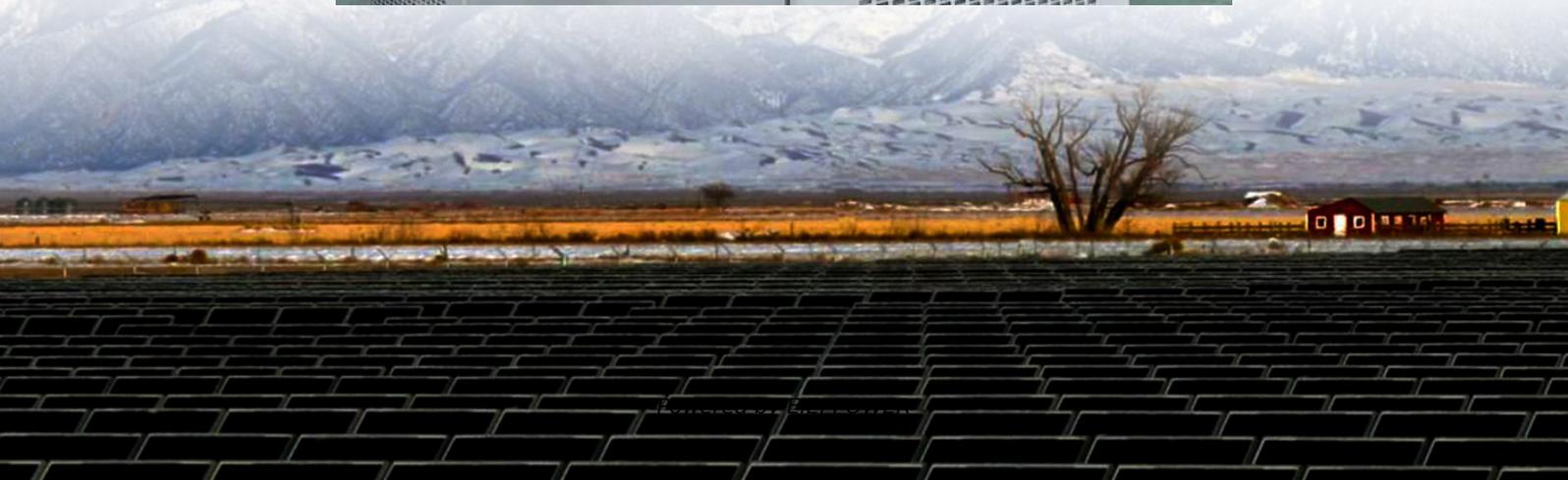


# Seismic-resistant mobile energy storage container in the Democratic Republic of Congo





## Overview

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This paper mainly describes the overall design and theoretical thermal calculation of the battery compartment of the energy storage system, and carries out static load calibration and seismic systematic research by using ANSYS analysis software, which verifies the reliability of the whole system in the national standard 7- degree seismic intensity, and the results of the research provide a safe basis for the actual operation of the project. Can mobile energy storage systems improve resilience of distribution systems?

According to the motivation in Section 1.1, the mobile energy storage system as an important flexible resource, cooperates with distributed generations, interconnection lines, reactive compensation equipment and repair teams to optimize dispatching to improve the resilience of distribution systems in this paper.

What is a mobile energy storage system?

A mobile energy storage system is composed of a mobile vehicle, battery system and power conversion system . Relying on its spatial-temporal flexibility, it can be moved to different charging stations to exchange energy with the power system.

What is a mobile energy storage system (mess)?

During emergencies via a shift in the produced energy, mobile energy storage systems (MESSs) can store excess energy on an island, and then use it in another location without sufficient energy supply and at another time , which provides high flexibility for distribution system operators to make disaster recovery decisions .

How do different resource types affect mobile energy storage systems?

When different resource types are applied, the routing and scheduling of mobile energy storage systems change. (2) The scheduling strategies of various flexible resources and repair teams can reduce the voltage offset of power supply buses under to minimize load curtailment of the power



distribution system.



## Seismic-resistant mobile energy storage container in the Democratic Republic of Congo



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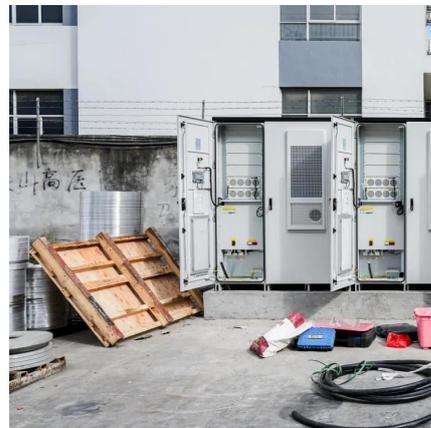


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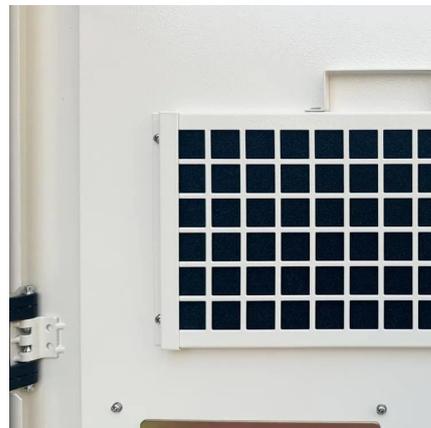


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