



May 26, 2021

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

RE: As You Sow Comments on Duke Energy's Proposed 2020 IRP (Docket No. E-100, Sub 165)

Dear Commissioners:

On behalf of long-term investors with ownership in Duke Energy and other major companies operating across North Carolina, and with facilities that are customers of Duke Energy within the state, we write to provide comments on Duke's proposed 2020 Integrated Resource Plan (IRP). We strongly support the ongoing decarbonization of our corporate holdings and therefore, by extension, of North Carolina's electricity grid.

The Intergovernmental Panel on Climate Change's (IPCC) 2018 report clearly lays out the magnitude of the disaster facing us should we not take urgent action.¹ Already companies are experiencing material costs and disruptions from climate change impacts including increased frequency of extreme storm and fire events, rising temperatures, supply chain disruptions, and loss of worker productivity, among others. In 2019, investor-owned utility PG&E was thrust into the limelight for becoming what the Wall Street Journal referred to as the first "climate bankruptcy"—a signal of more to come.²

Investors are eager to see our fossil fuel-reliant companies transition to sustainable, long-term business models aligned with the Paris Climate Agreement, reducing the uncertainty and risk increasingly associated with fossil-heavy energy sourcing. For this reason, investors applaud the goals outlined in the North Carolina Clean Energy Plan that aims to reduce in-state power sector emissions by 70% below 2005 levels by 2030 and achieve carbon neutrality by 2050.³ Already, more than 54 businesses in North Carolina, including 29 of the state's 50 largest private employers, have set goals to transition to 100% renewable energy.⁴ As such, we applaud Duke Energy's commitment to achieve net zero emissions by 2050 for its operations. This was an important step for the Company that must be followed by careful planning and concrete actions.

¹ Intergovernmental Panel on Climate Change, "Global Warming of 1.5°C," 2018. https://www.ipcc.ch/sr15/

² Russel Gold, "PG&E: The First Climate-Change Bankruptcy, Probably Not the Last," *The Wall Street Journal*, 2019. https://www.wsj.com/articles/pg-e-wildfires-and-the-first-climate-change-bankruptcy-11547820006

³ North Carolina Department of Environmental Quality, "Clean Energy Plan." https://deq.nc.gov/energy-climate-change/nc-climate-change-interagency-council/climate-change-clean-energy-16

⁴ To see a list of N.C. companies committed to 100% renewable energy, visit: https://energync.org/wp-content/uploads/2020/08/RE 100.pdf





It is particularly important to achieve ambitious reductions over the next decade to give more time to innovate and prepare for the harder to solve final 20% of emissions reductions.⁵ As such, decarbonization strategies and technologies that are already available and economical should be prioritized. Peers of Duke, like Xcel Energy, have set ambitious targets of 80% emissions reduction by 2030, and modeling shows that 80% by 2030 and 90% by 2035 are feasible and economic.^{6,7,8} In contrast, investors are worried that Duke's current plan does not prioritize rapid decarbonization and instead relies heavily on a selection of vaguely defined "Zero-Emitting Load-Following Resources" (ZELFR) to become cost-effective in the next 15 years. This promotes continued investment in and use of carbon-heavy resources in the near-term and presents considerable climate risk if such ZELFR technology does not materialize economically.

The urgent transition to cost-effective clean energy resources will help Duke meet the expectations of shareholders, employees, and customers. Companies that do not act with deliberation and speed are likely to miss market opportunities, lag competitors and, ultimately, lose value. Morgan Stanley stresses that Duke is one of the utilities with the most profitable opportunity to expedite the retirement of fossil fuel generation and replace it with renewables. Electricity customers in North Carolina would also benefit from the savings accrued from retiring less economic fossil fuel generation and the removal of volatile fuel costs.

While Duke Energy's proposed 2020 IRP has increased its decarbonization ambition over previous years, we are alarmed to see that it has proposed a very slow retirement schedule for coal generation assets and plans to build new natural gas generation assets. The latest International Energy Agency (IEA) modeling for a pathway to limit warming to 1.5 degrees Celsius shows that 75% of global electricity must come from low-carbon sources by 2030,¹⁰ further narrowing the role that gas can play in the coming decades. Recent research has shown that natural gas' climate impact is greater than thought, with production-stage emissions adding between 16-65% more greenhouse gas emissions beyond those

⁵ The landmark 2012 NREL "Renewable Electricity Futures Study" found an 80% renewable U.S. grid was reliable and affordable, using what are now outdated cost assumptions for solar, wind, and batteries and since-improved modeling technology: https://www.nrel.gov/analysis/re-futures.html

⁶ Xcel Energy, "Xcel Energy announces 2030 Clean Energy Plan to reduce carbon emissions 85%," 2021. https://www.xcelenergy.com/company/media_room/news_releases/xcel_energy_announces_2030_clean_energy_plan to reduce carbon emissions 85%25

⁷ University of California Berkeley, "2030: Powering America's Clean Economy," 2021. https://energyinnovation.org/wp-content/uploads/2021/04/2030-Report-FINAL.pdf

⁸ University of California Berkeley, "2035: Plummeting Solar, Wind, and Battery Costs Can Accelerate Our Clean Energy Future," 2020. https://www.2035report.com/wp-content/uploads/2020/06/2035- Report.pdf?utm referrer=https%3A%2F%2Fwww.2035report.com%2F

Darren Sweeney, "Morgan Stanley: 'Second wave of renewables' to drive 70 GW of coal retirements," S&P Global, 2020. https://www.spglobal.com/marketintelligence/en/news-insights/trending/n2V18rq_af4OBgqaW6CmkQ2
 International Energy Agency, "World Energy Outlook 2020," 2020. https://www.iea.org/reports/world-energy-outlook-2020





associated with gas combustion.¹¹ Peers of Duke, such as NIPSCO,¹² Consumers Energy,¹³ and PSEG¹⁴ are all decarbonizing their power generation cost-effectively without the addition of new fossil fuel generation to avoid the risks of asset stranding and burdening ratepayers.

Specifically, Duke should consider improving its IRP through:

- Retiring all coal assets no later than 2030 and replacing them cost-effectively with renewable energy generation assets;^{15,16}
- Avoiding the construction of any new natural gas generation assets;¹⁷
- Pursuing more aggressive support for energy efficiency and demand response; 18,19
- Ramping up investment in offshore and onshore wind, solar, and battery resources.²⁰

We therefore urge Duke and the Commission to prioritize cost-effective clean energy technologies over building further fossil fuel generation in North Carolina, as the state moves to complete its commendable transition to a carbon-neutral electricity system. Such foresight and leadership will not only ensure an innovative and economic transition, but will position North Carolina to lead on the pathway toward a sustainable future in the U.S. and globally.

We look forward to seeing North Carolina and Duke embrace and promote the clean energy transition, inspiring other states and utilities to follow their leadership.

¹¹ IOP Publishing Ltd., "Attribution of production-stage methane emissions to assess spatial variability in the climate intensity of US natural gas consumption," 2021. https://iopscience.iop.org/article/10.1088/1748-9326/abef33

¹² NIPSCO, "Integrated Resource Plan," 2018. https://www.in.gov/iurc/files/2018%20NIPSCO%20IRP.pdf

¹³ Consumers Energy, "Integrated Resource Plan," 2019. <a href="https://www.consumersenergy.com/-/media/CE/Documents/sustainability/integrated-resource-plan-summary.ashx?la=en&hash=9F602E19FE385367FA25C66B6779532142CBD374&hash=9F602E19FE385367FA25C66B6779532142CBD374

¹⁴ Scott DiSavino, "PSEG to shut most fossil power plants by 2046 to cut carbon emissions," *Reuters*, 2019. https://web.archive.org/web/20200212231741/https://www.reuters.com/article/us-usa-pseg-power-carbon/pseg-to-shut-most-fossil-power-plants-by-2046-to-cut-carbon-emissions-idUSKCN1UK12G

¹⁵ A recent study by Energy Innovation found that 97% of coal in NC could be cost-effectively replaced with local solar and wind energy. See: https://energyinnovation.org/publication/the-coal-cost-crossover
¹⁶ Sierra Club, "Duke's \$3 Billion Secret," 2021.

https://www.sierraclub.org/sites/www.sierraclub.org/files/2381 Duke \$3B Secret Report 05.pdf

17 IEEFA, "Key Shortcomings in Duke's North Carolina IRPs: Part 1," 2021. https://ieefa.org/wp-content/uploads/2021/01/Key-Shortcomings-in-Dukes-North-Carolina-IRPs Part-1 January-2021.pdf

18 While Duke Energy outperforms other utilities in the Southeast (see https://cleanenergy.org/blog/saces-third-annual-energy-efficiency-in-the-southeast-report-a-solution-to-multiple-crises), the American Council for an Energy Efficient Economy ranks Duke's North Carolina utility energy efficiency performance among the bottom half of the country's largest electric utilities (see https://www.aceee.org/utility-scorecard).

 ¹⁹ IEEFA, "Key Shortcomings in Duke's North Carolina IRPs: Part 2," 2021. https://ieefa.org/wp-content/uploads/2021/02/Key-Shortcomings-in-Duke-North-Carolina-IRPs Part 4," 2021. https://ieefa.org/wp-content/uploads/2021/04/Key-Shortcomings-in-Dukes-North-Carolina-IRPs-Part-4 April-2021.pdf





We would be happy to discuss such matters further. To schedule a dialogue, please contact Daniel Stewart, Senior Research Associate at dstewart@asyousow.org.

Sincerely,

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