

DEWA And Enbala To Build First Virtual Power Plant

Dubai Electricity and Water Authority (DEWA) has partnered with Canadian company Enbala to build the region's first Virtual Power Plant (VPP).

VPP is a smart network of distributed, small and medium scale generation units such as solar photovoltaic, battery storage and flexible loads.

According to DEWA, the pilot VPP is a result of a research collaboration between its Research and Development Centre at the Mohammed bin Rashid Al Maktoum Solar Park and Enbala.

The virtual plant will act as a platform that aggregates selected distributed energy resources and manage the mixed portfolio as a single conventional power plant connected to the grid.

It will help to increase the visibility of distributed energy resources (DER) and maximize their value by providing grid services such as peak shaving, frequency regulation or energy balancing.

Furthermore, the advanced technology uses Artificial Intelligence (AI) to enable integration of various types of energy into DEWA's smart grid.

"The virtual power plant will increase renewable energy integration capabilities, supporting the Dubai Clean Energy Strategy 2050 to produce 75% of Dubai's total energy from clean energy sources," said Saeed Mohammed Al Tayer, MD & CEO of DEWA.

DEWA is moving fast toward adopting clean energy. Last month, the company, along with a consortium led by Saudi Arabia's ACWA Power and Chinese state-owned Silk Road Fund, have reached the financial closing of the 950MW 4th phase of the Mohammed bin Rashid Al Maktoum Solar Park.

The solar power projects currently operational in the solar park have a capacity of 413MW. Meanwhile, DEWA has three more projects under implementation with a capacity of 1,550MW.

According to a report by P&S Intelligence, global virtual power plant market is projected to reach \$5.5 billion by 2023. North America has been leading the global virtual power plant market in terms of value, with an estimated share of more than 40% in 2017.

Many nations are investing heavily in renewable power projects to increase the share of renewable energy in the overall energy mix, including China, which plans to produce 150-200 GW of solar power by the end of 2020, added P&S Intelligence.

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