. Between 2010 and 2015, the company developed or acquired 17 facilities from coast to coast, representing 1,900 MW and \$4.5 billion in renewable investment.

FIRST WIND ASSET

Until 2015, Southern Power had primarily focused on utility-scale solar and natural gas projects that fit its business strategy, which is to build or acquire projects with minimal fuel and/or transmission risk that are covered by longterm, bilateral contracts with creditworthy counterparties. Consistent with that approach in March of 2015, Southern Power announced the acquisition of its first wind asset — the 299-MW Kay Wind Facility in Oklahoma.

"With the energy landscape constantly changing, it's critical for us to remain vigilant and look for strategic opportunities that meet market demands while maintaining our risk profile," said Buzz Miller, president and CEO of Southern Power. "Our company believes in the full portfolio of energy resources. At the end of 2014, we began to recognize that wind technology was maturing. The business profile matched Southern Power's investment criteria, and we were able to further diversify our fleet."

Between 2015 and 2016, Southern Power added seven wind facilities capable of generating 1,164 MW across Texas, Oklahoma, and Maine.

In addition, at the end of 2016, the company announced a joint development agreement (JDA) with Renewable Energy Systems Americas Inc. (RES) to develop and construct approximately 3,000 MW of wind projects. Southern Power also signed agreements with Siemens and Vestas to supply turbines for the projects.

The strategy behind the JDA was to take advantage of the pivotal point in a time where there was certainty of the production tax credit phaseout in 2020. Southern Power's experience in other generating technologies, along with strong relationships with partners like RES, allowed the company to secure equipment in a pipeline of wind-development projects expected to be commercial over the next three years.

"With Southern Power being very active on the acquisition front, we identified an opportunity to team with three premier organizations that will allow us to move further up the development chain by co-developing the projects within the JDA," Miller said.

APPLYING TO WIND

Southern Power is known within the industry as a world-class operator of natural gas generators,



with an industry-leading equivalent forced outage rate (EFOR) and safety record. Moving forward, the company plans to take that same approach and experience and apply it to wind generation.

According to SNL energy analysis, there is significant wind growth projected over the next 20 years, and with turbines getting bigger, more efficient, and costs coming down, the wind industry is expected to thrive. If that holds true and the demand is still robust, Southern Power is well-positioned to be a premier owner and operator in the renewable industry, and it will continue to influence policy on behalf of its customers.

"At the end of the day, we're helping Southern Company build energy for the future," Miller said. "Wind is definitely a part of that future, and we're committed to bringing efficient, economic projects to the market that provide value to our customers."

Southern Power, a subsidiary of Southern Company, is a leading U.S. wholesale energy provider meeting the electricity needs of municipalities, electric cooperatives, investor-owned utilities, and other energy customers. Southern Power and its subsidiaries own or have the rights to 46 facilities operating or under construction in 11 states with more than 12,600 MW of generating capacity in Alabama, California, Florida, Georgia, Maine, Minnesota, Nevada, New Mexico, North Carolina, Oklahoma and Texas. \checkmark



Lizzy Yates is communications manager for Southern Power, Southern Company's wholesale subsidiary with one of the fastest

growing clean-energy portfolios in the U.S. Since joining the company in 2014, Yates has announced the acquisition of more than 3,600 MW across 29 facilities from California to Maine.

LM Wind Power Lays First Stone at Cherbourg Blade Factory

LM Wind Power, one of the world's leading manufacturers of wind-turbine blades, recently announced work on its new factory in Cherbourg, Normandy, has begun.

This was marked with a foundation stone ceremony at the construction site, chaired by French Prime Minister Bernard Cazeneuve in the presence of industry and representatives from the local partners, including Normandy region, the Manche Department, the local community of Cherbourg, and the port authority, Ports Normands Associés (PNA). The company brings an initial investment of more than 100 million euros into the development of the Cherbourg site, which is expected to grow to a capacity between 1.2 and 2 GW.

The ramp-up to production of blades destined for European offshore wind farms is expected during 2018. The company aims to begin hiring and training after the summer, with a plan for more than 550 people at the facility once the first production lines are in place. The training will start in a new Center of Excellence that will provide the skills needed for a new strategically important green business. The plant is scaled for growth and is already in the initial phase expected to generate 2,000 further indirect jobs in the local area.

"LM Wind Power is open for offshore business in Cherbourg," said Alexis Crama, LM Wind Power's vice president Offshore. "We are delighted to celebrate the laying of the first stone together with our partners for one of the largest inward investments in Normandy by an industrial business for many years. With this facility, we are hoping to attract both existing and new customers that will develop the offshore wind industry with us. Together, we will develop and produce reliable and high performance ultra-long blades that will continue to drive down the levelized cost of energy from offshore wind to the benefit of people and the environment."

"The offshore market in Europe provides significant opportunities for growth in the coming years, and we are proud to be right at the center of that development with this new Cherbourg For more information, blade plant," said LM Wind Power

CEO Marc de Jong. "We thank GE Renewable Energy for their support to this second-to-none project, and we look forward to welcoming many new customers and hundreds of French colleagues into our global family." \downarrow

Source: LM Wind Power go to www.lmwindpower.com



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PacifiCorp Plans Significant New Clean Energy Investments

PacifiCorp recently released a longterm energy plan that looks to new investments in renewable energy resources, upgrades to the company's existing wind fleet, and energy efficiency measures to meet future customer energy needs. The \$3.5 billion expansion plan, set to be in place by 2020, also incorporates building a segment of the Gateway West transmission line to facilitate the wind expansion.

The Integrated Resource Plan (IRP), which was filed with utility regulators across PacifiCorp's sixstate service territory, is used as a road map to help the company provide reliable electric service to customers at the lowest cost. The 2017 IRP includes the investments set for the end of 2020, but also looks 20 years down the road:

- Upgrading more than 900 MW of existing wind plants with larger blades and newer technology to generate more energy in a wider range of wind conditions by 2020.
- Beginning construction on a segment of the Gateway West 500-ki-lovolt transmission line between Medicine Bow, Wyoming, and the Jim Bridger power plant in the southwestern part of the state. The 140-mile line, set to be in service by the end of 2020, would enable additional wind generation and improve the operational efficiency of the broader system by relieving transmission congestion in Wyoming.
- Building 1,100 MW of new wind projects, primarily in Wyoming, by the end of 2020.
- Adding another 859 MW of new wind capacity — 85 MW in

Wyoming and 774 MW in Idaho — between 2028 and 2036.

• Building 1,040 MW of new solar capacity between 2028 and 2036.

The plan incorporates the company's environmental compliance obligations for its coal-fired plants.

By moving to complete the wind upgrades and developments by 2020, the company will be able to use federal production tax credits.

Energy efficiency continues to play a key role in the company's long-term resource plans. The 2017 IRP anticipates energy efficiency will offset 88 percent of forecasted growth in energy usage over the next 10 years and continue to limit the need for new power plants. *A Source: PacifiCorp*

For more information, go to pacificorp.com/irp



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