Lineman's Safety Rodeo

Journeyman Lineman Joe Alexander competing at the 2019 Lineman's Safety Rodeo.

Eleven teams of linemen participated in the 22nd annual Lineman's Safety Rodeo sponsored by the Association of Illinois Electric Cooperatives (AIEC) on Friday, Sept. 27th. The rodeo gives linemen the opportunity to showcase their skills in a friendly competition with other lineworkers across the state.

Joe Alexander, Aaron Rodhouse, Nathan Wegs, Cameron Kemper, Josh Davis, and Ike Richard represented Illinois Electric Cooperative at this year's event.

For more photos from the Lineman's Safety Rodeo, visit our Facebook page at *facebook.com/illinoiselectric*.

My Recommendation: Get It Just Right. Use Goldilocks Sizing for Solar Installations.

Commentary by Bruce Giffin

As manager here for a long time, I've been fully in favor of the co-op's using wind and solar when it makes economic sense. I'm a real fan of solar. Most systems have only one moving part!

Generally speaking, in my judgment, the size of a residential solar system should be 2 or 3 kW for it to be economical. (kW is the abbreviation for kilowatt. One kilowatt over an hour is a kilowatt hour or kWh.)

Here's a simple rule of thumb. There are 730 hours in an average month. If you're using 1,460 kWh in a month, your average demand is 2 kW. It is my opinion that a 2 kW sized system would be a smart investment under these circumstances and that anything larger may not be. (I, of course, am neither richer or poorer because of the size of any solar array.)

Of course, there are other reasons for going solar. I understand that and fully support someone who wants a solar installation for purely environmental reasons.

I've been looking at proposals for members who asked me to do that. I'd be happy to do that for any member.

Some of the proposals contain projections about what's going to happen over the next 25 years and seem to suggest that nothing is going to change. It is my opinion that we have to assume the opposite; namely, that things will change.

For example, the managements of many electric suppliers are at least considering future rate structures that are dramatically different from today's rate structures.

There's an idea that if a consumer puts a kilowatt hour (kWh) unto the electric system and takes one back in the middle of the night, everything's fine. Even Steven. No harm, no foul.

No.

If you put one kWh unto our system, we don't buy that amount of energy from our supplier. We save about 3¢. We credit your account about 3¢. If we deliver one kWh to you in the middle of the night, we buy it and it carries the costs of the power plant and of the transmission grid with it, about 9¢. If we credited members 9¢, the 6¢ difference would get paid by everybody.

If that were to happen millions and millions and millions of times, it would begin to add up for people who can afford solar systems and people who can't.

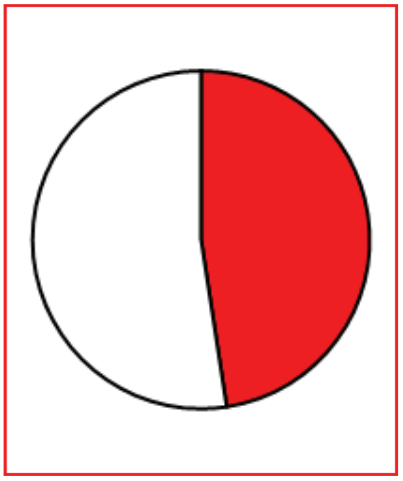
Today's metering technology, for instance, lets suppliers measure the peak monthly demand a consumer puts on an electric system and measure the account's peak demand at the time of highest costs.

As the electric industry moves to design and implement rates that collect the costs caused by those peak demands, the potential for savings from a solar array may get a lot smaller. Based on my experience, residential peak demand almost never occurs when solar production peaks.

I don't now know exactly just how new rate structures will be implemented. It is my opinion, however, that existing rate design isn't going to adequately recover the costs of operating an electric system as use of solar and wind increases.

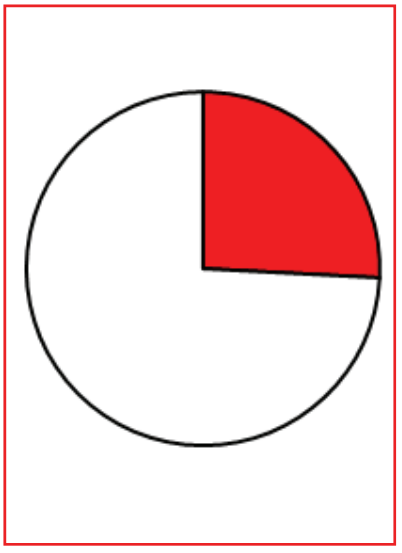
We have to pay the bills, and that means the way we collect costs will change. The industry will, if nothing else, be forced to change.

The following chart shows the portion of non-energy costs driven by peak demand in red:



We build the electric system to meet annual peak demand and doing that incurs substantial costs.

A significant portion of wholesale power costs is driven by peak monthly demand, as illustrated below in red:



Transmission costs are driven by monthly peaks as are the costs of the capacity to generate electricity that must be owned, or under contract.

(Let me oversimplify this: Even if we were too stupid to design rates which recovered the costs of providing service, let me assure you that our bankers aren't. They'd take over and collect costs.)

So, in my opinion, I don't think it is wise to assume that nothing will change over the next 25 years.

Another thing I think folks need to consider when contemplating an investment in solar is whether they can really expect a specific annual percentage increase in electric prices.

In our case, our largest source of supply comes from a power plant here in Illinois, and the coal for that plant comes from a mine across the street. Our generation supplier, which we and nine other co-ops own, owns a portion of the plant and the mine. The costs for the plant and its fuel are largely set for the next 30 years. Wages for the people who work there will increase naturally, but that's a relatively small part of the total costs. That power plant also has some of the lowest emissions of any power plant.

In other words, I think it is difficult to predict just how our costs for electricity are going to increase over the next 25 years. For example, I don't think we can simply assume that there will be annual increases of, say, 4%, each year, for 25 years.

Nonetheless, I firmly believe that we need to continually and dramatically reduce the amount of greenhouse gases – principally CO2, and methane – that we put into the atmosphere principally from coal, but also natural gas and oil. But everybody, I'd argue, needs to acknowledge that there's no easy, or really cheap, way to do that. No free lunches along the way.

Bruce Giffin began to manage the cooperative in November 1997 after 21 years experience with natural gas distribution companies and another electric cooperative. The opinions expressed here are his and do not necessarily reflect the opinions of the cooperative.

Christmas at the Pike County Lodges

Tuesday, Dec. 10th & Saturday, Dec. 14th

Six Pike County lodges will be decorated for the Christmas season and open to the public on Tuesday, December 4th and Saturday, December 8th. Christmas at the Pike County Lodges, presented by Access Illinois Outdoor, showcases Harpole's Heartland Lodge, Sunset View Lodge, New Canton Christmas Village, Sprague's Kinderhook Lodge, Illinois Extreme Lodge, and William Watson Hotel.

The tour includes a brunch, lunch, wine tasting, dessert and appetizers. Each lodge features a different floral designer who will have their creations for sale that day. A diverse selection of talented musicians will be performing a variety of seasonal music at each lodge. For more information or to make reservations, call Access Illinois Outdoors at (217) 285-2464.