

## Beneficial Electrification Powers Innovation

Beneficial electrification may sound like a new idea, but the concept has been around a while. It really gets back to the grassroots of where we started by providing electricity to your homes, farms and businesses. The Beneficial Electrification League (BEL) defines beneficial electrification as “the application of electricity to end-uses that would otherwise consume fossil fuels (e.g. natural gas, propane, oil, gasoline) where doing so satisfies at least one of the following conditions, without adversely affecting the others: save consumers money over time; benefit the environment and reduce greenhouse gas emissions; improve product quality or consumer quality of life; or foster a more robust and resilient grid.”

Beneficial electrification opportunities for residential members include electric vehicles (EVs), electric water heaters and all electric heating ventilation and air conditioning (HVAC) systems. Electric vehicles are probably the biggest opportunity right now. EVs cost less to drive and maintain than gas/diesel-powered vehicles. An EV costs less per mile than gas/diesel-powered vehicles and they have fewer moving parts and require no oil changes or emissions

inspections. EVs are beneficial to the environment by reducing emissions. Many utilities have adapted to EVs by restructuring their rate schedules. South River EMC currently offers a residential time-of-use rate that is ideal for homeowners with electric vehicles. This rate is not only for EV owners, it’s available to any member that is willing to make necessary changes to their daily routines to shift energy use from on-peak to off-peak times.

Beneficial electrification has taken root and is being deployed in other areas outside of residential dwellings. Raleigh-Durham International Airport (RDU) introduced four new electric buses this past summer to shuttle passengers between terminals and parking lots. They were designed and implemented to create a more comfortable experience for passengers, improve air quality and lower operating costs. Transit agency, GoRaleigh, is also planning to purchase five more electric buses to add to their fleet.

Beneficial electrification can be seen on farms today and studies are being conducted to determine how farm beneficial electrification can become more extensive. The most



Advise Guy Eric Gainey

common example of beneficial electrification on farms is irrigation pumping. Substantial cost savings can occur on a farm when replacing these old inefficient diesel motors with high efficiency electric motors. Along with irrigation pumps, there are several farm beneficial technologies being studied today. Many of the technologies such as electric tractors are still in the infancy stages of development. Some of the other farm beneficial electrification technologies include water heaters, grain dryers, thermal electric storage systems, radiant heaters, heat pumps and heat exchangers.

For more information on electric vehicles or South River EMCs time-of-use rate schedule, visit [sremc.com](http://sremc.com), e-mail [adviseguys@sremc.com](mailto:adviseguys@sremc.com) or call 910.892.8071.

## South River EMC Communicator



Follow Us! [southriveremc](http://southriveremc)

A Touchstone Energy® Cooperative



PO Box 931  
Dunn, NC 28335  
910.892.8071  
800.338.5530  
[www.sremc.com](http://www.sremc.com)