## Set a Whole New Standard for Power Plant Performance

# EtaPRO® Monitoring & Diagnostic Center













Many leading power generating fleets around the world face the combined challenges of lean resources and information overload. GP Strategies' EtaPRO Monitoring & Diagnostic (M&D) Center can provide a solution.

## Improve the availability, capacity, and efficiency of your people, processes, and facility.

For over a decade, the EtaPRO M&D Center and its team of engineers and operations specialists have been supporting customers with our experienced power plant subject matter experts who monitor, diagnose, and analyze plant performance and operational integrity using the industry-leading EtaPRO Performance and Condition Monitoring System.

We help some of the world's leading power generation companies monitor their combined-cycle, Rankine cycle, solar, wind turbine, and hydro plants from the EtaPRO M&D Center, keeping them on top of plant performance.

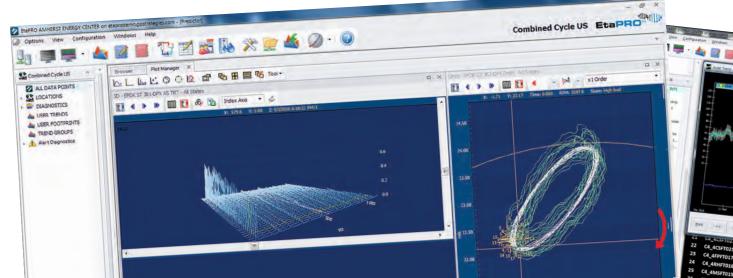
# EtaPRO®

### Core Deliverables and Services

The EtaPRO M&D Center helps our customers improve the operation of their plants in a variety of ways, starting with our technology. The EtaPRO Performance and Condition Monitoring System is the only monitoring system that combines thermodynamics, anomaly detection Advanced Pattern Recognition (APR) and machinery vibration signature monitoring together under one platform.

Using the most advanced EtaPRO system, the M&D team monitors your plant's components, which may include gas and steam turbines, generators, condensers, feedwater heaters, deaerators, boiler feed pumps, air heaters, boilers/HRSGs, fans, and other critical equipment. Using our state-of-the-art software, we find early deviations from normal operating conditions. When these deviations exceed established limits, GP Strategies® investigates, diagnoses, prioritizes, and notifies your staff of parameters that have been compromised using a 24/7 alert system integral to EtaPRO.

Customized communication plans are put in place with your plant staff to review identified issues and discuss/recommend a course of action.









#### Plant Anomaly Detection and Notification

Through our use of EtaPRO APR, plant anomalies that reduce capacity, reliability, and availability as well as increase heat rate are detected sooner. EtaPRO APR continuously compares current data to detailed empirical models of "normal" data, resulting in a highly effective means of tracking equipment health parameters.



#### Thermodynamic Modeling and "What-If" Studies

Does your organization need to know the impact of capital improvements or operating practices on plant performance? Using EtaPRO's VirtualPlant<sup>TM</sup> technology, our M&D staff can quickly and accurately quantify the heat rate and capacity benefits of equipment maintenance or upgrades as well as alternative capacity scenarios.



#### Machinery Fault Analysis and Diagnosis

Our experts can help you identify problems sooner to reduce unscheduled maintenance and allow for more effective planning of scheduled outages. Using EtaPRO Predictor™, GP Strategies engineers detect faults at their earliest stages and provide advanced diagnosis and prognosis of problems within large rotating machinery such as gas and steam turbines, generators, pumps, fans, and compressors.



#### Performance Assessment and Reporting

GP Strategies' staff can relieve the burden of routine production and performance reporting by automatically delivering customized daily, weekly, and/or monthly reports to your inbox. Our experts can also provide pre- and post- outage assessments to plan maintenance and confirm its effectiveness.



## Why GP Strategies?

GP Strategies' integration of its people, processes, and technology is what sets us apart.

Our people are experienced engineers and operations specialists who monitor a wide range of power plants. Their experiences with EtaPRO and power generation enables them to quickly investigate, diagnose, and quantify issues at your plant.

When it comes to process, GP Strategies communications plans can include weekly summary and monthly performance reviews. We'll help keep your plant's engineering and operations teams engaged to achieve peak performance.

By using our leading-edge technologies, we effectively monitor the condition of your plant equipment and provide early notification of anomalies long before they hit critical mass. We use the latest technologies, developed in-house over decades, to provide the best visibility to improving the availability and capacity of your plant.

#### Service Levels

GP Strategies' EtaPRO M&D Center features customizable plans that fit your plant's needs. With flexibility in levels of engagement and depth of investigation, you can choose the appropriate level of service needed, from basic anomaly detection to full scope performance services.

## How to Get Started

Getting started is easy! Call or email our EtaPRO M&D Center in Amherst, New York, to speak directly to a representative.



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### **GP** Strategies AT A GLANCE

Focus: GP Strategies Corporation is a global performance improvement company and a leader in engineering and technical services, technical training, eLearning solutions, and management consulting.

Founded: 1966

Headquarters: Columbia, Maryland, USA

Global Locations: Offices throughout the Americas, EMEA and APAC

**NYSE**: GPX

Vision and Mission: Our vision is a world where business excellence makes possibilities achievable. Our mission is to enable people and businesses to perform at their highest potential.

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