

CASE STUDY

Maximizing Output, Reliability, and Performance on a South American Fleet

Challenge

A group of South American power plants are responsible for supplying electrical energy to the country's national power grid and steam for its refineries. The Monitoring and Diagnostics Center (CMD) monitors nearly all of the company's fleet of thermal power stations in the nation. With 160 different types of equipment, there was a need to streamline the compilation of all operational failures and calculate RAM statistics according to ISO 14224.

Solution

As part of the customer's effort to maximize output, reliability, performance, and ultimately profitability, the CMD was equipped with EtaPRO Performance and Condition Monitoring, and EtaPRO Predictor to monitor all data available for the main components of the power plants.

Impact

The operational deployment of the CMD resulted in accurate monitoring of all operational variables from a central location allowing them to generate predictive diagnostics of the power plants, build fault trees for equipment failure, and maintain an ISO 14224 compliant database.

A total of 160 different types of equipment, including 61 gas turbines, 11 steam turbines, and 59 gas engines are monitored.

RESULTS

With the support of the EtaPRO programs, the plants were able to:

- Identify all operational failures and their root causes.
- Comply with ISO 14224, thus aiding in the planning of future maintenance activities, and
- Calculate actual and expected KPIs for all major equipment.

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