

Orbit Magazine

SSA Case Study

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AN EXAMPLE OF HOW GE HELPS CUSTOMERS IN THE OIL AND GAS INDUSTRY

Thanks to a Supporting Services Agreement (SSA), GE's Bently Nevada* business helps a customer restore a critical piece of machinery within 10 minutes of a machine trip.

GE's Bently Nevada business has an SSA with a customer in the Middle East. The agreement includes regular system maintenance and optimization as well as machinery alarm and event management for a large Bently Nevada installed base—which includes approximately three hundred 3500 Racks, 100 Dynamic Scanning Modules (DSMs), and 50 System 1* servers.

PROBLEM

During routine activities, the company's Condition Monitoring technician found the OK LED blinking on all temperature modules of one of their critical propane compressor trains, which is central to the customer's plant process. After repeatedly pressing the reset button in order to normalize the rack, the problem persisted.

The Condition Monitoring technician immediately called GE's Bently Nevada SS A Site Lead to inform him about the issue and then sent him the system events taken from the 3500 rack. After diagnosing the system events, it was found that all modules were showing NOT OK, including the Relay Cards. GE's Bently Nevada Site Lead promptly contacted the customer's management to inform them that the protection system of the propane compressor train was compromised and may lead to a trip.

The services required to restore machinery protection were planned to take place the next day, with the support of the SS A Site Lead. However, just prior to entering the control room to perform the corrective actions, the propane train tripped..

SOLUTION

The SSA Site Lead quickly determined that both the TDI and Keyphasor* modules were causing the rack to behave abnormally. The TDI was immediately replaced and the Keyphasor was completely removed from the rack as the rack was only assigned to monitor temperature and not vibration.

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The SSA Site Lead fixed the issue in 10 minutes and then gave the customer clearance to start up the machine.

PAYBACK

The contract has a key performance indicator of maintaining availability and quality of critical machinery data, making it possible for the customer to leverage the value of its condition monitoring system and properly perform machinery diagnostics. The SSA covers as many as 125 critical machine trains, including critical propane trains that are central to the customer plant process.

BENEFITS

- The customer's SSA resulted in prompt support.
- Reduced delays in starting up their critical machine, which would have resulted in a loss of \$1 million of revenue per day.
- Increased uptime and decreased downtime.

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