

## **PDEOZE PowerContainer**

# **Uzbekistan Power Frequency Communication BESS Power Station**



## Overview

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Sungrow's PowerTitan BESS, equipped with grid-forming technology, ensures stable voltage and frequency by providing voltage regulation, frequency response, and oscillation damping services —a critical solution for Uzbekistan's evolving energy landscape. What is the Bess O'zbekistan project?

The BESS O'zbekistan Project in Yapyan City, Fergana Region, Uzbekistan, is a significant step forward in energy efficiency. With a capacity of 150MW/300 MWh, it optimizes renewable energy utilization, integrates smart grid technologies, and fosters community engagement.

How much electricity is produced in Uzbekistan?

In 2019, the installed capacity of electricity generation in Uzbekistan totalled 63 TWh, with natural gas fired thermal power plants accounting for 85% of this production.

What is ACWA Power doing with Uzbekistan?

ACWA Power has entered an IA) with Uzbekistan's Ministry of Energy to develop 2GWh of standalone BESS capacity across the country.

Does a Bess need a high energy capacity?

A ramping constraint of 1.4 MW / minute is very strict and as a consequence it was found that the BESS needed to have a high energy capacity. The BESS was sized at 80 MW / 480 MWh, with a E:P ratio of 6, i.e. 6 hours storage duration. This storage time can only be met by a NaS battery at a high cost.

What does Bess stand for?

Credit: Es sarawuth/Shutterstock. ACWA Power has entered a binding implementation agreement (IA) with Uzbekistan's Ministry of Energy to develop up to two gigawatt hours (GWh) of standalone battery energy storage systems (BESS) capacity across the country.

How many PV power plants are there in Samarkand?

The Project consists of three main components which include two PV power plants, one BESS facility, and seven transmission lines, all of which will be located in Samarkand Region. The 100 MW PV power plant and 400 MW PV power plant are located in Nurobod District, about 17 and 78 km from Samarkand City respectively.

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