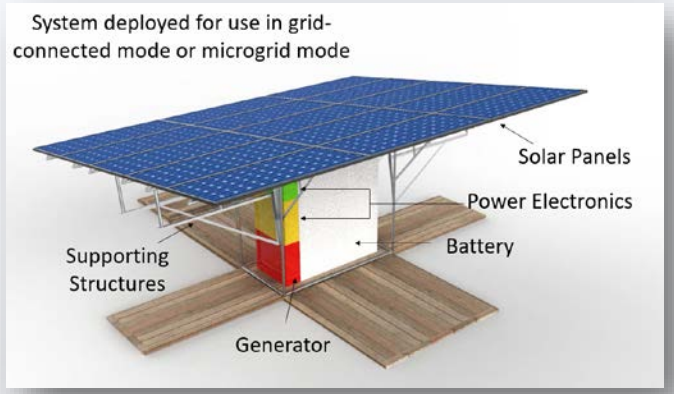
Problem

Microgrids are needed for resiliency during outages. But outages can strike for extended periods, and may affect some regions much harder than others. The weather event that caused the outage will often affect solar panels, sunshine and other fossil fuel availability limiting the usefulness of most microgrids today, which are either solar + storage or diesel only. Robust, triple-generator microgrids are often expensive and custom engineered – none can be bought off-the shelf. Most people like the idea of preparing for the worst, but when it comes to paying for it, they often balk at the high price and complex engineering and project management.

Top: Solar array on Puerto Rico after hurricane Irma (source: Rocky Mtn Inst.) left: Light outages in Florida before and after Irma (source: NOAA)

Plan

Finalize Design	Build Prototype	Determine Test Plan	Finalize Site Selection	Grow Team
Finalize electrical and mechanical design	Procure Components	Define metrics of success and test plan	Perform Site outreach for high-need areas	Partner with local connectors
Select components, define requirement	Construct Prototype	Determine keys standards and tests required	Receive signed letter of commitment from site	Bring on additional team members

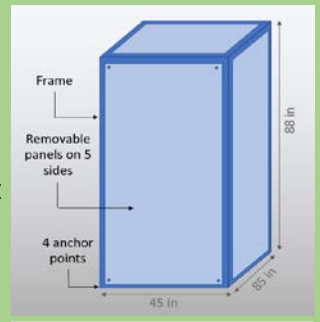


Sun E-Power

Solution

Sun EPower's Microgrid-in-a-box brings many unique features not found elsewhere in the market:

- **Three Generators for reliable performance**: Solar + Storage + diesel create a really robust solution in the face of weather so that a blocked road, low fuel supply or a few cloudy days don't shut you down completely.
- **Easy to deploy and repack:** The system can be deployed in 4 hours, including mechanical anchoring, stay away zone and electrical interconnection. The system can be repacked to survive extreme weather, or completely uninstalled to redeploy in a case such as Puerto Rico where certain regions have very long term effects after other regions are back online.
- **Robust Value Proposition:** The system arrives with a algorithm to peak shave, allowing customers to save on their monthly electric bill using only solar and storage. Costs are kept low by minimizing custom engineering requirements using a repeatable, manufacturable unit.
- **Plug and Play:** The system's user-friendly GUI is key to widespread adoption. This system has simple, yet effective controls for day-to-day bill-saving activities and in microgrid mode. The modules are easy to interconnect as it will comply with most interconnection requirements, and easy to scale by putting multiple units in place.



System Configured for Shipment or Storm Survival

Simple GUI shown in microgrid mode