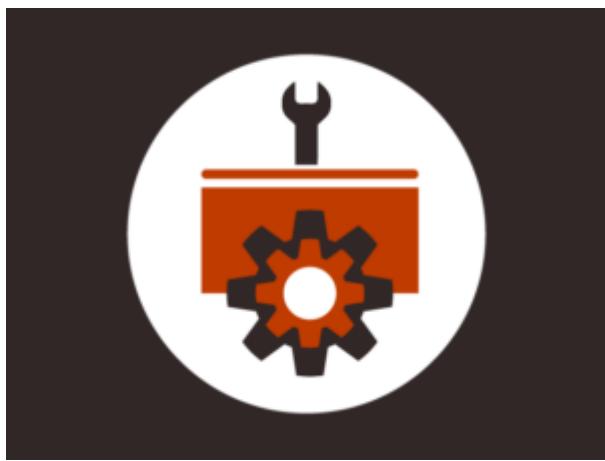


# Protect Your Home From Brownouts

## Infographic



# BROWNOUTS

## PROTECT YOUR HOME WHEN THE POWER GOES OUT

Brownouts are an intentional or unintentional **drop in voltage** from utilities or other power sources that **can cause damage** to your home's electronics. Brownouts can cause damage to insulation and cause unexpected electronic failure in the future. A sustained brownout could cause **damage to electric motors** that are in everyday appliances including washing machines, dryers, fans, air conditioners, refrigerators, and freezers.



## PREPARE YOUR HOME FOR BROWNOUTS:

**BEFORE or DURING** Brownouts

### Uninterruptible Power Supplies

**against all power disturbances.** These work by providing battery backup to critical electronics to protect them from sudden shutdowns.



Energy storage systems consist of batteries that **provide backup**

**during service interruptions.** These can be used to power critical systems in your home. Energy storage systems can be paired with home solar power to become more energy independent. Utilities **may offer incentives** for energy storage systems.

### Energy Storage



### Smart Meters

between your home's **electrical** needs and your energy provider. These can **help you reduce energy costs** and provide utilities with more information on how much electricity is being used in their service areas.

Smart meters allow for **greater communication**



Generators **provide energy during power interruptions.**

Both portable and standby generators should be **used with a transfer switch** to prevent unintentional energization of surrounding areas which could cause harm to utility workers or neighbors. **Install CO detectors** and keep generators at least **20 feet** from homes and away from doors and windows.

### Generators & Transfer Switches



### RECOVERING from Brownouts

#### Surge Protective Devices

SPDs **protect against voltage spikes** that can cause damage to your electronics when **full power is restored**. Whole home surge protection is **required** in the **2020 National Electrical Code**.

Please share this free resource to save lives



[www.facebook.com/ESFI.org](https://www.facebook.com/ESFI.org)

[www.twitter.com/ESFIdotorg](https://www.twitter.com/ESFIdotorg)

[www.youtube.com/ESFIdotorg](https://www.youtube.com/ESFIdotorg)

Brownouts are an intentional or unintentional drop in voltage from utilities or other power sources that can cause damage to your home's electronics. Brownouts can cause damage to insulation and cause unexpected electronic failure in the future. A sustained brownout could cause damage to electronic motors that are in everyday appliances, including washing machines, dryers, fans, air conditioners, refrigerators, and freezers.

## PREPARE YOUR HOME FOR BROWNOUTS

Before or during Brownouts:

- **Uninterruptible Power Supplies (UPS)**

These devices can protect against all power disturbances. These work by providing battery backup to critical electronic to protect them from sudden shutoffs.

- **Energy Storage**

Energy storage systems consist of batteries that provide backup during service interruptions. These can be used to power critical systems in your home. Energy storage systems can be paired with home solar power to become more energy independent. Utilities may offer incentives for energy storage systems.

- **Smart Meters**

Smart meters allow for greater communication between your home's electrical needs and your energy provider. These can help you reduce energy costs and provide utilities with more information on how much electricity is being used in their service areas.

- **Generators & Transfer Switches**

Generators provide energy during power interruptions. Both portable and standby generators should be used with a transfer switch to prevent unintentional energization of surrounding areas which could cause harm to utility workers or neighbors. Install CO detectors and keep generators at least 20 feet from homes and away from doors and windows.

Recovering from Brownouts:

- **Surge Protective Devices (SPD):**

SPDs protect against voltage spikes that can cause damage to your electronics when full power is restored. Whole home surge protection is required in the 2020 National Electrical Code.

Source: Republished with permission from *Electrical Safety Foundation International (ESFI)*