February X, 2021

Mrs. Kimberley A Campbell, Chief Clerk
North Carolina Utilities Commission
Dobbs Building, Fifth Floor
430 North Salisbury Street
Raleigh, North Carolina 27602

RE: Duke Energy Progress' and Duke Energy Carolina' jointly submitted 2020 Biennial Integrated Resource Plan, Docket No. E-100, Sub 165

Dear Chair Mitchell and Commission Members:

The cities of A, B, and C and the counties of X and Y (subsequently referred to as "the undersigned") respectfully submit the following comments on the Duke Energy Progress and Duke Energy Carolinas 2020 Biennial Integrated Resource Plan (IRP) filed on September 3rd, 2020. These comments were drafted alongside other North Carolina local governments in addition to those undersigned in this letter, as a collective effort to advance our governments' renewable energy and greenhouse gas reduction targets.

The undersigned are some of the largest Duke Energy customers and our local governments collectively serve more than X million North Carolina residents. Combined, our community-wide and government operations constitute approximately X MWh / year of energy demand. Accelerating a transition to a clean energy economy is a shared priority for our communities, and the decisions made in this 2020 Biennial IRP process, including the decisions made regarding generation, transmission, and energy efficiency, will critically impact our ability to meet the targets below. While our individual renewable energy goals and GHG reduction goals vary, the undersigned all share a vision of a reliable, affordable, resilient, and equitable energy system.

Undersigned Local Government Renewable Energy and Greenhouse Gas (GHG) Reduction Targets

- Town of Chapel Hill adopted a resolution in 2019 to create a Climate Action Plan and achieve 80% clean, renewable energy communitywide by 2030, and 100% by 2050. The Town also has a goal of reducing communitywide greenhouse gas emissions 26-28% by 2025.
- Orange County adopted goals to reduce greenhouse gas emissions community-wide by 26% by 2025 and transition to a 100% renewable energy-based economy by 2050.
- Durham County and the City of Durham adopted a climate action plan in 2007 with goals to reduce government GHGs by 50% and the community by 30% by 2030. In addition, the County adopted a resolution to work towards 80% renewable energy by 2030 and 100% by 2050 in our operations.
- The City of Durham has set a goal to achieve carbon neutrality in municipal buildings and operations by 2040. The city recently signed a Memorandum of Understanding with Duke Energy to work together on sustainability issues.
- The City of Wilmington adopted a resolution in 2009 establishing a municipal operations greenhouse gas reduction goal of 58% by 2050.

- The Town of Boone adopted a resolution establishing the goals of climate neutrality in municipal operations by 2030, 100% clean renewable energy used in municipal operations by 2040, and 100% clean renewable energy used in the entire Town of Boone by 2050.
- The Town of Carrboro accepted its Energy and Climate Protection Plan in 2014, which was updated in 2020 with a goal recommending an 80% reduction in 2010 municipal greenhouse gas emissions by 2030. The Town accepted its Community Climate Action Plan in 2017, which was updated in 2020 recommending a goal of an 80% reduction in 2010 community greenhouse gas emissions by 2030. Renewables are identified as a key method for achieving emissions reductions in both plans.

Several elements of the shared vision described above echo Duke Energy and the Commission's considerations to ensure affordable, adequate, and reliable electric service. Alongside these, the Commission has the opportunity to consider how the IRP's long-term planning goals can be met while also aligning with and helping to advance many local government and community-wide goals across North Carolina. The IRP is also an opportunity for Duke Energy to chart a course for how the utility will work directly with local governments to (1) prevent disproportionate and adverse health impacts to the customers already most impacted, and (2) offer energy efficiency and renewable energy programs that help achieve our shared equity goals.

Duke Energy has been and will continue to be an essential partner for implementing our climate and clean energy plans and related priorities. To date, the undersigned have established strong partnerships with Duke Energy through individual and group initiatives and the undersigned appreciate Duke Energy's efforts to model six unique IRP scenarios with various pathways to a clean energy future. The undersigned see the 2020 Biennial IRP as another pivotal opportunity to collaborate and achieve more together. We appreciate that the IRP begins to address our long-term renewable energy goals and GHG emission reduction goals as Duke Energy aims to meet their goal of net-zero carbon by 2050. Due to the urgency of climate change and the implications to the wellbeing of all, there are additional actions that should be considered to affordably and equitably reduce GHG emissions at a faster pace than currently outlined. Given this, the undersigned ask that the Commission direct Duke Energy to:

1. Retire its coal power plants as soon as possible to improve the health and public benefits of our communities and use all-source procurement for any replacement and expansion generation.

Our concerns with keeping coal power plants online any longer than absolutely necessary are due to their negative impacts on public health, the economy and the climate. Given these concerns, the undersigned commend Duke Energy's plans for retiring coal units "Allen 1-5" by 2025 in both the "Most Economic" and "Earliest Practicable" 2020 IRP scenarios and are encouraged by Duke Energy's "Earliest Practicable" 2020 IRP scenario that has all coal units set to retire by 2030. However, the undersigned have concerns about plans to primarily replace capacity with natural gas power plants, which are heavy emitters and could eventually become stranded assets due to the dramatic decline in the cost of renewable energy and maturation of storage.

All-source procurement can help ensure that Duke Energy's customers are receiving the best solutions the market can offer and benefiting from increased competition among suppliers that can lead to lower

prices. All-source procurement is a type of request for proposals (RFP) that is technology agnostic, allowing a full range of potential resources to compete on equal footing, and can create a fair process for renewable energy, energy efficiency, demand-side management, and storage to play a more critical role in addressing future energy and capacity needs. Because it typically delivers a suite of technologies and solutions, all-source procurement can also increase the grid's resilience in the face of unexpected natural disasters and reduce probabilities of outages.

A financial tool like rate-payer backed securitization, when made available in North Carolina, can address the challenge of recovering undepreciated value of the coal plants through the low-cost refinancing of that value through the issuance of low-risk bonds backed by customers paying their utility bills. **The undersigned strongly encourage Duke Energy to meet the coal retirement dates they have outlined in the "Earliest Practicable" scenario and replace any needed generation through all-source procurement with an aim towards a combination of renewables, efficiency, demand response, and storage that can provide the same services as fossil gas plants at lower costs.**

2. Update analysis methods to fully value the contribution of energy efficiency programs that help local governments and customers address affordability and climate concerns.

The undersigned are glad to see inclusion of energy efficiency in each of the IRP scenarios. Local governments work with Duke Energy on energy efficiency programs in our own facilities as well as promoting them in our communities. Energy burden is defined as the percentage of household income that goes toward paying electricity and/or natural gas bills. Households that spend 6% or more of their income on energy bills are considered to have a high energy burden. In 2018, 49% and 42% of household in DEP and DEC, respectively, had median energy burdens greater than 6%. When just looking at electricity bills, 31% of households in DEP territory and 26% of households in DEC territory had median electricity burden at or greater than 6%. Minority groups are disproportionately shouldering these high energy burdens.Recognizing that efficiency not only reduces emissions but also saves customers money, we see it as a very important component of meeting our climate and equity goals.

In its IRP, Duke Energy uses an energy efficiency and demand side management Market Potential Study (MPS) to analyze how much energy efficiency is available as a resource in Duke's service territory. The MPS uses the 'total resource cost test' (TRC), which includes costs to participants, but not their attendant benefits, eliminating valuable energy efficiency that could provide value to the system as a whole. As part of that study, we recommend using the Utility Cost Test (UCT), which the Commission directed be used as the primary test. The TRC study also relies on historic program participation data from Duke's current suite of program delivery and marketing methods to determine customer participation levels. This limits potential by missing critical tools like on-bill financing, which Duke does not currently offer.

Although the IRP details its income-qualified program offerings and the company describes it stakeholder engagement approach on the Duke website, it is not clear how or whether historically disadvantaged communities participated in decisonmaking about those programs, which may have led to underutilized/misprepresented assumptions about program use. Successful and durable low-income programs engage these communities so that programs benefit all. **Going forward, we encourage Duke Energy to clearly articulate how it has engaged historically disadvantaged communities in developing its IRP, and which of their recommendations are incorporated into the plan.**

Our local governments **encourage the Commission to review Duke Energy's assumptions in the Market Potential Study and request that Duke Energy submit updated scenarios that use a Utility Cost Test, use customer adoption models that include the full range of potential methods, including a range of financing tools.** These changes would enable Duke Energy to prioritize energy efficiency as a least cost resource for the system that delivers health, comfort, and affordability benefits to our communities.

3. Expand the distributed generation and utility-scale renewable energy solutions offered to help directly address our local government renewable energy, climate, and and equity goals

As currently proposed in the IRP, renewable energy plays varying roles across the six IRP scenarios. The undersigned applaud scenarios C-F where both solar and wind play a more substantial role. The undersigned also note that depending on the scenario selected, additional renewable energy will be needed to meet our collective governmental and community-wide renewable energy targets, either through the basegrid service mix or participation in additional customer programs. Duke Energy's renewable grid mix of 14% in the Carbon Policy scenario is too low for local governments to reach our renewable energy targets. Accordingly, **the undersigned request the Commission consider our collective goals when reviewing the proposed scenarios and as needed, request Duke Energy to utilize additional renewable energy resources or develop subsequent customer programs that allow local governments to reach stated goals.**

Given the significant portion of our communities that are confronted with energy burden as referenced above, the undersigned believe that it is ever more important to increase renewable energy procurements and collaborate on removing barriers to LMI programs. We look forward to collaborating with and supporting Duke Energy in the design and implementation of renewable energy programs such as new local renewable resources for municipal load and community-wide load, as well as community solar offerings with an emphasis on low-income customers.

4. Conduct a robust technological and economic analysis of the transmission investments needed to enable more renewables in future portfolios

A reliable and cost-effective electric grid distribution and transmission infrastructure is critical to enabling a dramatic increase in renewable energy generation in North Carolina. Conventional power systems planning and Duke's analysis suggest that significant investments in the transmission system are necessary to enable higher penetrations of renewable energy. The undersigned local governments encourage a cost-effective and systematic transmission expansion approach that enables a cleaner electricity system that includes potential transmission upgrades and has transparent assumptions. There should also be more consideration of the potential transmission benefits of operating DEC and DEP as a single balancing authority or the impact of North Carolina's commitment to the SMART-POWER memorandum. **Thus the undersigned recommend that Duke Energy undertake a more comprehensive and robust technological and economic analysis, including a substantial investigation of potential transmission alternatives, the repurposing of existing transmission corridors, and the economies of scale gained through large utility-scale renewable projects or joint balancing area planning.**

5. Reassess EV penetration rate and take a proactive approach to growing electrical load through transportation electrification offerings

Transportation electrification paired with clean energy portfolios will support the undersigned local governments' decarbonization goals and is in the public interest. Electrification will also provide value to Duke Energy through new revenue streams for the utility to grow its profits, as noted in the IRP. In the IRP, the assumed electric vehicle penetration rate is 7.3% by 2035, which might be too conservative, given major automakers' ambitious EV efforts. The undersigned commend Duke Energy's efforts through the Electric Transportation Pilot Program, approved by the Commission in December 2020 and encourage them to build on that pilot to hasten the adoption of EVs. **The undersigned recommend Duke Energy consider automakers' EV rollouts and Governor Cooper's Executive Order 80 to better forecast EV penetration, improve utility planning and actively promote EV adoption through incentives and rate design.**

In conclusion, the undersigned local governments have a commitment to the health, economic wellbeing, and resiliency of our communities. While our specific goals vary, we are all committed to a clean energy transition. The long-range plans proposed by Duke Energy will have a profound impact on our ability to meet these goals. Continuing to rely on fossil fuel-based electricity generation runs counter to our goals, is economically risky, and has adverse health impacts, especially for historically disadvantaged communities.

In summary, the undersigned request:

- Duke Energy retire coal plants as soon as possible via the "Earliest Practicable" IRP scenario to improve health and public benefits of NC communities, and to use all-source procurement for replacement and future generation expansion.
- Duke Energy submit updated scenarios that use a Utility Cost Test and use customer adoption models that include the full range of potential methods, including a range of financing tools to fully value the contribution of energy efficiency programs that help local governments and customers address affordability and climate concerns.
- The Commission consider our collective goals when reviewing the proposed IRP scenarios, and as needed, request Duke Energy expand the distributed generation and utility-scale renewable energy solutions offered to help directly address our local government renewable energy, climate, and and equity goals.
- Duke Energy conduct a robust technological and economic analysis of the transmission investments needed to enable more renewables in future portfolios.
- Duke Energy reassess EV penetration rate and take a proactive approach to growing electrical load through transportation electrification offerings.
- Duke Energy clearly articulate how it has engaged historically disadvantaged communities in developing its IRP, and which of their recommendations are incorporated into the plan.

The undersigned local governments have a history of partnering with Duke Energy on energy programs that benefit our residents, businesses, and local government operations. We look forward to and are

committed to working with Duke Energy to enable the above solutions that we believe will accelerate a more affordable, clean, equitable, resilient, and reliable energy system. Through continued partnership, we can demonstrate to both North Carolinians and the nation what collaborative clean energy leadership looks like.

Thank you for the opportunity to provide comments.

[Local Government Signatories]