

Romanian "electric shock" from windmills

Categories : [SEE Energy News](#)

Date : December 10, 2012

Over the past two years Romania made a boom in the production of electricity from wind energy, they have 2,000 megawatts (MW) currently installed, and in 2013 they plan to connect to the grid another 900 MW of electricity from wind turbines, said the president of the Romanian Association for Wind Energy Ionel David.

"In 2009 we had only 14 MW of capacity for the production of electricity from wind power but the development boom began in 2010" said David to journalists from Serbia who visited the largest onshore wind farm in Europe "Fantanele" in Romania.

David said that wind farms in Romania are located in three areas - Dobrudza where "Fantanele" is located, on the border with Moldova and in the territory of Banat.

According to David, the current price of electricity produced from windmills is 15.5 cents per kilowatt hour (kWh), and to the electricity grid in Romania between 5,000 and 6,000 MW of wind energy can be connected, while it costs 1.6 million per MW to build windmills.

Romania plans to produce 20 percent of the total electricity production from renewable sources by 2020, or 38 percent including large hydro power plants (HPP).

Six times 12 kilometers

Wind Farm "Fantanele" located near the port of Constanta and the Black Sea coast, has 240 turbines with a total installed power of 600 MW.

Development and construction was implemented by Continental Wind Partners (CWP), which sold the wind farm to Czech energy company CEZ for € 1.1 billion, which is the largest direct foreign investment (DFI) in the history of Romania.

Wind farm is located in the territory six times 12 kilometers big and on 240 poles with 100

meters (m) high they have installed the most modern wind turbines CWP with 2.5 MW power, and rotors with diameter of 99 m.

Construction began in September 2008, and the first wind turbines were erected as early as August next year and put into operation in June 2010.

In the first phase, 139 wind turbines were built, and then another 101, while the last turbine was connected to the grid on November 21, 2012.

From three to 25 m / sec

CEZ experts have told reporters, that seven meters per second (m / sec) is the average wind speed at the wind farm "Fantanele", the turbines are active at the speed of the wind, while it takes 15 working days to raise one wind turbine.

The average daily production of one unit is 10 megawatt-hours (MWh), the distance between the transformer and the farthest turbine is 15 km, and six months is a period of "test run" of the turbine, in which period the defects are repaired.

In the first nine months of this year, "Fantanele" have provided electricity to more than 600,000 households, and the construction of a large wind farm had a significant impact on the local economy primarily through the engagement of local companies, their machines and 500 workers at the construction.

137 km of access roads were built that are now used by the local population.

A large part of the land was leased from Romanian farmers for a 49 years long period at a price of 3,000 Euros per year.

Electricity from the wind farm represents nearly 10 percent of the total energy consumed by Romania from renewable sources.

Company headquarters moved to Belgrade

CWP company was established in 200. in the United States and is one of the world's largest companies engaged in the development and construction of wind farms.

CWP is currently working on projects of about 5,000 MW capacity in the countries of Central and Eastern Europe - Poland, Romania, Bulgaria and Serbia, as well as in Australia.

In September this year, the CWP company moved its headquarters from London to Belgrade which now leads all European activities.

The CWP company plans to begin construction of wind farms in Serbia, in Kovin, with up to 170 MW power, in 2013, announced the company president Mark Crandall.

"If everything goes according to plan, the first electricity from a wind farm in Kovin could be

produced in the second quarter of 2014," Crandall told reporters.

Crandall said that the investment is worth 300 million Euros. 200 million Euros would be provided from the international bank loans and the rest from company funds and partners.

Source Serbia Energy Magazine