

MEDIA RELATIONS

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ENEL DISTRIBUZIONE: ITALY'S FIRST SMART GRID IN ISERNIA

- *One of the first smart grids in Europe; total planned investment of 10 million euros.*

Rome, November 4th, 2011 - Enel Distribuzione has begun installing the first smart grid in Italy, and one of the first in Europe, in Isernia. The technology installed will make it possible to optimally regulate the bi-directional flow of electricity generated from renewable resources on low and medium-voltage networks and will enable new uses of energy. A total investment of 10 million euros is projected for this Molise "pilot project".

Several thousand customers will take part in the project. The pilot smart grid linked to the Carpinone substation encompasses:

- systems for estimating electricity generated from renewable resources;
- sensors for the advanced monitoring of grid volumes;
- interaction with electricity generators to provide advanced regulation of input flows;
- storage using lithium-ion battery technology, with a capacity of 0.7 MW (0.5 MWh), to modulate flows of electricity, built by Siemens to Enel specifications;
- recharging stations for electric vehicles;
- equipment installed in homes to allow customers to monitor their consumption.

The need for a smart grid distribution system has been spurred by the rapid spread of distributed generation that, for the most part arising from renewable resources, is subject to random fluctuations due to weather conditions or the alternating of day and night.

The pilot program is just one of the initiatives that Enel is carrying out in the area of smart grids, which are also being promoted by the Authority for Electricity and Gas (AEEG) which supports the development of new technologies for the Italian electricity network.

Enel is currently implementing a 10-year restructuring plan for its entire distribution network (over 1 million kilometres), coordinated with programmes for encouraging the introduction of smart grids launched by the European Commission.

As with digital metering, Enel Distribuzione is a leader in applying innovative solutions to improve network efficiency and the quality of the service offered to customers.