

Remote Monitoring and Fault Resolution

Introduction

Remote Monitoring and Fault Resolution are services provided by GE's Renewable Energy business to improve wind and solar asset performance and availability.

Applicable Platforms

1.5s, 1.5sle, 1.5se, 1.5xle, and 600 kW Solar Inverter



Remote Operations Center (ROC) in Schenectady, New York

Technical Description

GE service specialists located in the Remote Operations Center (ROC) in Schenectady, NY, will monitor GE wind turbines and solar power electronics using state-of-the-art automated software that will enable the remote reset and trouble-shooting of your assets. The procedures used to resolve turbine and solar electric system faults are based on our product knowledge and service engineering expertise. These continually evolving procedures draw upon GE's years of successful fleet operation, power electronics capability, and in-depth engineering knowledge of asset 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 asset's availability and reliability. This service includes ROC service specialists and Field Availability Engineers who

determine the best course of action. The ROC service specialist also performs additional wind plant/solar asset 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 & solar assets
- Reduction of downtime caused by faults

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

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

* Based on comparing the performance of seven wind plants before and after ROC 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 and solar assets including inverters
- 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

