

# CONSTRUCTION

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## **PATTERN ENERGY REACHES FULL COMMERCIAL OPERATION OF CHILE'S LARGEST WIND PROJECT**



Expanding its commercial operations into Chile, Pattern Energy Group Inc. has announced that the 115 MW El Arrayán Wind project has completed construction and is fully operational. The El Arrayán Wind power project is the largest wind project in Chile and all of South America.

The project marks Pattern Energy's first wind project outside North America, and expands the company's portfolio to eight operating wind projects across three countries. The completion of the project expands Pattern's owned operating capacity by 36 MW (representing its proportional interest in the project) to 1,042 MW.

"With the completion of El Arrayán Wind we are expanding our portfolio of world-class wind power projects with stable long-term cash flows in attractive markets," said Mike Garland, CEO of Pattern Energy. "We were

drawn to Chile for its robust and stable economy, its electricity pricing in U.S. dollars and its aggressive policy to expand renewables given their limited domestic energy resources. The project is one of the best wind sites in all of Chile. We have delivered El Arrayán on time, increasing our total operations to eight operating wind facilities with three more projects totaling 393 MW in construction, all of which are on track to be completed this year."

El Arrayán Wind is located approximately 400 km north of Santiago on the coast of Chile, in a location with strong coastal winds. The El Arrayán project will generate clean, renewable power equal to the needs of approximately 200,000 Chilean homes each year. The facility is utilizing 50 Siemens 2.3 MW wind turbines, which Pattern Energy is also using at other wind projects in Canada and the United States.

# HEADLINES

## Apex clean energy acquires development assets

Apex Clean Energy has acquired six wind energy development projects from BP Wind Energy, North America, Inc. These projects have the potential to support approximately

710 MW of wind energy capacity in Illinois, Michigan, Ohio, Virginia, and Tennessee.

"We are pleased to be building our portfolio in the Midwest and the Mid-Atlantic with these high-quality projects," said Mark

Goodwin, President of Apex Clean Energy. "We are committed to bringing electricity from clean, renewable projects like these to market, and we look forward to continuing to drive them toward construction."

Pattern Energy is the operator of El Arrayán Wind and is a joint venture owner with a net ownership interest of 31.5 percent in the project. Its joint venture partners include AEI El Arrayán Chile SpA, a subsidiary of AEI, and Antofagasta Minerals SA (AMSA) with net ownership interests of 38.5 percent and 30 percent of the project, respectively. In addition, AMSA is the controlling party of the off-taker Minera Los Pelambres, which will acquire approximately 70 percent of the project's expected electricity generation through a long-term fixed-for-floating hedge. The project will sell its remaining output into the Chilean spot market at the prevailing market price at the time of sale.

Arrayán connects to the Sistema Interconectado Central's 220kV transmission system. The project is located on approximately 15,320 acres of coastal land on a long-term lease with a single landowner.

Approximately 200 jobs were created during construction, as well as up to 15 ongoing permanent positions. The project was constructed by Skanska Chile SA, a subsidiary of Skanska AB and one of the leading wind-focused construction firms in Chile.

Compared to generation from a coal-fired power plant, the electricity produced annually by El Arrayán Wind will offset more than 300,000 metric tons of carbon dioxide, the equivalent to the annual carbon footprint of an estimated 70,000 Chileans, and will conserve enough water to meet the needs of more than 11,000 Chileans.

— Source: Pattern Energy



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## HEADLINES

### Michels ranked among top U.S. contractors

Michels Corporation's continued growth has earned a spot among the top two dozen contractors in the United States. Michels was ranked No. 24 by Engineering News-Record (ENR) on its 2014 Top 400 Contractors list. ENR is a leading publication for the engineering and construction industry.

Michels is based in Brownsville, WI, and has 26 permanent facilities from coast to coast, including in Canada.

Michels' ranking on the list, based on 2013 contracts, is up 12 places from the utility contractor's previous ranking. The ranking marks the ninth consecutive year that Michels has been in the top 100, beginning at No. 95 in 2006.

## GAMESA TO BUILD AND SUPPLY A 54 MW WIND PROJECT IN THE PHILIPPINES

Gamesa has reinforced its presence in the Philippines thanks to a new turnkey contract for the construction, supply and installation of a 54 MW wind farm for Alternergy. This marks the third contract closed by Gamesa in this market, having signed orders totalling 144 MW in recent months.

Gamesa will install 27 of its G90-2.0 MW turbines in the Pililla wind farm, located on the Philippine island of Luzón. The company will also provide the operations and maintenance (O&M) services at the facility for five years. Under the terms of the agreement, Gamesa will also build the infrastructure needed to install and operate the facility, including a substation. The civil and electrical works will be executed by Gamesa together with the local Philippine consortium CASA which is formed by Cendaur, Ati Consulting, Santa Clara and Airnergy. The wind farm is scheduled for completion during 2015.

This new contract cements Gamesa's presence in Asia, where it is already active in several markets (China, India, Japan, Sri Lanka, Vietnam, Taiwan and South Korea) in its capacity as both technology provider and wind farm developer. As of March 2014, the company had installed a total of 5,016 MW of its turbines in Asia, while it maintains a further 1,900 MW.

— Source: Gamesa



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