

# Alea Energia uses Movicon.NExT™ software to improve management of 1MW cogeneration power 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

Supervise 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 940kW cogeneration plant powered by vegetable oil located in the province of Catania, Italy, supplies electricity to the grid and 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 reducing profitability. The company immediately assigned Alea Service, which provides operation and maintenance services, to revamp the plant in order to increase its efficiency and optimize performance for greater 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 supervision system for the plant management and automation systems. The new supervision 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 Elettra group's power plants.

To avoid unnecessary production downtimes, 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

*“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

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 data related to the operation of the plant. The report manager module enables reports to be generated from data recorded by the platform or derived from any other source. Sophisticated data analysis solutions, available to operators locally or over the web, allow access to and visualization of curves relating 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/PACSystems](http://www.Emerson.com/PACSystems)

#### Movicon

[www.progea.com](http://www.progea.com)



*Movicon.NEXt oversees heating and fuel filtration, heat recovery from engine cooling water and exhaust fumes.*

#### Emerson Automation Solutions

Intelligent Platforms, LLC  
2500 Austin Dr  
Charlottesville, VA 22911, US  
T +1 (888) 305-2999

#### Emerson Automation Solutions

Progea International SA  
Via Sottobisio 28,  
6828 Balerna, Switzerland  
T +41 091 9676610

#### Emerson Automation Solutions

Rua Irmã Gabriela,  
51-Cidade Monções  
São Paulo-SP, 04571-130, Brazil

#### Emerson Automation Solutions

Intelligent Platforms  
Asia Pacific Pte. Ltd.  
1 Pandan Crescent,  
Singapore, 128461

#### Emerson Automation Solutions

Progea Srl  
Via D'Annunzio 295, Modena,  
41123, Italy  
T +39 059 451060

#### Emerson Automation Solutions

ICC Intelligent Platforms GmbH  
Memminger Straße 14  
Augsburg, DE 86159  
T +49 7721 99 838 0

#### Emerson Automation Solutions

Intelligent Platforms Pvt. Ltd.,  
Building No.8, Ground Floor  
Velankani Tech Park, No.43  
Electronics City Phase I,  
Hosur Road Bangalore-560100, India

#### Emerson Automation Solutions

Intelligent Platforms (Shanghai) Co., Ltd  
No.1277, Xin Jin Qiao Road, Pudong,  
Shanghai, China, 201206

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[Emerson.com](http://Emerson.com)

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