The role wind farms play in supporting and stabilizing the electrical grid has become increasingly important. To secure operational excellence and grid control a high-quality SCADA system is vital. Siemens has developed a number of additional features to its already existing SCADA system that can help to optimize wind farm operation. One of them is the Reactive Power at No Wind.

Siemens Wind Turbines with a full load frequency converter installed are able to control reactive power supply even when no active power is being produced, i.e. when the turbines are standing still due to lack of wind.

Normally, when the wind speed drops below the cut-in threshold, the wind turbine produces neither active nor reactive power. After configuration of the Reactive Power at No Wind feature, the turbine is able to control the reactive power, imported and exported within certain limits and without active power production.
By investing in the Siemens Reactive Power at No Wind feature, you can reduce or completely eliminate the need for any separate static and dynamic reactive power compensators. In addition, certain countries remunerate wind farm owners for the supply of reactive power exceeding the minimum requirements.

Currently the following countries reimburse for transmission of reactive power exceeding the minimum requirements: Australia, Canada, Chile, Germany, India, Ireland, Japan, Netherlands, New Zealand, Spain, United Kingdom and some states in the USA.

Availability
This product is available for all SWT-2.3MW, SWT-3.0MW, SWT-3.6MW and SWT-6.0MW turbines.

The capabilities for Reactive Power at No Wind depend on site specific parameters such as wind conditions, temperatures and voltage levels.