July 16, 2012

North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, NC 27699-4325

Re: Docket E-100, Sub 133; Order Requesting Comments

Dear North Carolina Utilities Commission:

The UNC Center on Poverty, Work and Opportunity submits the following statement in support of the petition filed by the North Carolina Waste Awareness and Reduction Network, Inc. (NC WARN) requesting a rulemaking proceeding to consider allocation methods in rate hike proceedings. The Center on Poverty, Work, and Opportunity supports the challenge to the Summer Coincident Peak methodology currently used to allocate costs to each customer class. This measure places an unfair and onerous burden on the poorest residents of our state and should be replaced by one that leads to more balanced and equitable results.

Poverty afflicts more North Carolinians than is commonly realized. Statewide, more than one in six—17.5 percent—fall below the stingy federal poverty level.\(^1\) Disturbingly, the numbers for children are even worse: nearly one in four children in the state is impoverished.\(^2\) And these overarching statistics disguise the grim fact that poverty disproportionately affects racial and ethnic minorities. Nor do they reveal the

---

1 U.S. Census Bureau, 2010 American Community Survey 1-Year Estimates
2 Id.
staggeringly high poverty rates in chronically distressed counties where well over 20 percent of the population is poor.

Additionally, North Carolina’s unemployment rate has outpaced the nation’s since before the onset of the Great Recession. In May 2012, the state unemployment rate of 9.4 percent was the fourth-highest in the country.\(^3\) Almost 40 percent of North Carolinians earn less than 200 percent of the federal poverty standard—approximately the figure many experts consider a conservative estimate of a “living wage” in North Carolina.\(^4\)

These startling numbers paint a bleak picture of the ability of low and moderate income families to afford basic household necessities such as utilities. This is especially true given that the average price of residential electricity has far exceeded income gains. Between 1990 and 2010, the average residential price of electricity in North Carolina increased 29 percent,\(^5\) while median household income rose a mere 2.7 percent.\(^6\)

Nationally, poorer households are spending an ever greater percentage of income on electricity. In 2012, families with a pre-tax income of less than ten thousand dollars are estimated to spend 19.5 percent of their household budget on residential electricity, up markedly from 15 percent in 2005 and 11.4 percent in 2001.\(^7\)

---

\(^4\) For example, the federal poverty threshold for a family with one adult and one child is $15,030; therefore 200 percent of poverty equals $30,060. The living income standard for North Carolina for the same family is $35,727. For two children and two adults, the poverty threshold is $22,113; the living income standard is $51,954. Poverty threshold data is available from the U.S. Census Bureau, Poverty Thresholds. North Carolina living income standard data is available from Alexandra Forter Sirota and Edwin McLenaghan, *Making Ends Meet After the Great Recession: The 2010 Living Income Standard for North Carolina*, NC Budget and Tax Center, NC Justice Center.
North Carolina electricity customers cannot choose their providers and have little choice but to accept each rate hike with stoicism, no matter how unfairly the costs may have been allocated. As a result, it is crucial that the allocation method accurately reflect use among customer classes. Duke Energy’s current rate allocation method—the Summer Coincident Peak—fails this simple test of fairness. The Summer Coincident Peak evaluates energy use at a particular point in time and determines the proportion of electricity used by each class of customer in order to fix costs. This method is flawed, however, in two fundamental ways. First, the peak use for residences and small businesses has no correlation to year-round or average use. Second, the Summer Coincident Peak obscures important differences in energy use between classes. Residences and small businesses are much more likely to experience fluctuations in demand; whereas industrial and commercial entities require large, but constant, amounts of energy. As a result, while small businesses and residences may comprise a large percentage of the overall use during the peak hour, this use is not representative of annual energy consumption.

To emphasize the unfairness that can result from the Summer Coincident Peak method, NC WARN compiled data from the most recent rate case before the Commission, Duke Energy’s Application for a Rate Increase filed June 1, 2011 (Docket No. E-7 Sub 989), to compare the cost of electricity for different customer subclasses. The results showed that costs allocated according to the Summer Coincident Peak method...
were heavily skewed against residential and small business customers. Many large industrial and commercial users (including several new data processing centers) possess the means to go off-grid during peak hours, often in response to tips from Duke Energy. The smaller number of total customers within these classes coupled with the widespread practice of reducing demand during the distribution system’s peak makes an appreciable difference in the amount of electricity consumed and recorded. The unfortunate result is that by switching for a short time to on-site power generation, large industrial and commercial customers circumvent the Summer Coincident Peak method to shift yearly costs onto residences and small businesses—costs that include the construction of generators necessitated by the data centers themselves.

Under Section 2 of the Public Utilities Act, the Commission is charged with providing “fair regulation of public utilities in the interest of the public.” This includes providing:

just and reasonable rates and charges for public utility services without unjust discrimination, undue preferences or advantages, or unfair or destructive competitive practices and consistent with long-term management and conservation of energy resources by avoiding wasteful, uneconomic and inefficient uses of energy.

It is important to remember that “the public” includes all North Carolina citizens, including low and moderate income residents who feel the squeeze as utility rates continue to climb. The Summer Coincident Peak method allocates costs in an inequitable manner, allowing high-load industrial and commercial customers (including some of the

---

world’s richest corporations) to game the system and pass the cost of the electricity they use, as well as the new plants that are being built primarily to meet their large annual demand, onto other ratepayers. This method rewards those customer classes that take advantage of peak-shaving techniques—a result the Commission is duty-bound by statute to prevent.

Blindly allowing the state’s public utilities to continue allocating costs according to the Summer Coincident Peak method will only serve to exacerbate the economic pressures felt by North Carolina’s struggling ratepayers. While corporations like Apple and Google pay for their electricity at 2.45 cents per kilowatt hour after fuel costs, residential customers pay 6.74 cents per kilowatt hour and small businesses pay 7.64 cents per kilowatt hour after fuel costs. There is no justification—in law, in logic, in morality—for these discrepancies. The growing number of data processing centers in North Carolina (most of which were aggressively recruited by Duke Energy) will only augment demand for electricity within the state, necessitating the construction of new power plants. As long as costs are allocated solely according to proportional use during a single peak hour, residential and small business customers will continue to subsidize these new plants while large-volume customers reap the benefits of peak-shaving techniques.

The Commission has stated in previous rate cases that the Summer Coincident Peak method is an unreasonable means of allocating costs and setting rates, rejecting Carolina Power & Light’s 1988 request to switch to a peak-only method by ruling that “it

---

is only appropriate that high load factor customers pay their share of the cost of the base 
load plants built primarily to serve them.”\textsuperscript{12} When Dominion Power attempted the same 
maneuver two years later, the Commission again rejected a peak-only methodology by 
requiring Dominion to retain a cost allocation that “recognizes that not all production 
plant fixed costs are demand-related” and “recognizes that energy-related production 
plant fixed costs should be allocated by kWh energy.”\textsuperscript{13} Precedent such as this makes it 
difficult to justify the continued use of the Summer Coincident Peak method by any 
public utility in North Carolina.

Electricity is more than a convenience—it is a physical necessity. Not only is it 
vital for air conditioning, almost 60 percent of households in North Carolina use 
electricity to heat their homes, compared to 35 percent of U.S. households overall.\textsuperscript{14} 
With Duke Energy occupying the role of sole electricity provider for most of North 
Carolina after the Duke-Progress merger, it is imperative that the Commission investigate 
the manner in which the Summer Coincident Peak method allocates costs amongst 
customer classes. Residential customers in North Carolina are currently shouldering most 
of the burden of the enormous cost of providing electricity to high-load customers with 
sustained, year-round demand. As the Commission was created to serve the public 
interest and ensure fairness for all customers, it must reject a cost allocation method that 
results in the poorest customer classes subsidizing the power bill of heavily resourced 
multinational corporations. NC WARN’s rulemaking petition will bring this concern 
before the Commission outside the context of a rate case, where the issue of fairness of 
cost allocation methods is often overlooked or settled before any serious broader inquiry

\textsuperscript{12} Docket E-2 Sub 537, Order Granting Partial Increase in Rates and Charges, p. 130. 
\textsuperscript{13} Docket E-22, Sub 314, Order Approving Partial Rate Increase, p. 17. 
\textsuperscript{14} 2010 American Community Survey 1-Year Estimates.
is made. The Center on Poverty, Work, and Opportunity therefore supports NC WARN’s petition to open rulemaking proceedings that would require re-consideration of rate determination methodologies in every rate case before the Commission.

Sincerely,

Gene R. Nichol
Center on Poverty, Work and Opportunity
University of North Carolina
Chapel Hill, NC

*Note: The Residential category used in these statistics incorporated the rate schedules for Residential Service (RS), Residential Service Energy Star Standard (ES), Residential Service – Electric Water Heating and Space Conditioning (RE), Residential Service – Energy Star All Electric (ESA), and Residential Service – Time of Use (RT). The Small Business category as used in the report refers only to customers billed under the rate schedule for Small General Service (SGS). The High-Load Industrial and Commercial category includes customers billed under the rate schedules for Optional Service Time of Use – Commercial Customers (OPTG), Optional Service Time of Use – Energy Only (PILOT) (OPTE), and Optional Power Service Time of Use Industrial Customers (OPT-I). The Data Center category refers only to customers billed under the Optional Service Time of Use – High Load Factor (OPTH) schedule.

*Note: This chart does not incorporate every rate schedule, so the values will not equal 100%.

**Note: The Residential category used in these statistics incorporated the rate schedules for Residential Service (RS), Residential Service Energy Star Standard (ES), Residential Service – Electric Water Heating and Space Conditioning (RE), Residential Service – Energy Star All Electric (ESA), and Residential Service – Time of Use (RT). The Small Business category as used in the report refers only to customers billed under the rate schedule for Small General Service (SGS). The High-Load Industrial and Commercial category includes customers billed under the rate schedules for Optional Service Time of Use – Commercial Customers (OPTG), Optional Service Time of Use – Energy Only (PILOT) (OPTE), and Optional Power Service Time of Use Industrial Customers (OPT-I). The Data Center category refers only to customers billed under the Optional Service Time of Use – High Load Factor (OPTH) schedule.
APPENDIX D

Average Price of Electricity by Customer Class, North Carolina 1990-2010

Source: U.S. Energy Information Administration, Electricity Data, Average Retail Price of Electricity to Ultimate Customers, By State, by Provider, Annual Back to 1990 (Form EIA-861).
Available at: http://www.eia.gov/electricity/data.cfm
North Carolina Median Household Income