Subject: Duke Power September 7, 2022

The staff and I meet with various groups that support and supply the town on a routine basis, and this past week Josh, Lamar Nix met with folks from Duke Energy. It was a good meeting.

As always, we had a little back and forth about how the mayor periodically criticizes Duke Energy. I always bring up those coal ash fees, along with other issues. Richard Knight, our Duke liaison, smiles and says, "Mayor, you have your job to advocate for the town, and we have our job to supply the town with power." We then all agree we need to move on and work on the issues at hand.

One challenge on which everyone in the meeting agreed on is we are all facing the fact that the demand for electric energy in Highlands, as well as across the state, will continually increase. For that matter, despite conservation efforts, the future portends for significant surges in demand, especially if the country converts to electric vehicles. We talked about this challenge later in the session, but the immediate challenge was for Duke to upgrade their incoming delivery system to Highlands.

Duke's analysis was that Highlands has approached or met the demand loads that have been allocated in our contract. The good news is the Duke is being proactive in addressing the problem with no additional expense to the town.

Their response is commendable, especially as we enter the winter months when electricity demand will increase. First, Duke is adjusting our contract to reflect the high demand periods that we are now experiencing. Second, they will upgrade their substation equipment to handle any future load increases that the town may have. Their engineers realized the increasing demand required immediate equipment upgrades to avoid unnecessary power outages.

Now some may ask if electric bills will increase? My response is that our electric rates will remain the same. But we all tend to use more power to operate more appliances like large screen TVs. Sallie and I like to plug in a large electric heater during the winter in one of our rooms to supplement our central gas heating system. That heater eats up electricity, thus our monthly bill increases. Fortunately, the town hasn't increased electric rates in a number of years, and there are no plans to do so now, even though our wholesale costs have increased about \$60,000 a month from pressures like skyrocketing natural gas prices.

We also talked about electric cars and charging stations. If the electric vehicle trend continues, the electric utilities with face major challenges, including the little old Highlands Electric Department. I should probably write another article on this very complicated issue.

Everyone at the meeting agreed that the conversion to electric vehicles is not a simple, green panacea for our planet, nor necessarily cheaper energy. Duke is already planning to upgrade their generating capacity and distribution grid. Highlands will have to upgrade our electric grid if everyone begins to charge vehicles. In addition, those now low electric charging rates will increase significantly as a national charging system replaces or equals gasoline stations. Just the sheer size of an efficient charging station is sobering. There are valid concerns about whether electric vehicles have a significantly better carbon footprint than gasoline vehicles. I have been reading about the mining of lithium that goes into electric car batteries. A case can be made that that process could rival the environmental impact of fracking natural gas.

By the way, there is a lithium vein in Gaston county. Folks there are concerned about the proposed open pit mining plan and the resulting increase in truck traffic. Uh oh, "not in our backyard!"