

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.

"The main advantage of using Movicon lies in the direct relationship with Emerson and consequently better support.

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

POWER GENERATION

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

www.Emerson.com/en-us/automation/control-and-safety-systems/programmable-automation-control-systems/programmableautomation-controllers

Control Software

www.Emerson.com/en-us/automation/control-and-safety-systems/programmable-automation-control-systems/control-software

Movicon

www.progea.com



©2021, Emerson. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. All other marks are the property of their respective owners.

The contents of this publication are presented for informational purposes only, and while diligent efforts were made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.

Contact Us

www.emerson.com/contactus

For more information:
www.emerson.com/PACSystems

00830-0100-0021

