

America. This transaction represents Fengate's fourth clean energy co-development partnership investment in North America — the third in 2018 and the second in the US.

"Houston is a perfect location to build Fengate's U.S. energy infrastructure investment platform," said Andrew Cogan, managing director, Infrastructure Investments, Fengate. "We are committed to continue growing the Houston office due to the investment opportunities in Texas, abundance of energy infrastructure professionals, and central geographic location."

Under the terms of the agreement, Fengate and LEP will co-fund the development and construction of Weaver. The project is in late-stage development and is expected to achieve notice to proceed in mid-2019 with a commercial operations date in late 2020 and will be a new and significant source of renewable energy in Maine.

**MORE INFO** [www.fengate.com](http://www.fengate.com).

## MAINTENANCE

# Seacat takes lead in offshore wind vessel monitoring

Offshore energy support vessel (OESV) operator, Seacat Services, has installed an advanced remote monitoring system across its fleet of 14 class-certified catamarans. The BareFLEET system, developed by Reygar, will give Seacat Services an unprecedented level of insight into the operational performance of its vessels, enabling progressive safety and technical availability gains that benefit crews, clients, and the wider industry.

"Digitalization" of operational practices, coupling remote data collection with advanced monitoring, is gaining pace as offshore wind firms throughout the supply chain aim to keep tabs on the performance of project critical infrastructure, optimize O&M and construction procedures, extend asset lifetimes, and bring down the levelized cost of energy (LCOE).



All 14 vessels in the Seacat Services fleet have been fitted with an "always-on" data connection. (Courtesy: Seacat Services)

To date, much of this investment in digital technologies has been focused on turbines and transmission, but there is now an emphasis on leading OESV operators to match this level of sophistication with more advanced vessel monitoring approaches that enhance the value of the vital service they deliver. While monitoring of key variables such as vessel motion, vibration, navigation, and engine performance is common practice, increasing the efficiency of reporting, and pulling this performance data into one place, is essential to inform more effective fleet-wide decision making.

Seacat Services' rollout of the BareFLEET system is part of the firm's ongoing investment in the quality of the service it provides to offshore wind developers, operators, and contractors, supporting a longstanding commitment to the highest standards of safety and technical availability.

All 14 vessels in the Seacat Services fleet have been fitted with an "always-on" data connection. The BareFLEET system has now been integrated with existing sensors and equipment and will be used to monitor key variables, including navigation data, vessel motion, and the performance of engines and other critical machinery.

Seacat Services will be able to view a live feed of this data from its Fleet Operations Center in Cowes, allowing

the business to keep tabs at all times on the performance of its vessels in the field. Critical alerts — such as an engine alarm — will be flagged instantly to shore-based personnel, leading to immediate action.

As the volume of data collected by the system increases, Seacat Services will conduct trend analysis, condition monitoring, and preventative maintenance, enabling the operations team to detect and address developing faults in critical components before they result in failure or unscheduled vessel downtime.

The system will also improve the capacity of Seacat Services for efficient, regular reporting from the field. By making use of Reygar's Digital Daily Progress Report (DDPR) mechanism, Masters and crews will be able to quickly log completion of key safety procedures such as drills and toolbox talks. BareFLEET is now integrated with CrewSmart — the cloud-based crew and fleet management software Seacat Services is using — bringing all of the data required for safe, effective crew management into one place.

"We've seen the wide-ranging benefits that digitalization of operations has had for turbine owners and operators — and it's time for the vessel market to follow suit by showing a commitment to matching these higher operational standards," said Ian Baylis, managing

director of Seacat Services. “Our investment in BareFLEET will not only enable us to protect our most important assets — our masters, crews, and the vessels they operate — but also ensure that our customers get maximum value from the boats they have under charter. As these digital systems become increasingly integrated, there is huge potential for cross-collaboration throughout the supply chain that ultimately helps us to change the way offshore wind farms are developed, built, and serviced.”

**MORE INFO** [www.seacatservices.co.uk](http://www.seacatservices.co.uk)

## MANUFACTURING

### Cherbourg blade factory reaches 2018 hiring target

Cherbourg blade factory recently completed its 2018 recruitment plan at its offshore wind turbine blade manufacturing site in Cherbourg, France.

The site counts more than 100 employees, 34 percent of whom are women.

The first group of 30 newly hired employees, from all functions, participated in the launch of the factory’s Cen-

ter of Excellence training center September 30. These new employees joined a one-week theoretical class, followed by a week of practicing on an actual piece of a wind turbine blade mold.

After completing the Center of Excellence course, each trainee left Cherbourg to spend a month abroad at other LM Wind Power sites — from Spain, to Denmark, Poland, and even Canada depending on the job scope. Employees from sites around the globe will also travel to Cherbourg to support the ramp-up of the factory. The second group started their training program on October 22.

“The Cherbourg site is a great location to support the development of the offshore wind industry in Europe and beyond, with a positive impact on the jobs and the ecosystem in the surrounding region,” said Alexis Crama, LM Wind Power Offshore Wind vice president. “We are investing in building a strong and sustainable value chain and are happy to welcome the first hundred recruits.”

The construction of the factory is on track to start the prototyping phase in January 2019. The first blade produced will be shipped to ORE Catalyst Research & Development Center in Blyth, U.K., for indoor testing. The next three blades produced will be installed

on GE’s Haliade-X 12-MW prototype at the end of the second quarter of 2019 at a yet to-be-determined site.

“This project entails new challenges and creates enthusiasm as we are starting up a new factory, installing new equipment inside, and welcoming new people with diverse backgrounds,” said Lukasz Cejrowski, LM 107.0 P project director. “At the same time, we are developing a new product: a new blade of a size we have never achieved before. We can witness a significant combination of efforts as we use the expertise from our facilities worldwide to train the people in Cherbourg. This enthusiasm from all our teams will bring us to the successful ramp-up of the factory.”

In parallel to the development of the LM 107.0 P blades in Cherbourg, GE’s Offshore Wind teams is focused on the assembly of the first two Haliade-X nacelles at the Saint-Nazaire manufacturing site in France.

**MORE INFO** [www.lmwindpower.com](http://www.lmwindpower.com)

## MANUFACTURING

### Vestas receives largest order to date in India

Leveraging Vestas’ experience from more than 4 GW of turnkey projects across the globe, Vestas has received an order for a 252-MW Engineering, Procurement and Construction (EPC) project in India. The order is Vestas’ largest order to date in India and placed by Vivid Solaire Energy Pvt. Ltd., a subsidiary of Engie, and was awarded as part of the national level wind auctions organized by SECI.

The project will be in Thattaparai in the Tuticorin district in the Tamil Nadu state and includes delivery, installation, and commissioning of 126 V120-2.0 MW turbines, as well as the project’s civil and electrical work. The turbines will be serviced by Vestas under a 10-year full scope Active Output Management 5000 (AOM 5000) service agreement as well as a Vestas Online®



The first group of 30 newly hired employees, from all functions, participated in the launch of the factory’s Center of Excellence training center September 30. (Courtesy: LM Windpower)