

I would like to lend my support to the testimony of utility industry expert Edward Burgess for the NC Attorney General's Office filed May 30. It may sound like a minor adjustment, but Duke's preferred portfolio that delays the 70% carbon reduction goal from 2030 to 2035 represents a 24% increase in cumulative carbon emissions. That is a major increase - substantively damaging our efforts to combat climate change. According to Burgess, Duke spent scarce time analyzing the implications of the lower carbon scenario with 2030 attainment, They limited the batteries that could be added to support additional solar, arbitrarily increased the cost renewables and storage, and made other adjustments and modeling decisions (including short period optimization which Burgess didn't mention) which made it much more difficult for the model to find a lower cost solution.

Burgess presents detailed and compelling evidence that Duke is "slow-walking" the investments needed to keep the lower carbon emissions pathway in play, including transmission, solar, batteries, onshore wind, and distributed energy - contrary to the express orders of the NCUC. He also shows how Duke is making unreasonable modeling assumptions for alternatives to coal that seem purposely designed to make emissions reductions look more expensive than they will be. By the time this becomes clear to all concerned, it will be too late to make the early investments needed to bring those emissions reduction investments about unless the NCUC acts now.

But there is hope as Mr. Burgess presents convincing evidence that there are technologies available that would allow Duke to achieve the lower emissions consistent with the law. In particular, he presents an innovative solution to allow more solar to be provided without adding to the interconnection challenge that Duke says limits their ability to add solar fast enough. Other solutions he recommends include greater investment in local onshore wind, purchased onshore wind from outside the territory, accelerated offshore wind, low-income energy efficiency, a concerted campaign to replace resistance heat with heat pumps, and rollout of vehicle to grid technology for energy storage. He identifies "energy only" solutions as an underutilized tool which should be considered more fully. With this focus Duke should be able to make the 70% reduction in carbon emissions by 2030 or 2032.

Another problem with Duke's analysis is they overstate the reliability value of new gas units and understate the cost of reliable gas supply. Incorporating these costs into the analysis, along with the programs above, would reduce the amount of gas that the modeling would choose - particularly the more expensive combined cycle gas plants. Duke may also be overstating the forecast for the demand for electricity, which increases the need for new gas which may not be needed.

In an earlier NCUC case Burgess presented many recommendations that would improve Duke's ability to get transmission better situated for the energy transition. For the most part, Duke has slow walked changes needed in the transmission system, based on these recommendations, to meet the 2030 goal. It's almost as if Duke isn't planning for the 2030 goal at all.

I agree with Burgess' recommendations for NCUC to order Duke: require that they commit to the 70% emissions reduction by at least 2032, accelerate coal retirements, deploy more renewable energy (particularly oversized solar with batteries, more onshore wind, and faster deployment of offshore wind), revisit the load forecast, add significantly to distributed energy resources, revisit the analysis of new gas needed, aggressively replace electric resistance heat with heat pumps, and make numerous improvements to speed the interconnection of new transmission. Please Commissioners, fully consider this important testimony.