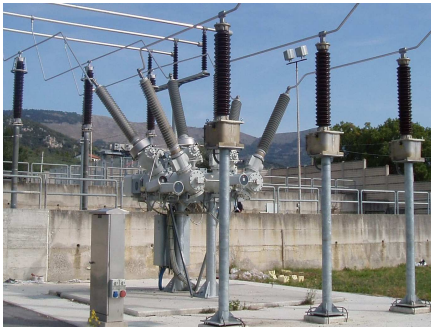


SORGENIA Wind Farm San Gregorio Magno (SA) 150 kV Substation, HV cable and GIS for Terna grid

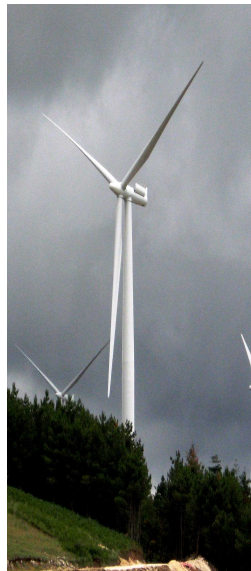


150kV GIS in Terna CP Substation



150kV Wind Farm Substation

Sorgenia built up a new wind farm in four selected areas of the site of San Gregorio Magno (SA) Italy; the comprehensive wind farm consists of No. 17 Wind Turbine Generators, each rated 2,5 MW. The cumulative generated power of the wind farm is collected via a 30 kV switchgear, in a dedicated pre-fabricated building at the site ("Cabina di Smistamento"). The generated power is then addressed (via two cable feeders of about 15 km length) to the 150 / 30 kV Substation close to the 150 kV ENEL Distribuzione Substation in Buccino. The plant, rated 42,5 MWe, produces electrical power for the High Voltage Italian national grid (RTN: Rete di Trasmissione Nazionale).



2,5 MW WTG

SAET scope of supply was a Turn Key with:

- 30 kV cabin with 15 km cable .
- Electrical 150/30 kV 42,5 MW SS
- ENEL Busbar extension
- The 150 kV underground cable
- The new 150kV GIS bay in Enel CP

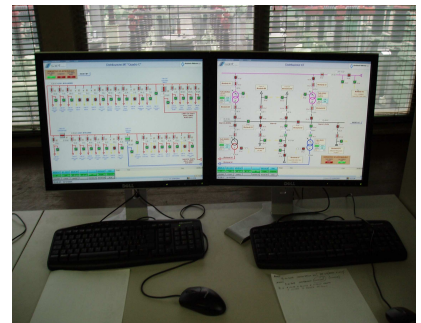
The supply was complete with Auxiliaries, IEC 61850 Protection system, Metering, Substation SCADA and Disturbance Recorder. The SCADA integration to National Grid has been completed with Communication devices to allow Data transmission between "Wind farm" and S/S to TERNA remote supervision via IEC 608705104 protocol and for disturbance records analysis COMTRADE protocol. The complete package has been successfully commissioned into operation by Saet



Protection Control Panel



30 kV Switchgears in Subst.



SCADA Terminals



San Gregorio Magno wind farm