

# fact sheet

## Supporting Services

### “Helping You Achieve Excellence”

Supporting Services solutions help you gain more value from your assets. GE Energy partners with you at the level you choose to help you enhance reliability, performance, operational optimization and costs by increasing the value of asset data.

Reams of asset data are valuable only when they are:

- Sufficiently accurate
- Readily available
- Accessible to decision makers
- Actionable

Supporting Services helps your data become useful knowledge thus enabling profitable decisions. Our engineers strive to enhance your peace of mind...knowing your assets are monitored by the best possible personnel.

### Accurate

Accurate data supports accurate decisions. Data is worthless if it is questionable or unwieldy. We will monitor your sensors, software and the health of your data to ensure accurate statistics are available and if not, recommend cost effective actions to improve data quality.

### Available

Available and organized information support timely decisions. Diagnostic Technicians and Operators require alarm, calculation, and predictive tools to function precisely and provide timely alerts. We will ensure that the highest possible system availability is achieved by monitoring and optimizing alarms, control systems, and calculational tools. We will also make proactive repairs and modifications to ensure your decision support tools can be easily accessed.

### Accessible

Personnel must be capable of accessing our tools to achieve your return on investment in hardware and software! We offer comprehensive training, tool simplification, on demand services and remote support assisting your staff to use diagnostics and optimization tools effectively. We also teach your operators to comprehend the models behind alerts and closed loop control functions.

### Actionable

Actionable Information\* is the keystone of timely decision making. Our Supporting Services solutions combines over 40 years of energy asset domain expertise with leading edge controls, diagnostics and optimization technology. Our monitoring, diagnostics, actionable recommendations and consulting services will give you the edge over your competition by providing more than raw data...we partner to make you more profitable!



Contact your GE Energy representative today for complete product specifications and ordering information at 775-782-3611, at the prompt ask for Supporting Services.

\* Bentley Nevada and Actionable Information are registered trademarks of General Electric Company.

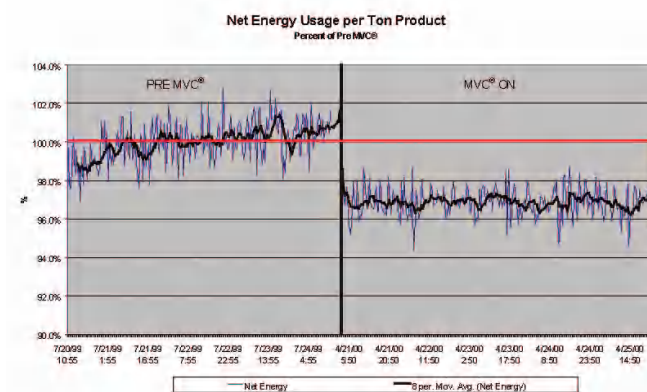


## Capabilities

- Proactive real-time remote monitoring and diagnostics
- On Call 24/7/365 to initiate response to your support needs rapidly
- Over 400 globally local field engineers in >80 countries, fluent in >30 languages
- Machinery Diagnostics, Performance, and Asset Management experts available to optimize and monitor improvement actions
- Periodic Diagnostic Reports containing tangible profit enhancing actions with supporting diagnostics and financial analysis

## Values

- Maximize your financial return on Software and Hardware investments
- Supplement your plant performance, maintenance, and reliability personnel
- Improve plant performance, asset reliability, and profitability
- Provide security that experts are diagnosing your critical assets 24/7



## Performance Improvement – A Refinery Case

A refinery's main compressors had indeterminate production losses. GE Energy performance engineers diagnosed fouling using performance software and recommended specific on line water washes. Interpretation of the data to determine the timing of the event and production impact was difficult because of extremely poor instrumentation. The customer stated that their production and efficiency improved dramatically!

## Condition Monitoring Services – A Refinery Case

A large refinery had problems with a Bently Nevada\* 3300 monitoring system installed by a 3<sup>rd</sup> party. The Supporting Services engineer assisted the customer in correcting these problems. Since then, the customer has relied on our services to diagnose vibration anomalies and temperature problems. The customer claims a savings of over \$500K using our support services.

## Performance Services – A Power Plant Case

A combined cycle power plant purchased performance software and supporting services. We diagnosed lost megawatts on the Gas Turbine (GT) due to measurement error causing the GT to "under fire". While running at base load – standard operating mode for this plant – savings are maximized. Assuming \$4/MMBtu(HHV) fuel price and ambient temperature of 59°F, the heat rate savings was 26.6Btu/kWhr with costs savings of ~\$75/hr...estimated savings over \$500k/year!

## Fleet Optimization Services – A Utility Case

A large utility purchased a wide range of Performance, Fuel and Dispatch Optimization Software. GE Energy diagnostics and software engineers ensure the system stays on line providing real time accurate economic dispatch 24/7. This team of support engineers maintain data and model accuracy, system health and database uptime with zero unplanned system outages in three years! Combining software and fleet management services saves the customer over \$1,000 per hour dispatched.

## Supporting Service Agreements Levels

Supporting Services maintain the value of your software investment. We have created 4 levels of Supporting Service Agreements (SSAs) designed to meet your support needs. These SSAs include technical support, software updates, training, and software maintenance as well as monitoring, diagnostics and optimization. The standard solutions can be further tailored by adding other services in the Bently Nevada (GE) portfolio. As your needs grow, so can your support solution.

	Condition Management	Performance and Process Optimization	Fleet Management and Dispatch Optimization
<b>BRONZE</b> (TSA)	24/7 Call Support, Software Updates	24/7 Call Support, Software Updates, Remote System Maintenance	
<b>SILVER</b> (Bronze +)	Remote System Maintenance, On Site Training,	Configuration/Model Optimization, Data Base Management,	Data Quality Reviews, Local Support Services
<b>RM&amp;D</b> (Silver +)	24/7/365 Monitoring, Remote Balancing and S/U Support, Machine Diagnostics	Remote Performance Diagnostics, Actionable Performance Recommendations	Dispatch Analysis, Data Quality Management, Cost Optimization Analysis
<b>GOLD</b> (RM&D +)	On Site Expertise for Condition Based Maintenance Management & Program Administration	On Site Expertise for Performance and Instrument Management	On Site Expertise for Electricity Market, Supply Chain & Cost Management

