

Remote Monitoring and Fault Resolution

Introduction

Remote Monitoring and Fault Resolution are services provided by GE Energy's wind business to improve wind turbine performance and availability—and reduce downtime. These services are currently available only in the US and Canada.

Applicable Platforms

1.5s, 1.5sle, 1.5se, 1.5xle.



Figure 1. GE Customer Support Center (CSC) in Schenectady, New York.

Technical Description

GE service specialists located in the Customer Support Center (CSC) in Schenectady, NY, will monitor GE wind turbines using state-of-the-art automated software that will enable the remote reset and trouble-shooting of your wind turbines.

The procedures used to resolve turbine faults are based on our product knowledge, service engineering expertise and years of successful fleet operation. These continually evolving procedures draw upon GE's fleet experience and in-depth engineering knowledge of unit design and operation.

GE provides 24/7 monitoring. Highly trained service specialists perform remote resets based on GE procedures. When a fault occurs, a fault resolution process is implemented to maximize the turbine's availability and reliability. This service includes CSC service specialists and Field Availability Engineers who

determine the best course of action. The CSC service specialist also performs additional wind plant management services that include parameter validation and changes, curtailments, and recommendation of service action or applicable upgrades. Weather/lightning alerts and more extensive engineering consultation and services can be purchased as needed.

Benefits

GE's Remote Monitoring and Fault Resolution service may provide:

- Performance improvement for the wind plants
- Reduction of downtime caused by faults

An average reduction in downtime of ~100 hours per turbine per year has been observed when compared to sites before and after CSC monitoring.*

The data collected will provide the capability to remotely diagnose incipient or systematic issues, provide recommendations for reducing your turbine downtime and to help optimize performance and production.

* Based on comparing the performance of seven wind plants before and after CSC monitoring. Actual site performance may vary depending on site conditions.

Scope of Supply

The customer shall provide a high bandwidth connection to be used only for the remote monitoring of the turbines contracted.

Scope of Work

- 24/7 remote monitoring and resolution of faulted turbines
- Remote reset of turbines as recommended by GE protocol
- Notification of fault and recommendation of service or upgrade
- Parameter validation and changes (with engineering approval)
- Curtailment of park load upon customer request

Contact your local GE representative for assistance or for additional information

