

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION  
DOCKET NO. E-7, SUB 1214  
DOCKET NO. E-2, SUB 1219**

**SUMMARY OF DIRECT TESTIMONY OF WITNESS RORY MCILMOIL  
ON BEHALF OF CENTER FOR BIOLOGICAL DIVERSITY AND APPALACHIAN VOICES**

**Testimony as it relates to Energy Burden and Affordability Concerns**

I am the Senior Energy Analyst at Appalachian Voices, where I do extensive research on energy policy models and analyze the impacts of particular rate structures and policies on families and local communities from an equity and affordability lens. The purpose of my testimony is to address the impacts that Duke Energy Carolinas' (DEC's) proposal to increase rates and raise their return on equity will have on low-income households, and specifically on the household energy cost burden that they experience.

Energy burden means the percent of gross household income that is spent on home energy costs, including all costs for electricity and non-electric heating fuels. While it doesn't get as much attention as issues like poverty or low-income housing, and in fact is wholly rejected by Duke Energy as a definable phrase, household energy burden is a serious, pervasive and persistent economic problem faced by hundreds of thousands of households across the state. Importantly, though, the term "energy burden" is recognized by numerous governmental, regulatory, academic, non-profit and other entities throughout the United States and even here in North Carolina. To date, the Commission itself has not explicitly considered energy burden as a factor in rate cases. That is highly problematic.

My research shows that the energy burden problem facing North Carolinians would be grossly exacerbated by DEC's proposed rate increase. In my testimony, using data provided by the U.S. Department of Energy and GIS utility service area shapefiles, I determined that virtually 100 percent of the estimated 332,000 low-income households served by DEC – which is one out

of every five households served by the utility – experienced an unaffordable household energy burden in 2016, and more than 40 percent of those low-income households experienced a “high” household energy burden, as defined by the US Dept. of Health and Human Services. Using that data as a baseline, I then established an adjusted baseline of household energy burden for 2019, from which I was then able to calculate the estimated change in household energy costs, energy burdens and number of households exceeding these two thresholds that would result from DEC’s proposed rate increase in this rate case.

As a result of the modeling, I reached three primary conclusions:

First, one of every 12 households served by DEC in 2019 experienced a “high energy burden,” meaning that the percentage of their income spent on electricity bills is 10.9 percent or higher. If DEC’s originally proposed rates are approved, this would increase to one out of every 9 households by 2021 and one out of every 8 households by 2025.

Second, as of the date of the filing of my testimony in February 2020, DEC’s proposed rate increase would result in nearly two-thirds of all low-income households served by the utility falling under the high household energy burden category by 2025 – representing an increase of 50 percent from 2019 levels, and a shift of nearly 70,000 low-income households from experiencing merely “unaffordable” energy costs into the “high” energy burden category.

Third, when combined, if DEC’s original request for increases in actual residential rates is approved, annual electric bills for low-income households will have increased by approximately \$138 per year (\$11.48 per month), on average, between 2016 and 2025 – representing a 10.6 percent increase in a decade. The large majority – 94 percent – of that impact would result from DEC’s proposed rate increase in this case. The recent settlements would not substantively change the overall results of my analysis.

Given these findings, I recommend that the Commission reject this newly negotiated rate increase. North Carolina families should not experience a higher energy burden as investors gain an artificially higher return on equity. But if the Commission decides to allow some level of increase, I have two recommendations in the alternative: 1) I recommend that the Commission make energy burden a priority factor in its consideration of DEC's requested rate increase and return on equity by analyzing the impact that DEC's proposed rate increase will have on electricity costs and household energy burdens, particularly for low- and middle-income customers, as it weighs "changing economic conditions" and "customer ability to afford a rate increase" ; and 2) I recommend the Commission approve no higher than a 9 percent return on equity for DEC, and a capital structure consisting of no more than a 50-to-50 debt-to-equity ratio, as originally proposed by the Public Staff, and consider an even lower ROE that more accurately reflects both current and pre-pandemic market conditions.

Thank you for your time.