



Siemens Gamesa Power Curve Upgrade

Increasing turbine yield through improved aerodynamic performance

Over the past 30 years, Siemens Gamesa has accumulated thousands of hours of service experience. Based on this gained knowledge, we have established a flexible range of service products and solutions that are designed to increase reliability and optimize the output of wind turbines.

Increase the production by 2-5%

Applying knowledge from the new state of the art blade design, Siemens Gamesa can improve the aerodynamic performance of already installed turbines. This is a result of continuous blade design research and development, enabling Siemens Gamesa to offer a Power Curve Upgrade for turbines already installed and operational. The upgrade,

dependent on site conditions, can increase the annual energy production (AEP) by +2-5% at an annual mean wind speed of 7,5 m/s, making this an attractive investment with a short pay back time.

The upgrade consists of tailor made aerodynamic components and software features. The components are strategically placed on the blades for optimized aerodynamics. Once installed, the upgrade enables the turbine to better utilize the wind resource resulting in a better power performance.



The upgrade consists of tailor made aerodynamic components and software features

Field Installation

The mounting is performed on site using prominent concepts from our blade manufacturing facilities. Our specially trained Service Rope Access Technicians will install the components accessing the blades by rope ensuring there is no need for costly cranes.

Investing in a Siemens Gamesa Power Curve Upgrade can:

- improve the power curve and allow for extra revenue from wind farm
- Improve wind farm cash flow
- Increase the speed of overall pay back of wind farm
- Increase the value of your asset

Available for

Siemens Gamesa Power Curve Upgrade is available for the following turbines, both onshore and offshore:

- SWT-2.3-82VS
- SWT-2.3-93
- SWT-2.3-101
- SWT-3.6-107
- SWT-3.6-120

Track Record

Siemens Gamesa has installed Power Curve upgrades on both on- and offshore wind turbines since 2010. Among others, the Power Curve Upgrade has been installed at Horns Rev II wind farm owned by DONG Energy.



Vortex generators fixed onto the blade

Siemens Gamesa Renewable Energy, S.A.U.
Parque Tecnológico de Bizkaia, Edificio 222
48170, Zamudio, Vizcaya
Spain
+34 944 03 73 52 (International)
902 734 949 (Spain)

siemensgamesa.com

Copyright 2018 Siemens Gamesa Renewable Energy (SGRE).

All rights reserved.
No part of this document may be reproduced without the prior written permission of SGRE.

The information contained in this document is for general information purposes only, may not apply in all cases. Information is subject to change without prior notice. No binding commitments are made by SGRE unless expressly agreed upon in a separate contract.