

**NKOSITHANDILEB SOLAR**

# **Vientiane Energy Storage Power Station Cooperation Model**



## Overview

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Will shared energy storage participate in the operation mode of multi-virtual power plant?

Considering the high investment cost of the energy storage system, it is proposed that the shared energy storage will participate in the operation mode of the multi-virtual power plant system as an independent subject, which will help to realize a win-win situation in cooperation between the VPP operator and the shared energy storage operator.

What is a two-tier optimization model for a multi-virtual power plant system?

A two-tier optimization model for the operation of a multi-virtual power plant system considering SES configurations 3.1.1. Outer layer Shared energy storage is independently configured by a third-party operator and provides energy storage services for multiple virtual power plants.

What does a positive power mean in an energy storage plant?

A positive power of the energy storage plant indicates charging and a negative power indicates discharging. Scenario 4 is analysed as an example. During 00:00–07:00 and 08:00–12:00 time periods, the SES plant purchases power from the VPP system at a lower power price.

What is a two-tier operation optimisation model for multi-area integrated energy systems?

Literature proposed a two-tier operation optimisation model for multi-area integrated energy systems configured with shared energy storage, and verified the advantages of the alliance system in enhancing the economic and environmental benefits of all parties.

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