

Case Study:

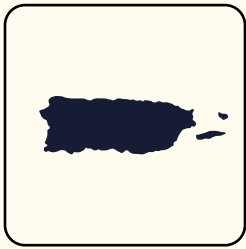
# Sunrun's Distributed Power Plant in Puerto Rico

## How Sunrun Is Strengthening Grid Reliability in Puerto Rico Through Distributed Solar + Storage

"The CBES+ program continues to demonstrate its value as a critical component in strengthening grid stability and supporting peak demand management during the summer season."

- LUMA

At a glance:



**Location**  
Puerto Rico



**Scale**  
50 plus MW - Largest participant in Puerto Rico's (CBES+) program



**Impact**  
Sunrun enrolled 30,000+ customers into its DPP in the summer of 2025

### Overview

Sunrun's **PowerOn Puerto Rico** is the island's **largest utility-scale residential DPP** and the largest participant in Puerto Rico's Customer Battery Energy Sharing (CBES+) program.

In 2025, Sunrun's home batteries, combined with those from other aggregators, scaled to approximately 50 MW over four-hour periods. The batteries dispatched to the grid 43 times from July to October, helping keep the lights on for everyone during times of peak demand across Puerto Rico.

## Challenges Puerto Rico Faces



**FREQUENT GRID OUTAGES**



**A CRITICAL NEED FOR RESILIENT, DISTRIBUTED ENERGY SOLUTIONS**



**HIGH ENERGY COSTS**

Traditional centralized power plants are expensive, fragile, and slow to deploy. A new model was needed—one that empowered local communities.

# Solution: Sunrun Distributed Power Plant Deployment

Sunrun enrolled more than **30,000 solar and battery customers** into the PowerOn Puerto Rico program within 4 months, turning homes into dispatchable energy resources. The DPP now supports the island's grid through:

- **Automated battery dispatch** during peak demand or grid emergencies
- **Real-time coordination** using Sunrun's software platform

During DPP events, Sunrun remotely dispatches energy from customers' batteries, helping to stabilize the grid and prevent outages. Customers remain in control of their systems with Sunrun ensuring their stored energy needs are prioritized while seamlessly supporting the broader energy grid. Sunrun manages the entire process from dispatch coordination to program compliance ensuring reliable performance and value for both customers and the grid.

## Impact

### Grid & Community Benefits:

- Supports the **island's electric utility provider, LUMA**, in maintaining grid stability
- Offers **resilience during blackouts** and critical peak periods

### Customer Benefits:

- Participants receive **annual compensation while helping to avoid blackouts**
- Customers still retain energy for backup during outages

### Why It Matters

PowerOn Puerto Rico proves that DPPs can scale **faster than developing new generation and energy infrastructure**, delivering both **resilience** and **reliability** in challenging environments. It showcases a replicable model for:

- Island and remote communities
- Areas prone to extreme weather events
- Regions seeking to modernize outdated grid infrastructure

