

Orbit Magazine

Case Study: Supporting Services

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SUPPORTING SERVICES

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

GE Condition Monitoring Helps Customer Avoid \$1 Million Machine Trip.

Through the terms of a GE Supporting Services Agreement (SSA), GE's Bently Nevada team recently helped an offshore customer in the United Kingdom avoid costly downtime due to a vibration problem in a compressor rotor.

PROBLEM

GE's Bently Nevada* product line has a Supporting Services Agreement (SSA) to provide diagnostic support using System 1* software to an offshore customer in the United Kingdom. During recent upgrades of obsolete protection systems, GE's System 1 software identified some instability at the customer's export compressor rotor, a condition that had resulted in multiple occurrences of thrust bearing damage and three instances of rotor instability in the prior year.

SOLUTION

Using the information from System 1, GE's remote engineers, in collaboration with the offshore team, determined that a well change was likely causing the instability, so they turned the recycle system to manual in order to increase the throughput. As a result, the rotor axial vibration was eradicated, the thrust bearing life was prolonged, and the source of the machine damage was isolated.

PAYBACK

Because System 1 software was deployed, the problem was identified before a machine trip occurred. Since the customer had an SSA in place, GE engineers were promptly able to resolve the issue. The resulting action improved the reliability and availability of critical equipment at the plant. The Customer Support Manager later reported that had a machine trip occurred, it could have resulted in an estimated \$1 million in losses.

BENEFITS

- **Reduced costs.** The combination of System 1 software and an SSA helped the customer

Orbit Magazine

avoid a machine trip on a critical asset, saving an estimated \$1 million.

- **Improved reliability and availability.** The deployment of System 1 for all online diagnostics resulted in early detection of the problem, improving both reliability and availability of critical plant equipment.
- **Avoided downtime.** The early diagnosis by System 1 prevented costly downtime.

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