

Wind Energy

Vallesaccarda wind farm starts up



Our Milan team has added another important project to its power portfolio. The Vallesaccarda wind farm in the Campania region of Italy is now up and running and supplying power to the Italian grid.

Adding capacity

Additionally, we have increased the wind farm capacity from the original 15 megawatt (electric), or MWe, to 22.5 MWe, thanks to the installation of five additional 1.5 MWe wind turbine generators. The wind farm, with 15 wind turbines, will now be able to produce about 50 gigawatts of electricity per year.

We received authorisation for this expansion in early July 2005 after the successful completion of an additional environmental impact assessment and the issue of the relevant building licence by the Vallesaccarda municipality.

"Although we are dealing with plants producing electricity from renewable sources, the permitting process in Italy has become more demanding, with few initiatives reaching the construction phase. More than twenty administrative opinions from local and central authorities have been necessary to obtain the green light for the construction works."

Andrea Belloli
Business Development Manager, Power Division
Foster Wheeler Italiana



Fast-track challenge

Construction was fast-tracked from July to December 2005. The project team was able to meet this aggressive schedule by taking advantage of infrastructure already in place from the previous project, such as roads and the electrical switchyard, on-schedule delivery of the wind turbines by GE, and some pre-work performed during summer 2005.

"This project was a challenge in constructability and logistics terms, involving the installation of equipment and parts up to 40 metres in length. Vallesaccarda is a mountainous area with widespread clay and an inadequate road network. The project execution strategy had to deal with these transportation challenges and also had to take account of weather issues. The aggressive project schedule which we achieved kept us clear of seasonal bad weather and avoided additional costs."

Andrea Scricciolo
Project Manager, Foster Wheeler Italiana

After the Italian grid operator made the grid available, commissioning, start-up and test run activities took place. The expansion project has reduced the overall cost per gigawatt of electricity produced from this whole development and improved the already strong economics of the project.

Outstanding reliability

"The wind turbines have demonstrated excellent performance during the first month of operation, under the trial run test period, by reaching an availability of around 100% for each wind turbine generator. This allowed us to declare the provisional acceptance of the works in January 2006."

Silvia Andreola
Principal Process Co-ordinator, Power Division
Foster Wheeler Italiana

The excellent performance of the turbines was further confirmed in February, with continuous, reliable operation across the full range of wind speeds for which this wind farm has been designed: between 2.5 and 25 metres per second (m/s).

This is a wide operational range: according to the Beaufort scale, a wind speed of 2.5 m/s is defined as a 'light breeze' while 25 m/s is defined as a 'strong gale'.

A leading player in Italy

The plant is now operating at full load and, as stakeholder in the project company and EPC contractor for the Vallesaccarda project, we have further strengthened our position as a developer, equity investor and operator in the Italian energy market.



Left to right: Andrea Scricciolo, Silvia Andreola, Andrea Belloli.