LLSE CONTAINERS

Bidirectional charging of mobile energy storage containers for drone stations

Overview

Can bidirectional electric vehicles be used as mobile battery storage?

Bidirectional electric vehicles (EV) employed as mobile battery storage can add resilience benefits and demand-response capabilities to a site’s building infrastructure.

Can drone-to-vehicle (D2V) charging be used for EV recharging?

To address this challenge, we propose a novel drone-to-vehicle (D2V) charging system, which leverages drones as mobile charging units to provide on-the-go recharging services for EVs.

What is a bi-directional charging system?

This shift is made possible by the cutting-edge bi-directional charging technology. Bi-directional charging allows EVs to function as mobile energy storage units. Equipped with this technology, EVs can not only draw power from the grid but also return electricity to it, or supply power to homes during peak demand or in the event of blackouts.

Can bidirectional EVs be used as mobile storage?

In contrast to stationary storage and generation which must stay at a selected site, bidirectional EVs employed as mobile storage can be mobilized to a site prior to planned outages or arrive shortly after an unexpected power outage to supplement local generation or serve as an emergency reserve.

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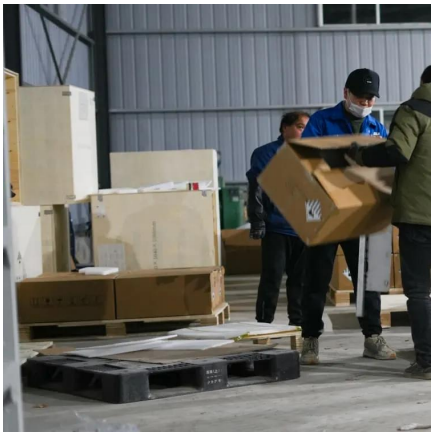

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