How Homeowners Stay Powered During Blackouts Without Rooftop Solar

A practical guide to reliable backup power options — what works, what doesn’t, and what most people choose.

WHY THIS GUIDE EXISTS

Power outages are becoming more common, longer, and more disruptive — yet most homeowners aren't looking to redesign their house or install rooftop solar.

This guide was created to explain realistic backup power options that people actually use. No hype, no fear tactics, and no complicated technical language.

The goal is simple: help you understand what works so you can make a calm, informed decision before you need it.

This guide will help you:

Understand your real backup power needs

Compare the most common options honestly

Avoid common mistakes that lead to disappointment

Choose a system that fits your home and budget

Being in the Electrical industry for over 40 years and installing many systems this guide is to help people who feel the need to have reliable power all the time.

Start With What Actually Matters

Most homes don’t need “whole-house” backup power during an outage. What matters is keeping essential systems running so life stays manageable.

Common essentials include:

- **Refrigerator (and freezer, if possible)**
- **Internet modem & router**
- **Phone charging**
- **Basic lighting**
- **Fans or small heaters (seasonal)**
- **Medical devices (if applicable)**

Once you know what you need to power and for how long, choosing the right system becomes much easier — and far less expensive.

A lot of this is based on previous power issues, what you need running and how long the power is off most of the time.

Some areas are far more affected then others.

The Three Legitimate Backup Power Paths

1) Gas Generators

- Lower upfront cost
- Longer runtime if fuel is available
- Downsides: noise, fuel storage, maintenance, outdoor-only use

2) Whole-Home Solar + Battery

- Long-term solution
- Automatic operation when designed correctly
- Downsides: high cost, permits, installation timeline

3) Portable Battery Power Stations

- Quiet and fuel-free
- Safe for indoor use
- No installation required
- Downsides: higher upfront cost than basic generators

Each option has trade-offs. The “best” choice depends on how much power you need and how much complexity you’re comfortable with.

What Most Homeowners End Up Choosing

For many homeowners, portable, expandable battery systems offer the best balance of convenience, reliability, and simplicity.

They're commonly chosen because:

- **They work immediately (no permits or installers)**
- **They're quiet and safe indoors**
- **They can be recharged from a wall outlet or optional solar**
- **They can be expanded later if needs change**

Instead of trying to power the entire home, most people focus on essentials — which keeps costs reasonable and expectations realistic.

Realistic Cost Ranges

Small Backup ($500–$800)

- **Phones, lights, internet**
- **Short outages or apartments**

Serious Essentials ($1,000–$2,000)

- **Refrigerator + internet + lights**
- **Most popular range for homeowners**

Extended Runtime ($2,500+)

- **Longer outages**
- **More devices or expandable systems**

Being honest about budget up front helps avoid buying the wrong system — and avoids frustration later.

Common Mistakes to Avoid

- **Buying based only on peak watts instead of runtime**
- **Trying to power everything instead of essentials**
- **Ignoring recharge options during longer outages**
- **Underestimating noise and fuel needs with generators**
- **Never testing the system before an emergency**

A little planning now prevents stress later.

This is where really understanding your needs before investing a ton of money on something

I have installed all kinds of systems from just a small generator that you pull start to complete systems with transfer switches and automatic start generators.

Simple Next Steps

1. **Write down your essential devices**
2. **Decide how many hours you want to cover**
3. **Compare systems designed for that use case**
4. **Test your setup once at home**

I suggest you create a google spreadsheet and use the columns to list all the appliances then the power needs of each one in amps so you can add up what you need for the bigger items. Then you can look at the smaller loads, lights, computers etc. Remember not all the appliances run all the time but they need the power to start up many people the forget the starting load.
So it is a little challenging but I am happy to provide any assistance you need just email me dave@practicalpowerguide.com
I will respond thanks

Closing:
I'll be sending a follow-up email with a short comparison of reliable backup systems so you can see what fits your situation best.