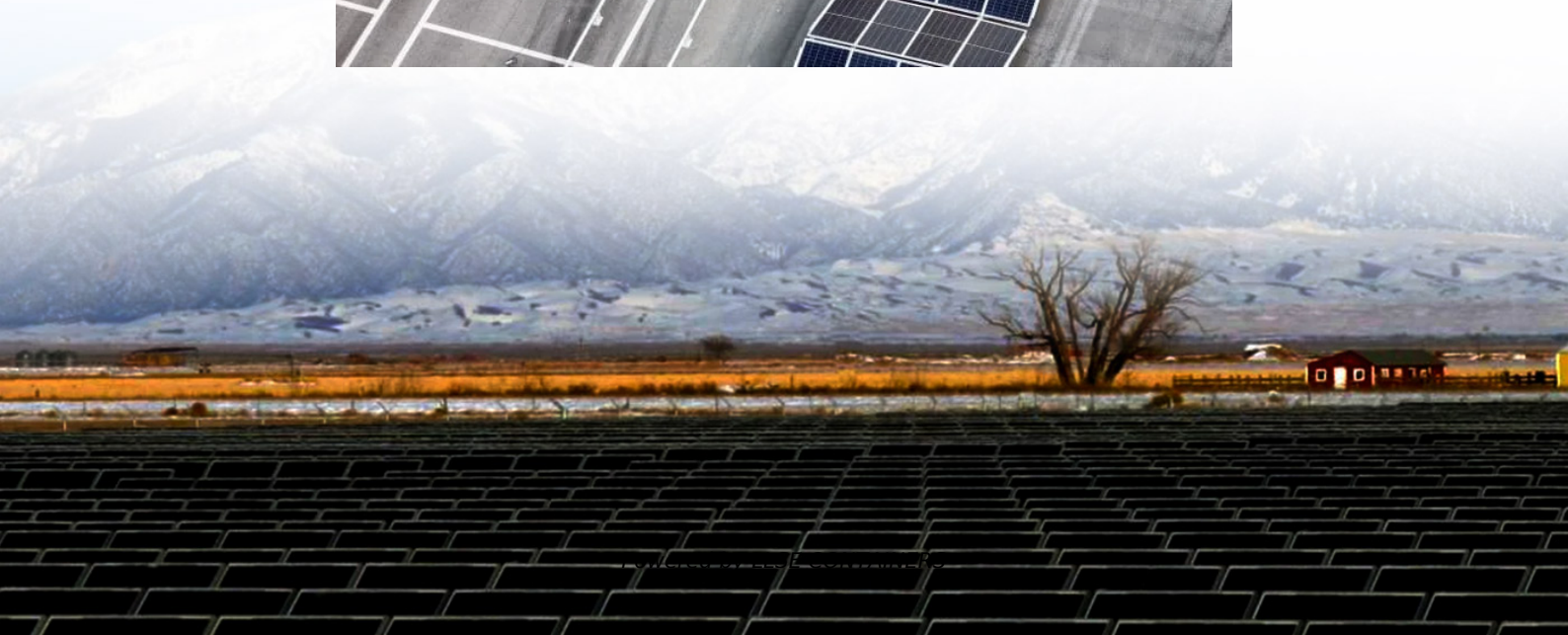


Solar Controlled Sphere Power System





Overview

What is a solar sphere?

Solar cell power is an alternative method of power generation. In this report, the application of a new concentrated photovoltaic technology called a solar sphere is tested experimentally. This technology works by collecting solar energy and concentrating it into a small area (focal point).

Can a solar sphere be used as a power source?

Abstract: World electricity demand is rapidly overtaking the power supply. Solar cell power is an alternative method of power generation. In this report, the application of a new concentrated photovoltaic technology called a solar sphere is tested experimentally.

How does solar energy work?

This technology works by collecting solar energy and concentrating it into a small area (focal point). The focused solar energy is able to generate a huge amount of power that can be used to produce far more electricity than alternative photovoltaic designs.

How are spheres compared to normal photovoltaics?

First, 3 shapes are tested: a full sphere, only the upper half of a sphere, and only the bottom half of the sphere. Then, they are compared with normal photovoltaics (PV) that have the same area as the spheres.



Solar Controlled Sphere Power System



Innovative Approach of Concentrated Solar Sphere to ...

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Apr 19, 2024 · The motivation of this paper is to design an innovative solar sphere system, which is a new concentrated photovoltaic technology that has better performance (efficiency and ...



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