Alea Energia uses Emerson’s Movicon. NExT to manage 1MW cogeneration plant

RESULTS

• Improved plant management and monitoring of all control loops
• Immediate notification of anomalies to operators
• Sophisticated analysis and reporting to identify trends and possible improvements

APPLICATION
Supervisory control of a 940kW cogeneration plant powered by vegetable oil.

CUSTOMER
Alea Energia S.p.A.

Alea Energia is part of the Elettra Investimenti S.p.A. group, which designs, builds and manages electricity production plants.

CHALLENGE
A grid connected 940kW vegetable oil fired cogeneration plant, located in the province of Catania, Italy, supplies power, hot water and saturated steam to the neighboring textile dyeing factories. When Alea Energia took over the plant in 2018, high fuel costs and inefficient machine performance were a drag on plant profitability. The company immediately assigned Alea Service, which provides operation and maintenance services, to revamp the plant in order to optimize its operating efficiency and performance for higher profitability.

SOLUTION
As part of the upgrade, which included a new generator, generator controller and control system, Emerson’s Movicon.NExT technology was chosen as the new supervisory control system for the plant management and automation systems. The new SCADA system oversees the entire plant, which is divided into two sections, one managing supply, heating and fuel filtration, and the other managing heat recovery from engine cooling water and exhaust fumes. Movicon also connects to a cloud software platform, used to collect energy data from all the Electra group’s power plants.

“Another advantage is the alarm dispatcher, which is a feature that other SCADA systems do not have and one that I consider to be very useful, if not indispensable in any plant management system.”

Marco Pisano
Project Manager
Alea Service

For more information:
www.emerson.com/PACSystems
To avoid unplanned downtime, the Movicon alarm dispatcher function is used to send instant alarm and event notifications to predefined on-call operators by voice (VoIP), telegram, SMS or email. The previous SCADA system could only send cumulative notifications by SMS, requiring the operator to find out the actual cause of the anomaly detected.

Notifications can also be sent at specific times, calendar dates, shifts or according to an on-call staff rota, ensuring that operators are provided with all the necessary information.

The Movicon.NExT software has integrated report, real-time trend and chart functions to enable Alea Energia operators to analyze plant operations data. The report manager module enables report generation from data collected by Movicon.NExT or from any other source. Sophisticated data analysis solutions, available to operators locally or over the web, allows access and visualization of curves related to process data behavior. This includes extensive and sophisticated analysis of historical data and quick analysis of predefined periods.

**RESOURCES**

**Emerson industrial automation and controls**  
www.Emerson.com/industrial-automation-controls

**Programmable Automation Controllers**  

**Control Software**  

**Movicon**  
www.progea.com