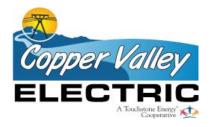
Copper Valley



Get Knowledgeable About Home Standby Generation

While CVEA does everything they can to deliver your power through safe, reliable, cost-effective means, the Co-op cannot guarantee 100 percent reliable power, especially considering the difficulties and challenges encountered in CVEA's rugged service territory.

Let's face it, there is no good time for a power outage. Some members prepare for the possibility of an extended power outage by purchasing an electric generator as a standby system. In some cases, these systems can provide electricity to major appliances, lights, or possibly even an entire home or business until power is restored.

There are two basic standby generation installations: portable standby generators and permanent standby generators.

Portable Standby Generators

Portable standby generators are typically under 8,000 watts and would most often be used to power a select number of items in your home or business. Appliances and lights are unplugged from wall outlets and connected directly to the generator utilizing electrical cords.

When using this type of generator, make sure the total load of all lights and appliances connected to the generator doesn't exceed the output rating. Electrical cords need to be properly sized to handle the current flow. Make sure that cords are kept clear of walking paths to avoid tripping hazards in low light conditions and avoid pinching the cords indoors.

Finally make sure that the generator is placed outdoors or the exhaust is vented outside to prevent hazardous exhaust gasses from entering into your home or business.



Permanent Standby Generators

Permanent standby generators are permanently connected into your home or business electrical system, range in size from 5,000 watts to more than 20,000 watts, and can provide electricity to the entire building. They can either be manually or automatically operated, depending on the type of double-throw transfer switch installed.

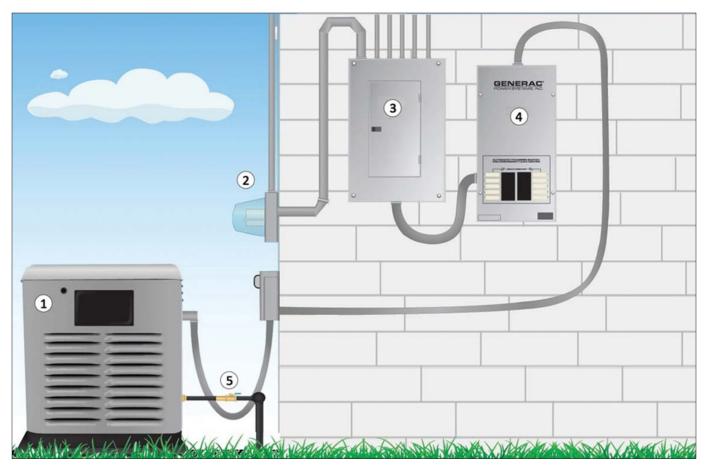
An automatic standby generator detects when a utility power outage occurs and starts the generator automatically, power can then be automatically restored to your home or business after the outage. Note: Standby fuel operated generators don't qualify for Net Metering under CVEA Tariff 3 Section 17.



As mentioned above, there are two types of double-throw transfer switches: manual and automatic transfer. A manual transfer switch requires the user to physically move the switch from the utility source position to a standby generator source position. The configuration is wired eliminating the possibility of connecting the standby generator to the overall utility system.

An automatic transfer switch detects a utility power outage and changes from the utility source to the generator source position. During a power outage a short time later, typically less than one minute, the automatic standby generator is powering your home or business. Once utility power is restored it will

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Above, typical installation of a permanent home standby generation system. 1. Permanent standby generator, 2. Utility meter, 3. Electrical breaker panel, 4. Transfer switch, 5. Fuel line. Far left, example of portable standby generation system. Left, a permanent standby generation system.

switch back to the utility source.

Members will have to determine which type of transfer switch and standby generation system might work best for them.

While a generator may offer peace of mind, CVEA wants to make sure members are also aware of the concerns and/or requirements of installing a generator in your home.

A generator may be able to keep your home or business running during a prolonged outage, but they can be expensive, noisy, and potentially dangerous. Generators can pose serious safety hazards to you and others, including hazardous exhaust gasses if not properly ventilated, excessive sound levels, and electrical shock. To reduce these risks, members should follow all Manufacturer's safety instructions.

In addition to member safety, the safety of CVEA personnel working on the electrical lines is of paramount importance to the Cooperative; it is required that standby generators have appropriate safety devices to prevent connecting to the energized system or feeding energy back into the system during a utility power outage.

This requirement is addressed in the CVEA Tariff 3, Section 9.13 where it states, "Standby generation installations shall

include the requirement for the installation of a double-throw switch on the consumer's side of the kilowatt-hour meter, with the capacity in either position equal to the total connected electrical load through the switch. All such installations shall be subject to prior approval of the Cooperative in order to assure the safety of the Cooperative's personnel."

If a member decides to install a permanent standby generator, they must contact CVEA prior to installation, to obtain approval. In some cases a CVEA employee may ask to check your electrical generator transfer switch for safety.

If you already have a permanently installed standby generator please contact CVEA and let them know. CVEA will make note of individual installations in order to inform employees working on the system of your back-up generator.

If you are unsure if your standby generator is wired correctly, contact a licensed electrician to inspect it for you. Please note: members are responsible for any injuries or damage to your property, your neighbors or CVEA's, resulting from an improperly installed or operated generator.

For additional information on home standby generation, please contact Travis Million at 822-3211. ■

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