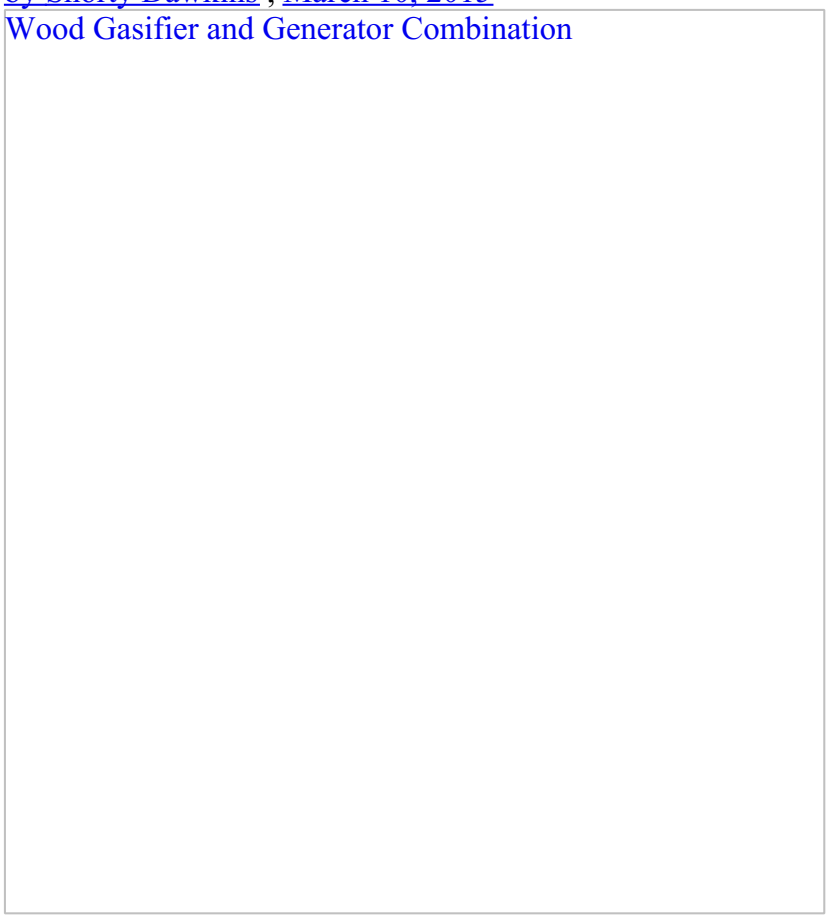
# Eureka CPT – Generators


by Shorty Dawkins , March 10, 2015
Wood Gasifier and Generator Combination



Wood Gasifier and Generator Combination

by Shorty Dawkins

Like Brandon Smith, I am a member of the Eureka CPT. Being 63 years old, I am not up to being a member of a Field Team. My legs and back won't handle the rigors of the Field Team. Nevertheless, I am committed to doing what I can, and have some valuable knowledge and life experiences to contribute. I was a carpenter for thirty-five years, and have been interested in, and learning, several different things. In our CPT, I am a member of the Home Guard, and have been designated the Engineering Team leader.

Last Saturday, I gave a 45 minute talk on generators. My talk was not about specific generators, but about how to figure your needs in order to choose a suitable generator. DO you need a 10,000 Watt generator? A 5,000 Watt generator? Or is a smaller generator enough for your needs? How can you decide? It all comes down to what devices you need for survival. If you have a well as your primary water source, you need enough power to run it. Refrigeration is important, though not an actual necessity. If your house is heated by a boiler or furnace, you will need electric power for the pump or fan that they have, or you won't have heat. The ability to charge batteries for your radio is important, and a few lights make life a little bit more bearable, also. All these devices use electric power, but how much? On each device, there is information on its power usage. On the inside wall of my refrigerator, is a tab telling me how much it draws in amperage, while in operation. It informs me it draws 3.2 amps using 115 volts AC. So, how do I know how many watts it uses, as most generators are rated in watts? There is a simple formula for determining the watts:

**Amps X Volts = Watts**

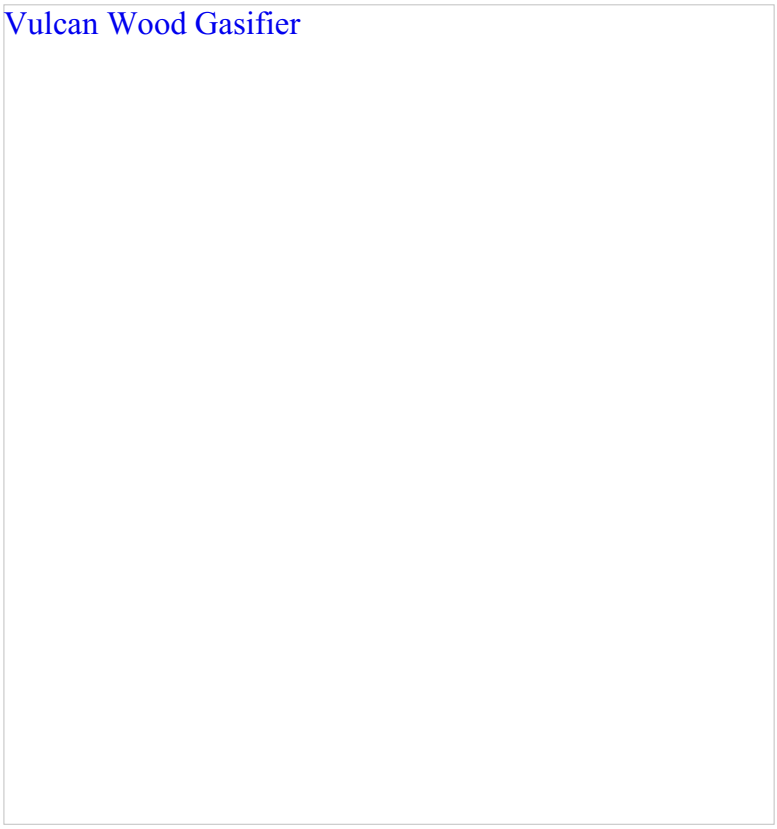
In my example of the refrigerator, I have 3.2 Amps times 115 Volts = 368 Watts. This is how to figure out your generator needs. Just use the formula with each device you plan on being necessary for your survival. Add them all together. Let's say your total comes to 5200 Watts. You would need a 5,000 Watt Generator, as it can be assumed not every device will be operating at the maximum draw at once.

Another consideration in generators is: Do you need a 240 Amp outlet? Deep well pumps usually use 240 Volts. If the tag on any of your needed devices says it needs 240 Volts, the generator you decide on will need a 240 Volt outlet.

**What Type of fuel?**

There are gasoline generators, diesel generators, LP (Liquid propane) gas generators, Natural gas generators, and dual fuel generators that use a combination of two of the above. (some combine three, for instance: Gasoline, LP gas and Natural gas). Which to use?

My suggestion is that you choose a dual fuel generator, if you can afford it; one that uses gasoline or LP gas. Gasoline can be used for short term power outages, like a storm caused outage. If you expect power back in several hours, or even a day, the gas you keep stored will be easy to use. For longer outages, such as a grid down outage, when power may be lost for weeks, months, or longer, LP gas is good, because it lasts indefinitely, without additives. Of course, you will need to have a lot of LP gas stored to last a long time, which can get expensive. And any fuel will eventually run out in a grid down situation, as the supply will cease to exist. What to do then?




Vulcan Wood Gasifier

**Make Your Own Syngas**

What is syngas? Syngas is a methane type gas that is made from burning wood, or any dry organic material, such as leaves, corncobs, twigs or wood chips. It will run any internal combustion engine, be it a gasoline generator, a LP gas generator, a tractor, even a car. If you do an Internet search for "wood gasifiers", you will find a number of sellers of units, some of which include the generator as part of the package they offer. Some of the systems offered are large scale systems, but there are several for sale for

5,000 watt (5KW) generators. I found one gasifier able to make syngas for a 5KW generator for $1,400. That may seem like a lot of money, but imagine buying several thousand gallons of gasoline, or propane gas, and you'll see how reasonable the price becomes. These gasifiers burn small pieces of dry, organic matter, such as wood pellets, wood chips, shredded leaves, and even shredded corncobs.

Imagine, if you will, a grid down situation, where the power company stops supplying power, when trucks stop delivering fuel to gas stations and propane dealers are no longer in business. Where will your fuel come from? With a gasifier, and a generator, you can supply your own power. It will take effort, but you can supply your needs and possibly a neighbor's needs.

A gasifier, used in conjunction with solar power, will give you flexibility and redundancy. The two combined create a long-lasting option for when the power grid shuts down. For those interested in getting "off grid", a gasifier and solar power make it possible.

In a future article I will discuss options for solar power.

Categories: All, CPT - Engineering, Featured

# About Author


## Shorty Dawkins

I am a writer of novels, currently living in the woods of Montana. My 5 novels can be seen here: https://www.oathkeepers.org/my-5-books-shorty-dawkins/