Are you looking for solutions that improve the profitability of your existing assets?

The evolution of the D3 platform has enabled Siemens Gamesa to develop its D3 Uprate product, which permanently increases the nominal power of existing first-generation D3 wind turbines, thereby raising the productivity and profitability of a wind farm.

D3 Uprate delivers a substantial increase in annual energy production (AEP) for the SWT-3.X-101, SWT-3.X-108, and SWT-3.0-113 wind turbines. It increases their rated power to:

- 3.2 MW for 113-meter rotor diameter turbines
- 3.2 MW or 3.4 MW for 101-/108-meter rotor diameter turbines

The uprates are achieved by improving the turbine control logics through a software update, allowing the full potential of the wind turbine to be utilized while still offering full safety guarantees. Depending on the turbine model, the software increases either the torque or both torque and revolutions per minute of the drive train.
Key benefits of D3 Uprate

- Increased profitability
- Zero-risk investment
- No additional hardware needed to implement D3 Uprate
- Take advantage of a certified solution that safely increases the maximum power output of D3 platform wind turbines

Depending on factors such as turbine type and the site-specific wind regime, the actual AEP gain could reach up to 5%. Below are the estimated AEPs for a site with 7.5 m/s average wind speed (assuming there is no export restriction).

**SWT – 3.X-101**
Potential AEP gain:
- From 3.0-101 to 3.2-101: +2.1%
- From 3.0-101 to 3.4-101: +4.3%

**SWT – 3.X-108**
Potential AEP gain:
- From 3.0-108 to 3.2-108: +2.8%
- From 3.0-108 to 3.4-108: +5.0%

**SWT – 3.X-113**
Potential AEP gain:
- From 3.0-113 to 3.2-113: +3.0%

Fig. 1: D3 Uprate power curve

![D3 Uprate power curve](image1.png)