BY STAN WISE, GEORGIA PUBLIC SERVICE COMMISSIONER

Look before leaping on solar offerings

The ink isn't dry yet on legislation making it easier to finance solar power systems for Georgia consumers, and already unscrupulous marketers are misleading consumers with offers to go solar and "eliminate" the electric bill. If Georgia's experience is anything like California, Arizona or even Louisiana, the Governor's Office of Consumer Affairs will soon be busy with complaints of deceptive marketing. Rest assured, solar consumers will still get an electric bill. And when you consider all capital and finance costs, solar isn't cheaper than residential and small commercial electric rates offered by Georgia utilities. Even after applying rebates and tax credits, it would take close to 14 years to break even on a $16,800 7-kw rooftop system being considered for my own family cabin served by one of Georgia's electric cooperatives.

Study the offers. Beware of sales gimmicks that predict electric rates will rise 4 to 6 percent annually. Over the last 25 years, the average annual increase has been less than 2 percent for the state's investor-owned electric utility. Ask for a good-faith estimate of the kilowatt-hours to be delivered by the system over time. Request plain language explanations of pricing terms over the life of the contract, warranties, and operation and maintenance costs and responsibilities. The lowest cost option for solar arrays may not even be a lease, but paying cash or using a home equity loan and taking the 30 percent federal tax credit oneself.

Think twice about solar backup systems. Before investing in a solar battery backup system at $5,000 to $10,000 every 10 years or so, be sure to weigh that cost against more practical investments in nonperishable foods and other goods necessary to ride out those rare power outages. If backup power is necessary, a natural gas standby generator is likely more cost-effective.

Talk to real estate appraisers. Even if cost calculations suggest you will break even in 15 to 20 years, it may not be a good idea to install solar if you may move before then. A solar array may be a selling point in some parts of California, but here in Georgia it can be a liability that harms resale value. Only a few buyers are willing to have arrays on their houses, much less willing to assume leases of older, less efficient equipment.

Be aware of restrictions. Some developments may require that solar arrays not be visible from the road. Considering the arrays perform best when facing south, this may limit your options. If you have trees that shade your home, your house may stay cooler with the shade and save you more money than if you cut the trees down for solar.

Rate structures may change. Solar customers must be connected to the grid for backup power and to sell excess power back to the system, which means they still need power plants and all the network infrastructure necessary to serve the home 24 hours a day. However, residential solar customers do not pay all these fixed costs. Efforts are under way in some states, such as Wisconsin and Arizona, to roll back the cost shifts that result. In California, a 2013 study estimated that rooftop solar has caused a $1.2 billion cost shift onto non-solar customers because solar customers pay about 19 percent less than what it costs the utility to serve them. For these reasons, Georgia should consider restructuring the fixed infrastructure costs into a demand component on residential customer bills so that everyone who uses the grid pays his fair share of the costs of keeping it operational.

Before investing a large amount of money in a home solar system in hopes of saving a few dollars a month, have an energy audit performed on your home to see if you can save energy costs every month. As consumer protections develop, technology improves and prices decline, solar energy shows great promise under the right application.

A similar column was widely distributed to news organizations around the state and may appear in other Georgia periodicals.