

‘Reverse’ Fuel Switching?

WEC Recommends The ‘Pledge’ Instead

From the June 2008 issue of *Co-op Currents*

Washington Electric Cooperative does not want history to repeat itself. During the 1990s WEC led the way among Vermont electric utilities in assisting its members to change from electric space heating, water heating, and clothes drying to other, less-costly fuels. Those were likely to be fuel oil or propane for heating, and LP gas (propane) for water heaters and dryers. WEC’s programs were called “demand-side management,” and in those days, just a decade ago, fossil fuels represented a less-expensive option than electricity for Co-op members.

But now the tables have turned, and Washington Electric and other Vermont utilities are again fielding inquiries about fuel switching – only now, people are asking about changing their home heating and appliances from fossil fuels to electric power. The reason is cost. Every American knows that petroleum-based fuels are increasing in cost to a degree that is not just shocking, but frightening to homeowners – particularly those in cold climates like Vermont.

This time, WEC does not want to lead the pack in fuel switching. But the fact that Washington Electric hasn’t had a rate increase since 1999, and is not expecting to raise its rates in the foreseeable future, presents a problem.

“One of the unintended outcomes is that, for all utilities but especially for ours, electricity prices look safe at the moment,” said Bill Powell, Washington Electric’s director of products and services.

“What’s more,” Powell continued, “some people are also pointing to the fact that our electricity comes from relatively ‘green’ sources and saying, ‘Why shouldn’t I be using this locally produced green energy instead?’”

WEC’s answer to these questions is unequivocal: This is not the time to start using electricity for residential hot water or heating.

“The relationship between the price of electricity and a gallon of oil or propane is always changing,” said General Manager Avram Patt. “People should not make long-term decisions based on the short-term prices of the day.”

Commenting while attending a national electric co-op conference, Patt added that national experts believe that, while we are at the moment experiencing an unrealistically high “bubble” price for fuels caused by a number of factors – including speculation in the energy market – high energy costs will be a permanent fixture. Prices may “dip” slightly when market speculation calms down, but ultimately the trend will be continued increases in the cost of energy.

“At the same time, electricity costs will continue to climb,” said Patt, “even, eventually, at the Co-op. Predicting is hard, but one thing is sure: the relationship between fuel and electric prices is always shifting and changing.”

Another big worry concerns lower income Vermonters who may plug in portable electric space heaters when they can’t pay their heating fuel bill.

“We’ve already been seeing this for a few years and especially this past winter,” Patt said. “We understand why people feel forced to do this, but they’re usually making matters worse for themselves. That electric heat can double or even triple their monthly electric bill, and the Co-op and other utilities are in a position where they’re having to disconnect increasing numbers of people for non-payment because of this.”

It’s a dilemma that leaves low-income people, particularly, in a difficult situation. That makes a societal response more important than ever – WEC members signing up for the Round-Up program, for example (call our Customer Service Representatives to find out how); Congress and the administration bolstering the LIHEAP program. But the message for WEC members is straightforward: Don’t switch to electric hot water, and don’t rely on electric space heaters. It’s a losing proposition.

For some, a solar solution

WEC's Bill Powell, whose work involves helping members find ways to reduce their electric consumption and get better energy performance from their homes and businesses, proposes a solution that may be suitable for some member households. It's solar hot water.

The best candidates are typically households with three or more occupants, and high hot-water use. A smaller household with less hot-water usage might also benefit from a solar water-heating system, but the cost-effectiveness (or "break-even") point may be longer-range.

Responding to member interest, WEC solicited proposals from local installers of solar equipment who would be interested in offering a discount to WEC members. Those proposals are being evaluated, and the Co-op will soon make this information available on our Website and through other channels.

"Solar hot water is now price competitive with fuels in many cases," Powell noted. "People's situations will vary; there will be unique needs in each house. For some households solar hot water can meet 70 percent or more of the hot water load. With a solar system backed up by an electric hot water tank, that could be a savings, roughly speaking, of \$500 a year from a \$700 electricity cost – the portion of the power bill that now goes to hot water for a four-person household with "average" hot water usage (17 gallons/ person/day, which is the U.S. daily average).

So if you are considering lessening your use of fossil fuels, or if you're building or renovating, solar is an option you may want to consider. And it is made more feasible as one of the many incentives in Washington Electric's new "Pledge" program.

Don't be 'average'; Take the Pledge

Whether your primary concern is your monthly power bill, your carbon footprint, or the country's dependence on fossil fuels, your first consideration should not be the source of the power you're using, but how much power you use. WEC strongly recommends that you start by investing in energy efficiency.

That includes people who may not think they need to make energy efficiency investments – the so-called "average" electricity consumers.

"Our year-round members use an average of 19 kilowatt-hours (kWh) a day," said Powell. "That comes out to around 570 kWh a month, for an electric bill of \$88. That's average. The trouble is that if people hear that their usage is average they say, 'I'm average? No problem!'"

But people who use the "average" amount of electric power (or more, obviously) are not part of the solution to U.S., Vermont, Washington Electric, or personal energy-demand problems. Being "average" is merely a mathematical formula. If a large number of users on an electric system are wasteful, or for any reason consume a lot of power, the "average" goes up. "Average" doesn't mean efficient, and it doesn't mean cheap.

"Average" consumers can lower their electric bills by becoming more-efficient power consumers, and WEC's Pledge program is the place for Washington Electric members to start. WEC developed Pledge in partnership with Efficiency Vermont (EVT), the state's nationally famous statewide "efficiency utility."

"Pledge is not a one-size-fits-all program," explained Powell. "We work with people to identify and correct energy inefficiencies in their homes, and help them make specific improvements that will rectify those problems and lower their electric bills. It usually has the additional benefit of making the homes more comfortable."

Members enrolled in the program "pledge" to attain energy-reduction goals, which they set for themselves with advice from the Co-op and EVT. WEC and EVT can often help them defray some of the costs associated with those home improvements. When they are successful and meet their goals, the Co-op presents them a cash reward, which is based on the amount of their energy reduction. Pledge is a service that WEC hopes will "push" members into action and help them lower their use of all energy fuels.

For some of the more costly home energy improvements, members may qualify for financing through the Vermont State Employees Credit Union (VSECU), and because of the cooperative relationship between VSECU and Washington Electric, all WEC members in good standing can

qualify for VSECU financing. Under the Pledge program, WEC and VSECU will buy down the interest on the loans.

Energy efficiency and conservation— using less energy, and using it wisely – are the best hedge against a volatile and insecure energy market.

“These are better solutions than reverse fuel-switching,” said Powell.

Through Pledge, WEC would like to help you get started. Call Bill Powell at the Co-op for more information, or check the Co-op’s website.