A little planning makes living with solar easier than you think

By Jennifer Stein Barker

People who are considering living on solar power often come to see how our system works. While they listen raptly to Lance’s technical descriptions of meters, wire gauges, inverter efficiency, and charging amps, sooner or later someone always sidles up to me and asks, “What’s it really like to live on solar power with no backup?” You see, our system has no generator or grid power supply to supplement our solar panels.

Well, it was no trouble at all getting used to it. I certainly feel lucky to live here in the pine woods of eastern Oregon, rather than feeling deprived because I can’t always do everything at once. Just as I have to plan time-consuming activities because of time constraints, I sometimes have to plan out my power usage because of power supply constraints. This isn’t as bad as it sounds.

Most of the year I can vacuum, do the laundry, play the stereo, and run my computer all at once (if I really wanted to). I could turn on the blender and all the lights in the house, too, just for fun, and there would still be enough power left to run my Sawzall. But in the heat of the summer, and the dark of winter, I prioritize my power use.

The author prepares a meal on a traditional wood cookstove while state-of-the-art electronic equipment regulates her photovoltaic power system.

The reason for summer prioritizing is that our primary summer use is water pumping. That’s the use which our system is sized for, and the one which we’ve had the most trouble finding an efficient appliance for. Our solar system supports a major garden which supplies all our vegetables and much of our fruit for over eight months of the year. When it’s hot and dry, we need maximum irrigation, and the sun provides it. Who wants to be anywhere but in the garden then, anyway?

The other half of our usage equation is that every appliance we use very much is chosen for maximum efficiency. Our Staber washer does a load of laundry for 1/3 the power and 1/2 the water of a conventional washer. (It’s made in the USA, too, as are most of the components of our system.) This has a minimal impact on our power supply, even during the dark days of winter or at the height of irrigation season.

Of course, things we use only a minute or two a day, on average, don’t have to be chosen quite so carefully. I may sit in front of my sewing machine for hours, but how much of the time is the motor actually running? I chose it for features like stretch-stitch capabilities, rather than power consumption. However, my computer, screen, and printer (on which all my BHM articles and my cookbook were written), were carefully considered before purchase. We chose models that use only 40 watts total when everything is running, because I sometimes have them on all day. This careful purchasing makes power supply less of an issue when deciding whether or not to use power. (If you only had five gallons of gas, would you set off on a 100 mile trip in a gas hog?)

The biggest issue for us is quality of life. Since we don’t have a generator, we do have to consider the state of our power supply when planning power-using activities. However, we don’t have to spend time earning money to buy, maintain, and feed a generator. We don’t have to obtain and deal with toxic, smelly fuel for it. Most of all, we don’t have to listen to it. The added responsibility of careful planning seems a small trade-off for these privileges.

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