

Abengoa is awarded the first large scale hybrid microgrid with flow batteries in Africa

• Located in South Africa, it will consist of a 3.5 MW photovoltaic plant and an energy storage system using vanadium flow batteries.

November 11, 2020 – Abengoa (MCE: ABG/P:SM), the international company that applies innovative technology solutions for sustainability in the infrastructures, energy and water sectors, has been selected to construct a hybrid microgrid power plant by the leading vanadium energy storage solutions provider in the African market Bushveld Energy.

Specifically, the company will be responsible for the engineering, supply and construction of a plant integrated by an energy storage system using Vanadium Redox Flow Batteries (VRFB BESS), with a capacity of 1MW / 4MWh, and a 3.5 MW solar photovoltaic plant. This will be located at Vametco Alloys mine, owned by Bushveld Minerals in the North West province of South Africa and will allow it to increase its energy autonomy. The VRFB BESS system will be provided by Enerox Holdings Limited, a Bushveld subsidiary. In addition, the plant will be the first commercial-scale hybrid project with vanadium flow batteries in the continent and the first 'MW scale' hybrid power plant for a mine in South Africa.

The photovoltaic solar plant and the energy storage system will reduce the emissions of more than 114,000 tons of CO₂ into the atmosphere over 20 years, supporting decarbonization in the region. The plant will be able to operate independently or jointly, either as standalone systems or as a fully functional microgrid thanks to Abengoa's proprietary energy management system (Abengoa Energy Management System, AEMS).

This project is part of Bushveld's strategy to develop and promote the role of vanadium in the growing global energy storage market through VRFB BESS, following an overall trend toward long duration storage, as well as to improve the stable power supply on the African continent.

This project is an important milestone for Abengoa, which has installed the world's largest fleet of thermal energy storage (which exceeds 6,000 MWht), and now is installing the world's largest hybrid solar plant incorporating vanadium. With such a flagship reference, Abengoa consolidates its global reputation as a one-stop-shop storage provider, with lithium, vanadium and molten salt storage.



Innovative technology solutions for sustainability

This award, Abengoa's fourth project in South Africa using solar plus storage - this time the dispatchable solar solution using PV + VRFB BESS technology in a microgrid – reinforces the company's position as one of the most referenced EPC contractors and integrators in Africa for complex power generation projects with energy storage over the past ten years, having commissioned 250MW with storage, continuing our service of providing dispatchable clean energy to the market with innovative new technologies.

About Abengoa

Abengoa (MCE: ABG/P:SM) applies innovative technology solutions for sustainability in the infrastructures, energy and water sectors. (www.abengoa.com)

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