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Mortenson to Build Largest Single-Phase Wind Project in North America



An artist conception of the Rush Creek Wind Project in Colorado. (Courtesy: Mortenson)

Mortenson, a leading renewable energy contractor, has been selected to build what will be the largest single-phase wind farm ever built in North America. The 600-MW Rush Creek Wind Project, owned and operated by Xcel Energy, will be home to 300 turbines and an 83-mile transmission near Limon, Colorado.

"We are pleased to be selected to construct this significant project for Xcel Energy and the state of Colorado," said Tim Maag, vice president and general manager at Mortenson's Wind Energy Group. "This project is another great example of Xcel's commitment to clean renewable energy."

Mortenson's Wind Energy, High Voltage Transmission, and Civil groups will deliver full engineering,

procurement, and construction for Rush Creek. Colorado-based turbine manufacturer Vestas will provide the 300-V110 2.0MW wind turbines. The engineering design will be complete in April, with construction expected to begin in May and an in-service date of October 2018.

The 600-MW Rush Creek Wind Project will be the single largest wind contract executed for Mortenson, as well as the largest for the state of Colorado.

"Mortenson has a long and distinguished history with the construction of major projects in Colorado, from the Stapleton Redevelopment to Denver International Airport hotel and transit center, to the Alamosa Solar Project," said Gerald Kelly, Xcel Energy Project manager. "In

addition, it has extensive experience in the development of wind projects throughout the U.S. Mortenson also shares Xcel Energy's commitment to providing a safe and healthy work environment. We look forward to working with Mortenson on our Rush Creek Wind Farm effort."

The wind farm is estimated to contribute 350 jobs to the state during the peak of construction, and when complete will increase Colorado's wind-energy production by more than 20 percent and potentially generate \$180 million in landowner lease payments and property tax revenue. ↴

Source: Mortenson

For more information, go to www.mortenson.com



Crews place the final beam into position. (Courtesy: Lincoln Electric)

Final Beam Placed on New Welding Training Center

Construction on Lincoln Electric's new \$30 million Welding Technology Center project continues, and crews placed the final beam in February, completing the structural frame of the building on the company's Euclid, Ohio, campus. The next phase will focus on the building's façade, interior, electrical, and plumbing work.

"Construction is progressing rapidly — structural framing just wrapped up, allowing us to move on to the next phase of construction," said John Mueller, director of Facility Planning and Development at Lincoln Electric. "We look forward to opening the facility later this year."

Before crews hoisted and placed the beam into position, representatives from Lincoln Electric and other companies working on the project participated in a beam-signing ceremony. On-hand to sign the beam were Chris Mapes, George Blankenship, and Doug Lance from Lincoln Electric's senior management. Members of the Lincoln Electric facilities team and representatives from Panzica Construction Company, Structura Architects Ltd., and Ironworker Local Union No. 17 also added signatures.

"We are proud to be using tradesmen from the same trades organizations we

actively help to train at a variety of sites around the country," said Jason Scales, manager of Education Solutions at Lincoln Electric. "General contractor Panzica Construction Company, Steel fabricator Nova Structural Steel, and other contractors on the site employ skilled trades workers typically trained on Lincoln Electric equipment in their skilled trade schools."

When the new Welding Technology Center opens, it will mark the centennial anniversary of the company's legacy welding school, the longest-operating one in the United States. The facility further reflects Lincoln Electric's 100-year commitment to leading welding education and innovation in an era of strong demand for skilled trades.

The new 130,000-square-foot center will double Lincoln's welding education capacity to 180 welding booths and will include high-tech classroom and seminar spaces. It also will showcase and integrate Lincoln Electric's latest technologies and solutions into a comprehensive welding curriculum — making it the industry's most advanced facility of its kind. *✍*

Source: Lincoln Electric

For more information, go to www.lincolnelectric.com

75 Turbines Erected for the Ararat Wind Farm

The last rotor of Ararat Wind Farm's 75 turbines has been installed by contractor Mammoet. The cable trenching and installation by RJE Global is also complete. All that remains are the connection of cables to the turbines required to transport electricity generated to the substation and into the grid, commissioning of the remaining turbines, and site rehabilitation.

Ararat Wind Farm General Manager Stuart Liddell is confident the project's principal construction partner, GEDowner will continue to deliver these remaining tasks on or ahead of schedule to achieve project completion by May 4. To date, all major construction milestones have been delivered on time contributing to the project's overall success.

Sixty-one of the 75 turbines already are commissioned and contributing to Victoria's supply of renewable energy and showcasing the potential of the renewables industry in Australia. Once complete, the Ararat Wind Farm will be a world-class project that plays a key part in Australia's renewable energy future. The local community has been overwhelmingly supportive of the Ararat Wind Farm and recognizes the significant benefits associated with a project of this scale. Ararat Wind Farm is establishing its community grants fund that will be open to eligible applicants in the latter half of 2017.

The 240 MW Ararat Wind Farm in south-west Victoria will be the third largest wind farm in Australia and has attracted almost half a billion dollars of direct international investment into Victoria.

The Ararat Wind Farm was the



Sixty-one turbines already are commissioned and operational. (Courtesy: Mammoet)

first major wind farm contract to be signed following restored bipartisan support for the Renewable Energy Target (RET) in June 2015. Construction of the wind farm is a joint venture between Downer and GE.

The project also benefits from a power purchase agreement with the Australian Capital Territory Government (ACT), guaranteeing the purchase of about 40 percent of the energy produced at the site, which was awarded under the ACT's Wind Auction announcement in February 2015. ↵

Source: Mammoet

For more information, go to www.mammoet.com

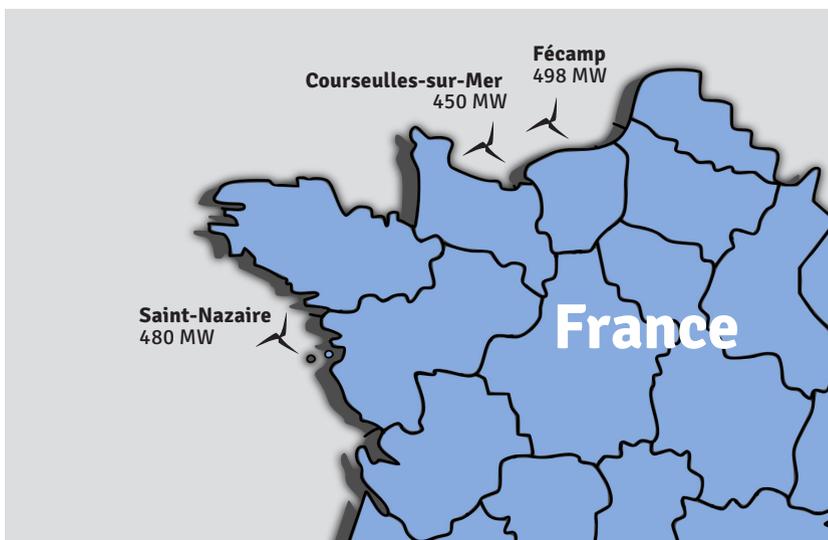
LOC Delivers Marine Warranty Services for French Offshore Wind

The renewables team of international marine and engineering consultant LOC Group will provide comprehensive marine warranty surveying (MWS) services for the first offshore wind farms in French territorial waters. The work is for three individual offshore sites: the 498-MW Fécamp, the 450-MW Courseulles-sur-Mer, and the 480-MW Saint-Nazaire wind farms.

Development of the three sites was awarded to a consortium led by EDF Énergies Nouvelles and Enbridge. LOC Group has been working with the consortium to offer early-stage guidance on the design work and ensure the safety and security of the construction process.

With the French government actively looking to grow the country's offshore wind industry, it is keen to appoint companies in the industrial and maritime sectors with a local base. LOC's Paris-based renewables team consists of highly skilled, bilingual professionals.

The LOC team is working closely with EDF Énergies Nouvelles to advise on the transportation and installation of the individual turbines, and ensure all procedures meet the standards required by the marine warranty surveyor.



As part of its MWS offering, LOC has accounted for the varying environmental conditions and water depth at each site. In particular, initial drilling revealed different soil conditions, with Saint-Nazaire having a hard seabed, Courseulles-sur-Mer a softer one made up mainly of clay and limestone, and Fécamp's being chalk-based. As a result, the 83 turbines at Fécamp will use gravity-based foundations, while the other two sites will use monopole foundations for the turbines.

"France intends to install 6 GW

worth of wind farms by 2020, and is taking a leading role in developing opportunities in floating offshore wind," said R.V. Ahilan, group director of Renewables Advisory & Energy Technology at LOC. "In this market, the offshore engineers of the LOC Paris team are well placed to take a lead role in the industry's development in France." ↵

Source: LOC

For more information, go to www.loc-group.com