

Gamesa deploys its Overhaul and Life Extension programs in a wind farm boosting rated power by more than 7.5%



30 July 2015







- Gamesa's Overhaul and Life Extension deliver profitable turbine operation until year 30 of service life.
- Gamesa will also maintain this wind farm for 15 years.

Gamesa, a global wind technology leader, has successfully completed Overhaul and Life Extension upgrades to the Medicine Bow Wind Farm in Carbon County, Wyoming (USA) for wind farm owner and wind generation investor Commonwealth Bay. The upgrade package includes a 15-year comprehensive operations and maintenance agreement.

The project included the application of Gamesa's Turbine Overhaul and Life Extension programs to the wind farm's nine turbines, produced by another wind turbine manufacturer and having nameplate ratings from 600 kW to 660 kW. Turbine Overhaul transforms aging turbines into modern turbines using today's technology to change all the major electrical components and electronic systems of the machines.

In the case of Medicine Bow, the turbines were upgraded to 650 kW and 710 kW machines, increasing the original rated power for the wind farm by approximately 7.5%. A variety of additional Life Extension upgrades are being applied to ensure additional profitable operation until service year 30. In addition, Gamesa will operate and maintain the wind complex for the next 15 years.

Gamesa initiated the upgrades in 2014. "The Medicine Bow project was very interesting because we knew our Overhaul and Life Extension products would significantly maximize returns for the owner," said Philippe Delleville, Gamesa's Vice President of Services for North America. "The project is a wonderful showcase for the practical application of these upgrade technologies and multi-technology capabilities. While Gamesa has implemented overhaul and life extension in Europe, Medicine Bow is the first wind farm where we deployed the programs in the U.S."

Overhaul and Life Extension were highlighted in Gamesa's recently released 2015-2017 business plan, as an important part of the successful expansion of Gamesa's Service product offerings, and market presence in the United States.

"We are excited to work with Gamesa in the deployment of these innovative programs. Their expertise as an OEM and O&M provider gave Commonwealth Bay the necessary

assurances to enter into this unique long-term investment and relationship," Ben Burkholz, Vice President of Commonwealth Bay, said.

Commonwealth Bay, the asset manager for MAEGI Fund I, L.P., immediately saw the value of investing in Medicine Bow and partnering with Gamesa. Sean R. Sullivan, Managing Director of Commonwealth Bay, views the Medicine Bow project as representing "a fundamental development in the US wind industry, whereby mature wind farms are reengineered to operate well beyond their originally projected useful life rather than executing a tear-down and re-power. Medicine Bow demonstrates the market's demand to de-risk aging wind power assets and the power of innovation in meeting that demand."

Commonwealth Bay financed the project through private equity and a commercial loan agreement with North Sky Alliance Fund and NewWorld Environmental Infrastructure L.P., arranged by GoldenSet Capital Partners.

Platte River Power Authority (PRPA) who led the initial Medicine Bow development in 1997 as one of the first commercial wind generation sites in the Rocky Mountain region, also expressed confidence in the value of the project. "We are very pleased that Commonwealth Bay will continue to invest in Medicine Bow," said Jackie Sargent, general manager and CEO of PRPA. "We are proud to have played a leadership role in the revitalization process, and look forward to the continued benefits from the facility for Platte River and our member municipalities," he added.