

Living Off the Grid

By Anne Groebner

What is energy? According to Larry Bell, Owner of Alternative Energy Discount, energy is the basis of all things. As an energy master, Bell has a mission to get the message out about anything notable concerning alternative energy such as solar and wind. His mother company is called North Eastern Arizona Energy Service Company and it is a non-profit business that promotes clean sustainable energy. Now they have opened a brick and mortar store that allows people to stop by and actually see and purchase the materials to put in their own energy systems.

Bell has an immense fascination with the workings of energy. He is an inventor and is passionate about bringing new ideas to the public that will save them money or make their life easier using alternative sources of energy. He is adamant about testing something before any of his customers spend money on it. "Anytime someone states that they have an invention that really supports humanity, I have to be there to support them," says Bell. "So, we buy it with hopes that they are telling the truth. As an energy-aware company, I will occasionally suffer the loss or will determine if the product is worth the purchase." He showed me several inventions to prove that life is not only easier and cheaper but it is pretty amazing how things work within the solar and wind lifestyle.

He started out showing me his magnetic levitator (mag-lev). It is a small, simulated earth globe suspended in air by magnetic energy. Nothing was touching the globe except energy. Then we moved on to his Sterling Engine. This is an engine that has been in existence for over 200 years. Its energy power is created by the difference between hot and cold air — just ambient air. It creates power difference between cold and contracted air and heated and expansive air within a confined space. "You heat one side and you keep the other side cold," says Bell, "and alternate hot, cold, hot, cold and the engine runs great!"

They have solutions for solar flares and CMEs (coronal mass ejection is a significant release of plasma and magnetic field from the solar corona, often following solar flares). They help people build Faraday cages (named for the notable scientist Michael Faraday who established the basis for the concept of the electromagnetic field in physics). These cages produce a protective element that is similar to an experiment that Nikolas Tesla (the inventor of the Tesla coil and alternating current machinery) did in the 1800s where he sat inside a small iron cage with bars in it and had massive amounts of lightning strike it while he sat there and read a book — unharmed. A Faraday cage is added protection. For example, according to Bell if a solar flare or CME affected the grid, any appliance that it touched could burn out. What his company is doing is finding solutions to prevent that from happening. They have big 50-gallon drums that are Faraday cages. In fact, they can build a room into a Faraday cage.

Bell created an oven that cooks with hydrogen, made from a water jar connected to solar panels. At his house, the water pump is driven by wind and pumps more water than he needs. Recently, he has discovered that they can take a standard water heater in a house and take the heating element out of it and replace it with one of their elements and now they have the ability to have solar or wind hot water - for free! "We are so excited with this solution," says Bell, "because I used to sell these solar hot water heaters that sat outside. We had so many problems with those. It wasn't the heater itself, it was the fact that you had to get the water out there, and then get it back inside — and sometime in the coldest part of winter!" Now they have

found that they can heat water without it leaving its controlled environment. His newest experiment is using the same elements to heat the floor of his battery storage building.

At Alternative Energy Discount, they sell it all these products. “We decided early on that if we sell the product, then we can promote solar and wind as alternative methods of energy.” says Bell. They have great stock on panels and batteries and all the other equipment that is needed such as controller and converters — mostly the standard type of equipment that you would use for your home. “We help customers through the whole process, including self-installation. Most people can get by with a modest set up that would cost an average of around \$2,000 and still have enough site potential. Bell would recommend an inverter that would make available 1500 watts. He and his wife have lived off the grid on 1500 watts for over 20 years. They strongly push self-installation because “it’s not rocket science,” says Bell. They do not install but they have a list of installers that they will recommend if needed.

People come from all over the country and the world to get help from Alternative Energy Discount with their solar and/or wind investment. In fact, they have doubled their business in the past year. They feel that, if they can get people to see what is available, they can save them money and allow them to live, at least partially, off grid. “We feel there is a strong spiritual element to what we are doing — and spirit is energy.” says Bell

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