FLUENCE
A Siemens and AES Company

PROJECT SPOTLIGHT

Creating a Stable Grid on a Remote Island in the Mediterranean

Isle of Ventotene, Italy

> We were interested not only in pricing but in competence, reliability, and sustainability. And we were looking for a partner who shared our values.
>
> ENEL, Italy

SYSTEM OVERVIEW

- Fluence's Siestorage Energy Storage Platform
- 0.5 MW / 0.6 MWh
- Operated by Italian energy utility Enel Produzione SPA, the utility responsible for operating the island's diesel generation plant and the distribution network.
- Entered commercial operation in 2015

APPLICATION

- Microgrids & Islands

PROJECT HIGHLIGHTS

- This project tackles the various challenges posed by a small island not connected to the national grid on the mainland. The hybrid system integrates all existing and new power components into a stable power supply to balance extreme fluctuations in the grid and reduce the island's CO_2 emissions.
- The integrated operation of the new energy storage system and existing diesel generators minimizes fuel consumption and properly manages grid dynamics on the island during seasonal swings in power demand caused by an annual influx of tourists.
- These modern controls have already demonstrated 15% fuel savings on the island, with an approximately 55% reduction in genset operating hours, and a reduction in the aging and maintenance costs associated with the generators.
- The Ventotene project provides a sustainable model that could be replicated on hundreds of other European islands with benefits for both the environment and millions of inhabitants and encourages further integration of renewables.