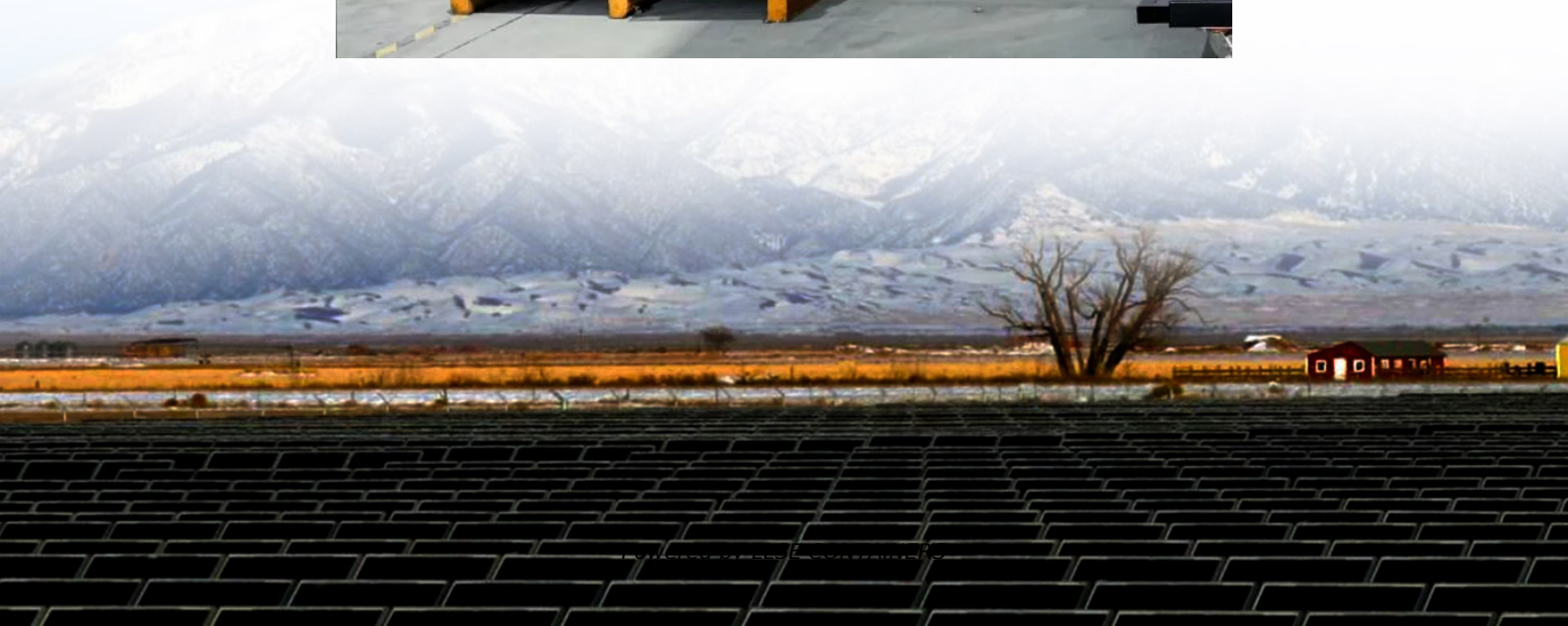


# **Large Energy Storage Distribution Network**





## Overview

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Should energy storage systems be used in distribution networks?

Author to whom correspondence should be addressed. Configuring energy storage systems (ESSs) in distribution networks is an effective way to alleviate issues induced by intermittent distributed generation such as transformer overloading and line congestion. However, flexibility has not been fully taken into account when placing ESSs.

Why is distributed energy storage important?

This can lead to significant line over-voltage and power flow reversal issues when numerous distributed energy resources (DERs) are connected to the distribution network. Incorporation of distributed energy storage can mitigate the instability and economic uncertainty caused by DERs in the distribution network.

What is an energy storage system?

Energy storage systems For distribution networks, an ESS converts electrical energy from a power network, via an external interface, into a form that can be stored and converted back to electrical energy when needed.

What is the difference between Dno and shared energy storage?

Typically, the distribution network operator (DNO) alone configures and manages the energy storage and distribution network, leading to a simpler benefit structure. Conversely, In the shared energy storage model, the energy storage operator and distribution network operator operate independently.



## Large Energy Storage Distribution Network

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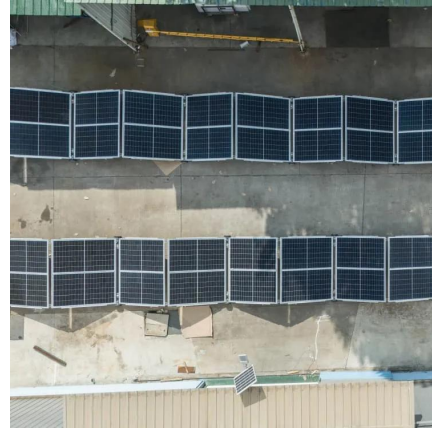
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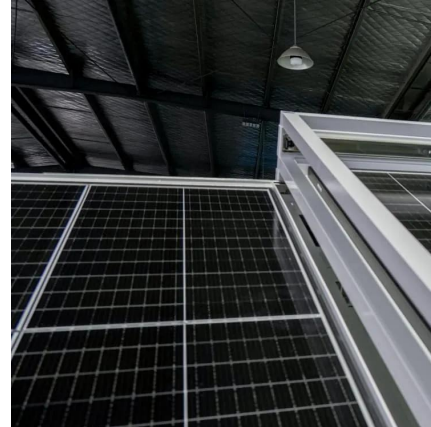
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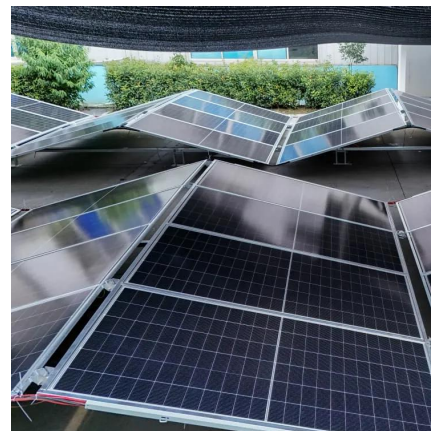


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