

# Solar energy storage in power plants





## Overview

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Which thermal energy storage systems are used in solar power plants?

Thermal energy storage systems are key components of concentrating solar power plants in order to offer energy dispatchability to adapt the electricity power production to the curve demand. This paper presents a review of the current commercial thermal energy storage systems used in solar thermal power plants: steam accumulators and molten salts.

Can solar energy be used for energy storage?

Solar power can be used to create new fuels that can be stored and later used to provide energy. Existing compressed air energy storage systems often use the released air as part of a natural gas power cycle to produce electricity.

Where is storage located in a power plant?

Storage can be located at a power plant, as a stand-alone resource on the transmission system, on the distribution system and at a customer's premise behind the meter. Do wind and solar need storage?

All power systems need flexibility, and this need increases with increased levels of wind and solar.

What is energy storage?

Energy storage is a system that can help more effectively integrate solar into the energy landscape. Sometimes it is co-located with, or placed next to, a solar energy system, and sometimes the storage system stands alone.



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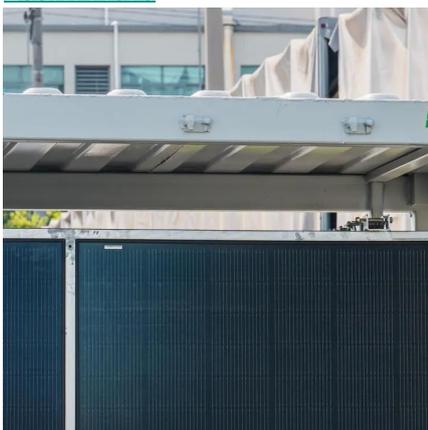
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STORAGE FOR POWER SYSTEMS Growing levels of wind and solar power increase the need for flexibility and grid services across different time scales in the power ...

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