ABB to build the first hybrid substation in Morocco

July 7, 2017 - ABB will supply a $16 million hybrid substation for a wind farm, helping the country to reduce its carbon footprint.

Forecasts for the Kingdom of Morocco indicate that the country’s energy demand will rise continuously in the coming years. The country has abundant renewable energy resources – including solar, wind and hydropower – and has set a 52% renewable target by 2030 while reducing its current dependency on imported fossil fuels. The government is focused on developing its electrical infrastructure to integrate renewable energy, with targets to generate more power from wind and other renewable energy sources.

ABB is working with Energie Eolienne du Maroc, one of the leaders in Morocco’s energy sector, to build a new hybrid substation in southern Morocco that will connect to the country’s national grid. It will be the first hybrid substation in Morocco and is being designed to withstand the challenging weather conditions of the desert and the marine air conditions. During the 22nd United Nations Framework Convention on Climate Change event, hosted in Marrakech at the end of 2016, Nareva’s new wind farm received a COP 22 label.

The hybrid substation will have a capacity of 225/33 kilovolts (kV) and will be flexible and scalable, with the ability to be upgraded up to 400 kV or the wind farm upgraded to 300 MW. Nareva is involved in several wind farm developments across Morocco.

The company was seeking strong customer support from its potential supplier. ABB teams from Spain, Morocco, Italy, Turkey, Switzerland and Sweden worked together to provide technical seminars, and various lifecycle cost analytics. The hybrid substation will include the latest ABB technology of PASS, ZS2 MV switchgear, 150 MW of power transformers, instrument transformers, surge arresters, substation automation system as well as protection and control. The new substation enhances ABB presence in Africa and ABB Power Grid’s goal to enable a stronger, smarter and greener grid for its customers.

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