

The North Carolina Utilities Commission's Plan for a Carbon-Free Future Doesn't Make the Grade

IDENTIFYING OPPORTUNITIES FOR ACTION IN THE 2023
NORTH CAROLINA CARBON PLAN



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Report Card

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Introduction

In 2021, the NC General Assembly passed HB 951, which directed the NC Utilities Commission (NCUC) to adopt a “Carbon Plan” that would reduce carbon dioxide emissions from electricity generation 70% below 2005 levels by 2030 and achieve “net zero” emissions by 2050.

Shortly thereafter, People Power NC, a coalition of environmental justice, climate, and clean energy advocacy groups, published [12 Principles for a Carbon Plan in the Public Interest](#). The NCUC instructed Duke Energy to draft a plan, which it published in May 2022. We published a [second report](#) grading the Duke draft against our 12 principles. Duke’s draft plan received an F.

Many of us participated in Carbon Plan stakeholder meetings held by Duke Energy. Some were official intervenors in the legal proceedings held by the NCUC. Others testified at public hearings. All of us have been paying close attention to the process.

The NCUC issued an Order containing the state’s first [Carbon Plan](#) on December 30, 2022, and this report grades that plan. Unfortunately, the NCUC Carbon Plan makes it nearly impossible to achieve North Carolina’s 70% decarbonization goal by 2030. So we issue a grade of D-, with the fervent hope that critical decisions by the NCUC by 2024 will correct the present trajectory.

The NCUC Carbon Plan lacks a sense of urgency in dealing with the climate emergency that is already impacting North Carolina residents, particularly the elderly, low-income communities, and communities of color who testified to that effect in public hearings held across the state. If the NCUC truly wants to ensure that our energy decisions are “reasonable and prudent,” it should quickly phase out fossil fuels and make a much more robust and rapid commitment to renewables, battery storage and energy efficiency.

HB 951 calls for the plan to be updated every two years, and the NCUC Order combines the Carbon Plan update with the pre-existing long-term planning process known as the Integrated Resource Plan in a new “CPIRP” process. The NCUC has instructed Duke Energy to propose an updated plan by September 1, 2023, putting the profit-driven fox once again in charge of the climate and economic henhouse. Other parties will again weigh in, and the NCUC will issue a new Carbon Plan by December 31, 2024.

North Carolina needs to do its part to reduce the emissions that are fueling extreme weather events like hurricanes, heatwaves, and polar vortexes. Without significant improvement in the next Carbon Plan, North Carolina will fall short of its most basic commitment to help avoid the worst impacts of climate change. The cost of extreme weather events like these is not always fully calculated, considered, or even understood. An example of this can be found in the fact that four years after Hurricane Florence dumped its torrential rains across the southeast part of the state, there are still dozens of North Carolinians living out of hotel rooms - [displaced from their homes since 2018](#).

Winter Storm Elliott caused Duke Energy to implement forced rolling outages on December 24, 2022, due to equipment failures at several coal and gas plants. NCUC’s Carbon Plan, which is intended to ensure reliable electricity supply in our state, will have the opposite effect by expanding our reliance on gas, which just last month failed us, forcing thousands of people into darkness and bitter cold.

Below are details on how the NCUC has fallen short in meeting the 12 principles of a carbon plan in the public interest, and ways we think the NCUC can demonstrate more ambition and leadership moving forward.

The North Carolina Carbon Plan Should...

1. Be the Responsibility of the North Carolina Utilities Commission



Summary

The NCUC has elected to essentially accept Duke Energy’s version of a Carbon Plan, despite more comprehensive and accurate models and analyses. With scientists warning that climate change is likely to reach catastrophic and possibly irredeemable levels in less than a decade without drastic remedial action, the Commission’s decision, or lack thereof, is beyond puzzling – it is dangerous. Duke Energy has a clear conflict of interest, and consistently chooses to favor profitability over ratepayer protection. The Commission has chosen to side

with Duke Energy, discounting both the chorus of pleas from climate-concerned ratepayers and the testimony from objective experts on how a clean, low-cost, reliable energy revolution can be attained.

Discussion

Our June 2022 Report Card graded this subject “incomplete” as it was too early to tell. There was concern that the NCUC would direct Duke Energy to draft a plan and then take that as the basis for their Order. Those concerns have been realized. Phrases such as “the Commission agrees with Duke,” “the Commission gives substantial weight to Duke’s testimony that...,” “the Commission finds persuasive Duke’s testimony that...,” “the Commission concludes that Duke’s request...is appropriate...” are common throughout the Order.

The NCUC did not offer independent analysis on this plan, remarking only on contributions from Duke Energy, the Public Staff, the Attorney General's Office, and intervenors. The Commission gave a great deal of weight to the Public Staff, whose mandate is to represent the concerns of the "using and consuming public," theoretically acting as a fiscal watchdog to protect ratepayers from avoidable costs and to protect public health and safety, but often siding with Duke even when other consumer advocates and subject matter experts disagreed. The Public Staff has never expressed concern about the climate crisis: in these [167 pages of comments](#) they filed in the Carbon Plan docket, the word climate does not appear once.

Several intervenors performed model runs with results contradictory to Duke Energy's analyses. These groups presented their findings at their own expense, unlike Duke's, which were done at ratepayers' expense. Intervenors' motives varied from wanting more clean energy business, advocating for lower ratepayer costs, preserving our species' ability to survive on Earth, or a combination of the above. Duke Energy's legal directives are to provide reliable, low-cost service at a profit, their motives skewed by their commitment to shareholders for whom they "earn" billions in profits each year. The NCUC chose to overwhelmingly favor Duke Energy's analyses over others.

The NCUC received input from 139 individuals testifying at six public hearings, and 489 written comments were submitted. As was the case with the intervenors, the NCUC was apparently not swayed by these heartfelt, thoughtful contributions.

Duke Energy used the same expert witnesses they've used for years to build the fossil fuel-heavy system we have today. When change is needed, new people and new ways of thinking need to be included. It is not prudent to rely on coal and fossil gas experts to lead us away from those very sources and into the clean energy revolution.

The Commission passed the responsibility to Duke to facilitate three stakeholder meetings, as well as technical subgroups, and to conduct outreach to environmental justice stakeholders. Duke's engagement process, especially its engagement with environmental justice stakeholders, was deficient. In its Order, the Commission noted, "*Witnesses expressed particular concern that the Commission tasked Duke with preparing the primary draft Carbon Plan proposal and urged the Commission to take a more active role in developing the Carbon Plan*" (p 13).

And yet, once again, the NCUC has tasked Duke Energy with providing the next draft Carbon Plan by September 1, 2023. Some of the Commission's directives are aimed at improving the process, including making Duke Energy's modeling more transparent. The Commission also directs Duke to improve its outreach to impacted communities: "to continue to develop targeted engagement plans for impacted communities, to enact these plans in the near term and to report to the Commission." It is good that Duke Energy will need to report on those actions specifically, yet unfortunate that the NCUC did not take on that task directly.

Commissioner Clodfelter noted in his appended remarks that the NCUC’s Carbon Plan is like a plan for a trip. It is a series of steps leading to a “*destination — a 70% reduction in carbon dioxide emissions by 2030 and no net carbon dioxide emissions by 2050*” (p. 136). We agree. But if a captain is charged with sailing from Wilmington to South Africa, with lives at stake unless the trip is made with all due haste, setting the initial course for Portugal would be dereliction of duty.

The NCUC has met its responsibility in issuing the Carbon Plan. Yet the Commission’s initial course does not meet its charge to balance Duke’s needs for profits with ratepayers’ needs for reliable, clean, low-cost electricity. The NCUC will be making concrete, far-reaching decisions in the years 2023 and 2024, hopefully leading to a swiftly corrected direction in our collective journey.

Grade: D

2. Center Stakeholder Feedback



Summary

The NCUC provided ample time and opportunity for public comment. However, Commissioners did not use this feedback in their final Order. Grassroots ideas related to environmental justice, speculative technologies and local solar were ignored. The Commissioners earned a low grade in this section – they may have solicited stakeholder feedback, but they did not appear to consider it, much less center it.

Discussion

The Commission would likely get an A, if it were being graded only for elicitation of public comment. In its plan, the NCUC noted the six public hearings held, named the 139 individuals who testified, mentioned several points made, and ended with “*public witnesses offered eclectic opinions varying from disapproval to approval of Duke’s Carbon Plan proposal*” (p. 13).

Comments, speakers, and intervenors asked for environmental justice, no new fracked gas projects, promotion of solar and storage, and an end to plans for small modular reactors and green hydrogen. These ideas were ignored, or incorporated in meaningless ways. Many ideas brought up in stakeholder meetings were excluded in the Order, with no explanation.

A review of the record indicates far more objections to the addition of new fossil gas facilities than to nuclear ones, and an almost universal plea for climate action. Yet the Order noted the 489 comments submitted in writing and summarized them thus: *“Similar to the testimony received by the witnesses at the public hearings, the consumer statements covered a variety of topics relating to Duke’s Carbon Plan proposal, including expressing support for renewable energy resources and stating opposition to new nuclear generation resources”* (p. 13). That ends the few pages noting what the public stated.

From what we see in the Order, the NCUC was not affected by the overwhelming majority’s expressed concern: climate change. The NCUC apparently centered the Public Staff as the spokesperson for the public, not the hundreds of members of the public who shared their views.

The Commission held three conferences, occurring on February 7, 2022, March 7, 2022, and April 4, 2022, for parties to update the Commission on the sufficiency of the Duke-led stakeholder meetings. None of those three transcripts has a single mention of environmental justice. A witness at the July 12, 2022, Wilmington public hearing testified specifically that Duke’s environmental justice outreach about its proposed Carbon Plan had been inadequate.

The NCUC responded to environmental justice concerns, writing: *“Successful execution of the Carbon Plan requires engagement by Duke on issues related to environmental justice and with frontline communities”* (p. 42). Commissioners then go on to recognize Duke Energy for their “engagement” so far: engagement that consisted of two listening sessions with ten people (p. 129). Rather than taking Duke to task for paltry attempts at outreach, the NCUC apologizes for not giving the company more time to pursue their environmental justice efforts. The input from this meager engagement is summarized as *“a variety of interests, including health, environmental, and economic impacts of the Carbon Plan”* (p 130) with no further consideration given anywhere in the plan.

The NCUC listened to the public and then bowed to Duke Energy. Held behind the backs of the Commissioners were rubber stamps, pulled out as soon as the curtains closed. While preferable to a closed-door process between Commissioners and the utility, it is not to their credit.

Grade: D

3. Establish Comprehensive Metrics for Success



Summary

Duke Energy provided only the most basic metric for success in its Carbon Plan proposal: calculating the amount of carbon dioxide emissions they must reduce to meet the goals established in HB 951; and of the four portfolios they presented to the NCUC, only one even achieved that. Unfortunately, the NCUC ignored widespread stakeholder feedback asking for additional metrics on all greenhouse gas emissions, on environmental justice outreach, and on Duke's interim progress toward these goals. As a result, it will be difficult for ratepayers to understand if their dollars are being

used in the most timely and effective way to meet the goals of HB 951 and to offer feedback on progress.

Discussion

The NC Carbon Plan offers all North Carolina residents an opportunity to rethink how energy is generated, distributed, and used in the state. Meeting all of the emission reduction targets in HB 951 must be the top priority, but the plan also offers a chance to make our energy system more equitable, more resilient, and better for public health. Unfortunately, the Commission's Order does not encourage Duke Energy to monitor and maximize these secondary opportunities. Instead it allows the utility to rely on basic and outdated metrics.

[A. Measure All Six Primary Greenhouse Gas \(GHG\) Pollutants, Not Just Carbon Dioxide](#)

Despite the scientific consensus that methane and other greenhouse gasses must also be reduced immediately if we are to avoid the worst impacts of climate change, the Commission did not require Duke to incorporate emissions reduction monitoring of anything other than carbon dioxide into the next CPIRP. While HB 951 did not require reduction of the other greenhouse gasses, the Commission could and should have directed Duke to account for those gasses in all future proposed generation projects. Doing so would provide ratepayers and other stakeholders with the information necessary to determine whether new generation assets would contribute to the climate crisis and diminish air quality, or would help move us to the clean energy future that so many public comments and testimonies indicated that the citizens of North Carolina want.

Section grade: F

[B. Use a Third-Party Verification Service](#)

To determine the amount of emissions reduction necessary to meet both the interim and final targets set forth in HB 951, Duke Energy had to establish the level of emissions originating from their in-state facilities in 2005. They stated they used data from the eGRID service of the

Environmental Protection Agency (EPA) and clearly established that they must cut carbon dioxide emissions by 53,105,632 short tons.

The EPA is a trusted source for emissions tracking, and parties involved in the Carbon Plan proceedings did not contest these calculations. What is less clear, however, is how Duke will report on emissions reduction in the future and how they will transparently model emissions reduction in facilities not yet operating nor reporting to the EPA. In addition, the Commission did not require that Duke use a third-party verification service – a universal best practice and a good faith effort for transparency.

Section grade: D

C. Account for System-Wide Emissions

Stakeholders across the state were concerned that Duke Energy, to get around targets set for North Carolina, would site assets in South Carolina in order to avoid reporting on them. To their credit, Duke Energy acknowledged those concerns and suggested that they would model new resources as if they were all to be located in North Carolina. The Commission approved this, but also agreed that Duke should be allowed to site assets where they are needed, regardless of which side of the border they are on.

Unfortunately, because South Carolina has not passed a law directing utilities to reduce emissions, the lack of accounting for all system-wide emissions necessarily means that communities across the Carolinas may now be vulnerable to the negative impacts methane gas plants can have on air and water quality. In addition, new gas plants may become “stranded,” closing earlier than anticipated and leaving customers paying for plants that aren’t even operating, all so that Duke can recover its costs and continue profiting from its ill-advised investments.

Section grade: D-

D. Clearly Identify Interim Milestones, Associated Schedules, and Responsible Parties

A Carbon Plan approved by the NCUC should represent a clear path forward toward the goals of HB 951. Instead, the draft plan that Duke Energy submitted contains four very different scenarios and the Order released by the Commission offers little additional clarity. The Commission’s Order directs Duke Energy to take a variety of near-term actions, but it is unclear whether those actions are sufficient to meet the interim goal. Regarding longer-term actions, the Order is even less clear and kicks the can down the road to future proceedings.

Not only did the Order not identify milestones, schedules, and responsible parties in regard to Duke’s generation mix, it did not address milestones or performance improvement opportunities regarding Duke Energy’s egregious outreach work in low-income communities and communities of color. Achieving environmental justice requires the articulation of specific, measurable, attainable, relevant, and time-bound (SMART) goals. It also requires dedicated personnel who are given the support necessary to achieve those goals. Despite testimony in the public

hearings attesting to how poor Duke’s outreach was, the Commission only gave the utility vague direction to “*continue to develop targeted engagement plans for impacted communities*” (p 135), with no acknowledgment that they did a poor job in the first instance, and no directive to improve in the future.

Section grade: F

Grade: D

4. Reflect Work from the Previous Clean Energy Plan Process



Summary

Duke Energy’s plan received an F on this principle and the NCUC did nothing to improve its grade, since it did not incorporate additional work from the Clean Energy Plan process.

Discussion

From 2018 to 2020, there was a robust clean energy dialogue in North Carolina that is entirely invisible to readers of the NCUC’s Carbon Plan. Governor Roy Cooper’s [Executive Order 80](#) kicked off a year of work by a wide variety of stakeholders resulting in the [NC Clean Energy Plan](#), which in turn spawned an additional year of work resulting in two extensive [implementation updates](#) detailing how the state’s clean energy transition could be accelerated.

Instead of using all this work toward consensus as the starting point for a Carbon Plan, the NC General Assembly and Duke Energy, and now the NCUC, have cherry-picked the parts they liked and ignored the rest.

The NCUC may argue that they are constrained to consider only what was entered into the Carbon Plan record, but this is cold comfort to those who spent two years working together and developing ideas to maximize clean energy in the state.

Grade: F

5. Maximize Near-Term Deployment of Renewable Resources and Storage



Summary

The fact that the amount of renewables Duke is directed to procure will likely leave us unable to hit the 2030 compliance date is one of the biggest failures in the Commission’s Order. The NCUC’s approach lacks vision and direction. It focuses only on near-term solar additions, missing the opportunity to set a clear course for ambitious 2030 and 2050 renewable energy targets.

The NCUC ordered 2,350 MW of solar to be procured in 2023 and 2024 and brought online by 2028; 1,000 MW of stand-alone storage; and 600 MW of storage paired with solar. The total renewables and storage over time in the NCUC plan is much less than is possible, per other modeling and installed examples, and creates an unnecessary and artificial barrier to achieving the carbon reduction targets and securing safe, reliable energy for North Carolina.

In short, the NCUC has failed to maximize renewables and storage.

Discussion

It is no surprise that Duke would choose to undervalue solar, since by law it is required to open up almost half of all solar and solar-battery projects to competitive bids from third-party solar developers. It is extremely concerning that the NCUC would play into Duke’s preference, despite significant evidence presented by intervenors that much higher levels of solar are possible.

The NCUC ordered only the deployment of 2,350 MW (2.35 GW) of new solar capacity. The ordered addition is about 9% of Duke’s current total statewide NC generation capacity (about 27 GW, based on data in Duke’s 2018 IRP submissions).

A. Solar

The NCUC directs Duke to procure 2,350 MW of solar in 2023 and 2024. Including the 750 MW that was ordered in the 2022 solar procurement, this yields a total of 3,100 MW of new solar estimated to be online by the end of 2028. These near-term solar targets set by the NCUC align with Duke’s suggested targets. These amounts are subject to change if costs come in above or below Duke’s modeled costs. This could increase or reduce the total procurement by up to 20%. The majority of intervenors, as well as other expert modelers, recommended procuring significantly more solar in the near term (from 350 to 1,700 MW more). The Public Staff was the

sole entity in the proceeding to suggest deploying less solar than Duke proposed - 470 MW less. It is alarming that the Public Staff, the supposed consumer advocate at the proceedings, appears to fundamentally misunderstand the opportunity provided by proven, available solar technologies.

[A study](#) that Duke Energy commissioned from the National Renewable Energy Laboratory, but did not file with the NCUC, showed that Duke could most economically meet the carbon reduction targets mandated by law by tripling the proposed solar on its grid by 2030, suggesting Duke should target 9 GW of new solar by 2030, instead of the 3.1 GW that Duke suggested and that the NCUC went along with.

A coalition of intervenors, including environmental and industry groups, recommended an independent technical committee that would study Duke's rate of interconnections, and specifically the achievability of higher interconnection rates. That recommendation did not appear in the NCUC Order.

In the Order, the commission acknowledges that public witnesses in the proceeding "*expressed concern regarding Duke's lack of communication to the public about renewable energy education and information, specifically information about rebates and incentives encouraging customers to adopt renewable energy technologies*" (p 14), but took no action to direct Duke to improve communications.

B. Storage

Stand-alone battery storage of between 1,000 and 4,000 MW was proposed by [different intervenors](#), plus another 600 - 1,650 MW of batteries connected to solar. The NCUC Carbon Plan calls for the exact amount Duke recommended: standalone storage of 1,000 MW and solar-connected storage of 600 MW. This is the bottom end of each range and a fraction of what is possible. There is no ambition here.

Fortunately, the NCUC supports Duke's plan to expand its existing pumped hydro storage capacity. This technology uses excess power at low-demand times to pump water from a lower to a higher reservoir, then release it to generate clean energy at times of peak demand.

C. Wind

Onshore wind is one of the lowest-cost resources available, and because wind typically blows at night, it could serve a complementary role alongside solar power. Unfortunately, the NCUC took little action to take advantage of wind as a resource. Instead of directing Duke to issue a request for proposal for onshore wind, as many intervenors recommended, the NCUC directed Duke to "engage with onshore wind stakeholders."

Intervenor modeling also showed that building transmission that would allow Duke to import wind from the Midwest would be cost-effective, yet the Commission didn't require Duke to take advantage of that plentiful and low-cost resource.

The Carbon Plan directs Duke to evaluate all three leased offshore Wind Energy Areas but orders no explicit deployments of offshore wind, and thus fails to set a path that complies with Governor Cooper's [Executive Order 218](#) and its goals of 2.8 GW of offshore wind by 2030 and 8 GW by 2040. While offshore wind might not be cost-effective today, it's likely to be a key part of any least-cost plan to achieve net-zero in 2050, and we need to prepare today, to take advantage of this resource in the future. Duke's Carbon Plan proposal also ignored and failed to reach those levels of offshore wind deployment. Their maximum build-out of offshore wind by 2050 was on the order of 3 GW; their maximum build-out of onshore wind was on the order of 2 GW of capacity.

The NCUC notes the objection of Public Staff to any near-term action on wind, and disregards it: *"the Commission is not persuaded by the Public Staff's contention that because offshore wind is not selected until the 2040s, or ever, in half the portfolios modeled, the Commission should deny near-term actions at this time"* (p. 102).

The Plan also rejects Duke's request to acquire and recover costs related to the transfer of the Duke Renewables-owned lease in the Carolina Long Bay.

Final Words on the Deployment of Renewables

Cumulatively, these Orders yield unspecified increases in renewable capacity for North Carolina, with no specific milestone dates. This situation is wholly inadequate in terms of reasonably assuring attainment of the legislated goals. The NCUC Carbon Plan should have included non-Duke-owned generation assets, including rooftop solar from North Carolina residents, businesses, and institutions, and community solar projects. The plan should have included deployment targets in these generation sectors, and policy changes to facilitate and accelerate such deployments.

Instead, Duke Energy suggests, and the Commission has largely accepted, reliance on certain technologies that are highly speculative and, if attainable, would be years, if not decades, away from being commercially available. These include advanced nuclear reactors, small modular nuclear reactors, and hydrogen. Holding out hope for these technologies instead of actively deploying proven renewable and storage technology - currently on the market - is imprudent and potentially disastrous. In the portion of the Order acknowledging public testimony, the NCUC writes, *"Public witnesses expressed apprehension about the practicality of using unproven technologies such as small modular reactors (SMRs) and hydrogen-fueled turbines to produce energy...Witnesses stated their preference for renewable generation, including wind, solar, and hydropower, and for more aggressive implementation of energy efficiency (EE) measures, battery storage, and improvements to the transmission grid"* (p 13).

Further, by not ordering more renewables and storage now, and given the long lead times involved in new projects (securing land leases, rights-of-way, equipment, engineering, construction, grid interconnection, commissioning, etc), the NCUC is effectively voiding the opportunity to have significantly more renewables on the grid in 2030. [Commentary](#) from the Energy Transition Institute concludes that the Commission’s Carbon Plan “effectively gives up from the outset on meeting the state’s decarbonization goal by 2030.”

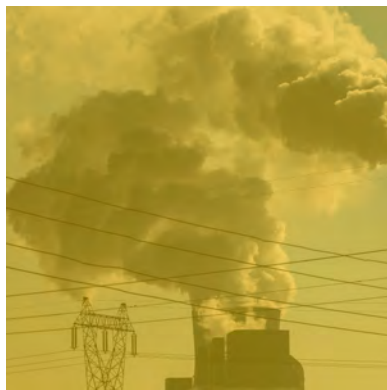
It is critically important that the Commission take stronger and significantly more ambitious action on ordering renewables and storage. If there is any remaining opportunity to reach the 2030 target, it will require the Commission to maximize renewables and storage in the next iteration of the Carbon Plan.

Finally, where we are headed depends, also, on where we are now. While the nationwide grid presently has about [20% renewables](#) sourcing for all power supplied, [Duke is sitting at about 8%](#) (Figure 3-3).

Duke and the NCUC lack ambition, vision, and drive. As far as renewables go, they are [failing](#).

Grade: F

6. Set an Ambitious Timeline for Closing Coal



Summary

The NCUC failed in not calling for coal retirement sooner than what Duke Energy proposed in its draft plan. Retirement of Duke’s coal generation fleet is a critical step in the path to compliance with the 2030 carbon reduction target set by HB 951. In the next iteration of the Carbon Plan in 2024, the Commission should direct Duke to accelerate the retirement of remaining coal units to 2030 or earlier.

Discussion

In the Order, the NCUC writes that retirement of Duke’s coal generation fleet is a critical step in the path to compliance with HB 951. Yet the NCUC did not call for coal to be retired any sooner than what Duke Energy proposed in its draft plan. The NCUC’s Carbon Plan extends the life of multiple coal plants beyond the 2029 date that had been included in Duke’s last Integrated Resource Plan (IRP) in 2020. Duke Energy’s coal plants have long been uneconomic, and they are the biggest source of carbon dioxide pollution in North Carolina’s energy landscape. When Duke continues to run these plants, they make energy unnecessarily expensive, and pollute the air and water in North Carolina communities.

In addition, the forced outages that many North Carolinians experienced on December 24, 2022, were due to the failure of coal units at Mayo and Roxboro plants, where instrumentation freezes limited their operating capacity, even after the plants had been assessed to handle extreme winter storm events. Several gas plants also experienced equipment failures that caused them to underperform, contributing to the rolling blackouts.

In the May 2022 draft plan submitted by Duke Energy to the NCUC, Duke acknowledged that *“Coal is an increasingly risky fuel source...the Companies’ remaining coal facilities are nearing the end of their technical and economic life and becoming riskier to operate; thus, retirement is increasingly inevitable.”* Duke knows this, yet proposed, and the NCUC agreed, that North Carolinians should bear this risk and wait as long as 13 years - until 2036 - for retirement of some facilities. The Carbon Plan Order also notes that the Public Staff recommends *“modeling Belews Creek as operating exclusively on natural gas post-2035 until the end of 2037, the end of the station’s projected depreciable life”* (p. 62) The Commission determined it would *“benefit from additional review”* and *“directs Duke to re-study the potential costs and benefits of a further conversion of Belews Creek as part of its upcoming proposed biennial “CPIRP.”* Extending the life of certain coal units through fuel source conversions compounds the risks with coal that Duke acknowledged, avoids analyzing cheaper, clean alternatives like battery-storage at these sites, and ignores the concerns discussed in Section 7, below.

People who live next to coal plants are forced to breathe higher levels of air pollution and toxic substances. Coal-fired power plants generate massive amounts of pollution, including fine particulate matter (PM2.5), which is especially detrimental to human health because it can infiltrate deep into the lungs and increase the risk of asthma, heart attacks, stroke, cancer, premature death, and impaired cognitive function. Air pollution from coal-fired power plants leads to thousands of deaths each year in the United States as well as a significant number of medical visits and hospitalizations.

Duke relied on assumptions in its modeling that systematically skewed its results in favor of continued reliance on fossil resources and a continued delay in the transition to renewables. In its plan, the NCUC acknowledges intervenor modeling that points to Duke’s interference: *“Synapse’s conclusion is that Duke’s manual adjustments would cost ratepayers an additional \$1.4 billion”* (p 58). Multiple intervenors, including the Attorney General’s Office and Southern Environmental Law Center and their clients, found that retiring the entire coal fleet by 2030 was the least-cost path to achieving the 2030 carbon reduction target established by HB 951.

In addition to the continued health and environmental costs to North Carolinians, coal is the most expensive and uneconomic choice for energy generation. By approving Duke’s delayed retirement plan, the Commission also misses the opportunity to maximize customer savings. Duke could use low-interest bonds to pay off the remaining costs of plants retiring early, as provided for by the “securitization” section of HB 951.

The Commission should not force North Carolinians to pay the costs associated with continuing to operate dirty, expensive, coal plants, and need to do more to protect those who bear the greatest financial and health costs of continued reliance on coal. If the NCUC truly wants to ensure that our energy decisions are “reasonable and prudent,” it should quickly phase out fossil fuels and make a much more robust and rapid commitment to renewables, battery storage, and energy efficiency. In the next iteration of the Carbon Plan in 2024, the Commission should direct Duke to accelerate the retirement of remaining coal units to 2030 or earlier.

Grade: F

7. Allow No New Gas



Summary

The NCUC concluded that “planning for approximately 800 MW of CTs and a CC of up to 1,200 MW is a reasonable step for Duke to take at this time.” This represents all the new combustion turbine (CT) and combined-cycle (CC) gas capacity proposed by Duke in its near-term action plan. Clearly, the NCUC has failed to meet the “no new gas” principle. It failed to show leadership to stop Duke Energy’s gas buildout and failed to adequately consider the comments, concerns, and suggestions of intervenors and the general public, who not only strongly opposed new gas but demonstrated in detail that gas is not needed to reach the state’s decarbonization targets. Duke must apply for permits to actually build the plants, and the NCUC indicated it will closely scrutinize those applications, requiring Duke to show that gas supply is adequate and that gas is still the least-cost option after accounting for clean energy incentives from the Inflation Reduction Act. Because there is still a chance to achieve our goal of no new gas, we give the NCUC a D. If some or all of Duke’s permits to build gas are rejected, the grade will improve; if not, it will slip to F.

Discussion

The NCUC Carbon Plan unfortunately goes along with Duke’s proposal to build new gas-burning power plants, ignoring both the many voices saying there should be no new gas in the plan, as well as several models produced by other intervenors showing that the goal can be reached without gas. The Commission accepted Duke’s questionable projections regarding future access to cost-effective hydrogen technology. The justification continues to be reliability and affordability.

In its near-term action plan, Duke proposed 1,200 MW of combined cycle gas units (CCs) and 800 MW of combustion turbines (CTs). The NCUC said Duke could request permits for this amount of new gas, emphasizing that Duke must demonstrate there will be adequate gas supply, a reference to the difficulty of getting new pipelines built to bring Appalachian fracked gas to the state, as well as general gas supply issues.

To actually build a new gas plant, Duke must apply for a permit known as a “certificate of public convenience and necessity” (CPCN). NCUC rightly cautioned that inclusion of gas resources in the Carbon Plan does not mean a CPCN application will be granted. Duke must show that the proposed new plant is the least-cost option for providing the power that is needed. It must propose a specific location and present accurate construction and fuel costs. (Multiple intervenors argued that Duke’s construction costs were artificially low in its Carbon Plan proposal.) The NCUC also will require Duke to model the impact of the Inflation Reduction Act incentives being offered for clean resources such as solar, wind, and batteries.

It is good that the NCUC spelled out this caveat, but it is nothing new. New gas plants have always required a CPCN, and inclusion of a given plant in a planning procedure has never guaranteed that the CPCN will be granted. However, in historical practice, a plant approved for planning purposes rarely fails to receive a CPCN.

Below are the gas-related issues addressed in our report card on Duke’s Carbon Plan proposal. Let’s see how the NCUC plan stacks up.

A. Reliability

The NCUC accepted Duke’s argument that new gas is needed to ensure reliability. We argue that additional battery storage can serve the same need, yet the NCUC ordered an unambitious amount of storage (see details in Principle 5 above).

The NCUC ordered Duke to provide more robust modeling of storage prices in its next Carbon Plan proposal, which is exceedingly important since Duke’s manual amendments in its proposed plan led the model to select more gas and less storage than it otherwise would have.

Real-world experience by a number of utilities already shows that renewables combined with storage, flexible demand-side resources, and participation in regional wholesale markets such as independent system operators (ISOs) can [provide 99.9% of electricity needs](#) with high reliability. Scores of modeling assessments done worldwide conclude that energy needs in various sectors could be met reliably and economically using [80 to 90% renewables](#), including many detailing [100% scenarios](#).

Additionally, recent cold weather has brought up new problems for gas in the face of extreme weather events. While many things contributed to Duke Energy’s rolling blackouts on December 24, 2022, the Dan River natural gas plant lost [“roughly half of its capacity”](#) during the frigid temperatures. Unquestionably, in light of this failure during an extreme weather event, the

NCUC should consider it reasonable and prudent to boost the commitment to renewables, battery storage and energy efficiency in order to ensure reliability.

B. Methane

The NCUC leaned on the strict language of HB 951 and refused to consider any greenhouse gasses other than carbon dioxide, despite the fact that methane emissions from gas operations are a significant contributor to climate change.

The global warming potential (GWP) of methane is up to 87 times greater than that of carbon dioxide in the first 20 years after release and [scientists have cautioned](#) that “the use of natural gas as a (temporary) substitute for coal may even lead to an additional short-term temperature increase” that could lead to “[abrupt and irreversible climate change](#) as early as the next decade,” in part by triggering a [cascade of global tipping points](#).

As scientists told NC Governor Roy Cooper in [November 2022](#), “reducing emissions of methane and other short-lived climate pollutants this decade will slow global warming faster than any other mitigation strategy.”

But HB 951, drafted largely by Duke Energy, excluded methane intentionally and the NCUC did not take the initiative to consider it.

C. Pipelines

The NCUC says it will require Duke to demonstrate adequate supply of gas before granting any CPCNs. Fuel supply has become an increasing concern because courageous activists defeated the Atlantic Coast Pipeline and are now fighting the Mountain Valley Pipeline, cutting off Duke’s access to Appalachian fracked gas. Gas pipelines not only wreck landscapes and threaten local health and safety, but also facilitate a gas buildout that is a climate disaster. We need to hold the NCUC to its word to deny CPCNs for gas plants that cannot guarantee adequate fuel supply.

D. Market volatility

The cost of fossil gas continues to be a point of contention between Duke and renewable energy advocates. The NCUC approved Duke’s method of projecting gas prices and took the side of the utility in concluding that new CCs should be “*part of a least cost plan to continue the energy transition*” (p. 77), despite evidence to the contrary, including the Attorney General’s Office pointing out that Duke’s price modeling did not reflect the Russian invasion of Ukraine and that current prices “*are significantly higher than the worst case scenario that Duke modeled in its Carbon Plan proposal*” (p. 73). Gas prices will be evaluated again in CPCN proceedings. However, any current investment in gas infrastructure puts North Carolinians at the mercy of future gas prices, which may exceed fuel cost projections, whereas the “fuel” cost of solar and wind is known: it’s free and always will be.

E. Stranded costs

The NCUC is aware of the risk that gas plants built now may have to be retired early, leaving customers paying for plants that are not operating. But it accepted all Duke's arguments for how this will be avoided, most of which depend on Duke's ability to convert new gas plants to burn hydrogen in the future. Even the Public Staff, which generally sides with Duke, said this is too risky a proposition. Without expensive upgrades, new gas plants built in the near term would never burn more than 15% hydrogen. If a gas plant with a 35-year lifetime is built in 2028, it will be burning 85% fossil gas until 2063. With a state target of net zero carbon emissions by 2050, the plant will almost certainly have to close early and leave customers paying for nothing.

Adding insult to injury, the NCUC even suggested that excessive early investment in battery storage could subject customers to stranded costs because battery technology will improve in the future. This is illogical. Are there no gas plants operating now that use older technology? Do we stop using them because they are no longer state-of-the-art? Do we refuse to approve new gas plants because gas technology might improve? Today's batteries will keep working for their useful lives, after which they will be replaced by newer technology, just like gas. But batteries have a big advantage over gas in this respect: commit to a battery and you are "stuck with it" for 15 years, whereas the Commission assumes a lifetime of 35 years for a gas plant.

F. Hydrogen

The NCUC allowed Duke to proceed with planning to burn hydrogen in its gas plants, despite the fact that hydrogen technology is in its infancy and is recommended by the [Natural Resources Defense Council](#) and others for use only in hard-to-decarbonize sectors such as aviation, marine shipping and heavy industry. The Attorney General advised holding off on new gas until hydrogen technology is more proven. Here is Duke's plan for hydrogen: burn 3% hydrogen in existing CTs by 2035, ramping up to 15% by 2041; burn 100% hydrogen in new CTs that will be built in the 2040s; burn 100% hydrogen in all new CTs and CCs built in 2050 and beyond. Duke is betting big on hydrogen and the NCUC took the bet. But neither of them has to pay the bill; customers do.

G. Circumventing regulatory process

In its draft plan, Duke made an obscure but ominous request that it be allowed to propose revised CPCN rules in collaboration with the Public Staff. The NCUC deserves credit for expanding participation to "any interested stakeholders." NCUC states that a proposed rule governing the 2024 CPIRP proceeding shall be submitted by April 28, 2023. Since CPCN proceedings are our next chance to stop Duke from building new gas, we need to ensure CPCN rules are not weakened.

Grade: D

8. Capture Maximum Benefits of Customer-Owned Resources



Summary

The Commission's Order lacks a vision of the future for customer and Grid Edge programs, seemingly deferring to Duke's definition and inclination of what is possible. It is good that the Commission recommends a stakeholder process to develop guidelines for quicker approval of innovative programs, but the wording of the Order does not prevent Duke from overcontrolling the process.

Discussion

While Duke and the Commission recognize that customer programs hold the potential to significantly reduce carbon dioxide emissions, the Order is very thin on details of specific programs needed to achieve these goals, leaving those for another day.

The Order failed to establish any firm directives beyond Duke's current forecast of reducing 1% of eligible load through utility energy efficiency programs. The Order does, however, recognize that much higher future savings are possible and establishes an energy savings "aspirational" goal of at least 1.5% of eligible load. The Commission recognized that reducing load through Grid Edge programs (demand-side management, customer self-generation, and voltage management) is a "reasonable step toward achieving reductions in carbon dioxide emissions" but failed to highlight any specific strategies or priorities for pursuing such technologies or customer programs.

The Commission recognizes that EVs are critical for Duke to consider in its load forecasts and that beneficial load growth from EVs "has the potential to reduce system average costs and possibly lead to more optimal system operation." While the Commission states that "Duke must pursue this opportunity to the fullest extent," it does not follow through with concrete suggestions. Rather, commissioners merely set the expectation for what they hope to see modeled in future Carbon Plan proceedings. The Commission does include general direction for Duke to locate EV charging in a manner that mitigates the need for system upgrades and/or provides additional benefits.

In perhaps the only element saving the Order from an F, it introduces what has been called a "regulatory sandbox" concept to allow Duke to propose innovative programs on a small scale

with a short approval process. While this is a positive move and held as a best regulatory practice around the country, the invitation is for Duke to propose rules of the road for approvals of its future “rapid prototype” programs. Absent a meaningful stakeholder process in advance of the formal proposal for “rapid prototyping” guidelines, this could be another instance of the Commission giving Duke wide latitude to develop the rules that will govern its future programs.

Grade: D

9. Lead to Fair and Affordable Rates & Bills



Summary

In its Order, the NCUC acknowledges that “a significant percentage of [Duke Energy’s] residential customers in North Carolina face” a “magnitude” of affordability challenges. In fact, more than half a million households served by Duke, more than 15%, experience an ongoing struggle to afford their electric bills. Nearly one million households – 32% of Duke’s residential accounts – qualify as low-income. Given this, plus the Commission’s apparent concern for affordability, as expressed in the final hearing for the Duke Energy Low-Income

Affordability Collaborative process, the Commission should have ordered Duke to incorporate any number of recommendations. Intervenors and stakeholders offered actions to directly address existing and future affordability challenges and impacts. Unfortunately, the Commission only barely acknowledged the problem, and did nothing to address it in the final Order.

Discussion

Decarbonizing the grid through a transition to clean, renewable energy resources, plus battery storage, and substantial investments in energy efficiency and demand-side management is critical. That transition must proceed rapidly to confront the worst impacts of climate change and protect public health. However, any plan that guides that transition must, as a core and integrated objective, directly address, not merely pay lip service to, existing and future affordability challenges and impacts.

In the plan, the NCUC recognized that during the public hearings, “*witnesses testified about persons and communities often hardest hit by climate change, including those of low-to-moderate income levels and people of color, who because of excessive power bills and the cost of electric bills, often must make difficult decisions prioritizing basic necessities*” (p 13).

Today, Duke Energy’s electricity rates are already unaffordable for nearly six-hundred thousand households that struggle to pay their bills, a large portion of which have experienced

disconnections for inability to pay. Despite listing “affordability” as a core objective of the Carbon Plan, Duke Energy neglected and even refused to define affordability, either generally or in the context of the Carbon Plan. Instead, the Companies inappropriately conflated the terms “least cost” and “affordability.”

At the closing of the Low-Income Affordability Collaborative stakeholder process, the Commission acknowledged the need to alleviate affordability challenges through investments in energy efficiency and demand reduction for low-income households, and recognized that doing so would contribute to achieving the required reductions in carbon emissions. Yet there was nothing in the Commission’s Order incorporating such investments, nor even any low-income bill or rate assistance programming. Instead, as Duke did in their proposed plan, the Commission incorrectly conflates “least cost planning” with “affordability,” and punts the issue of affordability to other dockets and future planning processes.

The Commission further sided with Duke on its proposed (and weak) energy efficiency/ demand-side management target of 1.0% of eligible (rather than total) sales and only charged Duke with pursuing an “aspirational” target of 1.5% of eligible sales by 2030. Due to the fact that large commercial and industrial customers are allowed to opt out of energy efficiency and demand-side management programs, sales to these customers are not considered “eligible” for setting energy efficiency and demand-side management targets. As such, “eligible” sales represent only about 70% of Duke Energy’s total retail sales of electricity. So applying a 1.0 or 1.5% target to only eligible sales, rather than total sales, significantly reduces the amount of savings and demand reduction that can be achieved with those targets. Additionally, the Commission did not set any mandatory carve-out for low-income energy efficiency in the 1.0 or 1.5% goals, nor did they set a required level of spending on energy efficiency for low-income households.

Duke’s investments in low-income energy efficiency are likely to be negligible and have only a minimal impact on reducing the affordability challenges and impacts experienced by its customers. Similarly, the Commission’s allowance for Duke to plan for new expensive gas generation while generally accepting Duke’s undervaluing of future solar and battery storage will likely exacerbate existing affordability challenges already being experienced by Duke’s customers.

Grade: F

10. Address Historic Harm from Fossil Fuels and Dirty Energy



Summary

Given the history of harm done to BIPOC (Black, Indigenous, People of Color) and frontline communities by the legacy of fossil fuels, the NCUC Carbon Plan should have outlined more deliberate steps to include new perspectives and leadership to create mutual benefit in our collective energy future. Unfortunately, this Plan allows Duke to continue skirting and ignoring executive orders that are designed to prioritize stakeholder input. The Commission is far too vague in its request for coordinated and inclusive input from impacted communities.

Discussion

For far too long, certain communities in North Carolina have borne the brunt of the consequences of our overreliance on fossil fuels. Those communities are frequently poor, BIPOC, and denied equal access to economic self-determination. As a result, negative effects on health and economic development have been tolerated, ignored, or accepted as "collateral damage" in exchange for the comfort and convenience of the rest of society. To ensure these harms are minimized, a carbon plan process in the public interest not only must take genuine steps to listen to and incorporate the concerns and demands of impacted communities, but should also foster and embrace a new generation of energy-focused leadership emerging from these spaces.

On January 7, 2022, Governor Roy Cooper issued Executive Order No. 246, requiring that "each Cabinet agency, supported by the Governor's Office, shall develop an agency public participation plan informed by stakeholder input. The plan shall include best practices for community engagement, meaningful dialogue, and efficient mechanisms to receive and incorporate public input into agency decision-making."

While this executive order does not apply directly to the carbon planning process, it is clear that the leadership of North Carolina seeks to ensure that policies impacting residents of the state should be informed by those same residents. Unfortunately, the NCUC did not adopt the spirit of this important executive order and accepted Duke's poor outreach to environmental justice communities.

Communities of color and households with low to moderate incomes should have been, and should continue to be, consulted extensively during the design phase of each new Carbon Plan. These ratepayers have typically suffered the most from an energy system that is operated on polluting fossil fuels and the corresponding costs of building these expensive assets. The shift to a system that runs on renewable energy should be conceived with these populations in mind to ensure we do not repeat the injustices of the past.

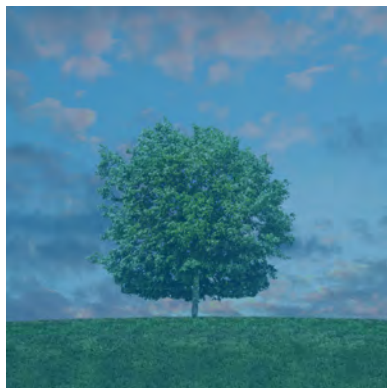
Duke's process of engaging environmental justice stakeholders consisted of a couple of meetings that were not geographically or structurally well-planned. Two invitation-only meetings, on May 5, 2022, and August 2, 2022, for engagement with communities across North Carolina cannot possibly encompass the intricacies and concerns of communities across the state that have long been harmed by fossil fuel usage. While holding a stakeholder conference for affected and frontline communities on May 5, 2022, with an emphasis on upcoming coal

retirements, may seem like a good faith attempt, the dearth of additional meetings suggests otherwise. To expect single-digit outreach instances to adequately represent the real scale of impacted communities' concerns would be to understate the impact variances that exist from region to region across North Carolina.

The last point in the NCUC's Carbon Plan Order states that Duke “*shall continue to develop targeted engagement plans for impacted communities*” (p. 135), but does not specify any metrics or demand that Duke make any significant efforts to improve their existing processes. It is a vague assent to “keep doing what you've been doing.” Achieving environmental justice requires the articulation of specific, measurable, attainable, relevant, and time-bound goals. This order shows a lack of awareness and commitment on the part of the NCUC, which will only worsen the effects on the communities that have already been harmed historically by the use of fossil fuels and dirty energy.

Grade: D-

11. Build Climate Resilience



Summary

By failing to set ambitious goals for energy efficiency and distributed resources, the NCUC Carbon Plan has missed a significant opportunity to reduce North Carolina’s vulnerability to climate impacts, both for individual electric customers and for the grid as a whole.

Discussion

Mitigation and adaptation are imperative in addressing the climate crisis. Climate resilience, or the ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate, is one component in solutions and planning for both acute (e.g., storms) and chronic (e.g., worsening air quality) climate change effects. While we must quickly mitigate emissions to ensure catastrophic climate impacts do not become more severe, communities – especially low-wealth and communities of color – are already facing disproportionate economic, social, and environmental disruptions that are requiring adaptation to climate change. As climate change-related disasters continue to tax energy systems, leading to more frequent rolling blackouts and outages, it is critical that clean, reliable energy remain in the forefront of the climate resilience discussion.

A Carbon Plan that encourages customers to incorporate clean energy systems that will provide power to a home or business in emergency times, but also supply the grid in normal times, is a win-win for customers and the utility. Unfortunately, the Carbon Plan lacks specifics on clean energy resources for reliability, and remains ambiguous on how carbon emissions reductions will also address energy reliability and reliance.

A. Distributed Energy Resources

While the Commission mandates that Duke Energy select a mix of clean energy assets, it is unclear how many of those resources will be used in a distributed, intentional way to build community resilience through the use of technologies like solar panels, community solar, and microgrids. The NCUC Carbon Plan directives involving solar, wind, nuclear, and other sources for electricity do not endorse any particular mix of energy sources to meet the mandates currently required for 2030, thus undermining both the potential and necessity for distributed generation powered by solar or wind.

Distributed energy such as microgrids, solar panels, and community solar reduce community reliance on centralized infrastructure during extreme weather events such as hurricanes, cold-snaps, and heatwaves. At the same time, they decrease community dependence on fossil fuels, decrease overall grid demand, and help to reduce emissions. While the Commission Order cites the North American Electric Reliability Corporation's (NERC) 2022-2023 Winter Reliability Assessment, noting North Carolina's grid shortfall in extreme cold weather events, the Commission ignores the fact that Duke Energy's recent rolling blackouts on December 24, 2022, were caused by reduced capacity at gas and coal plants and fails to mandate microgrid technology in response. With such outages occurring more frequently and intensely, it is clear the status quo of coal- and gas-fired power plants is not adequate to manage climate risk.

B. Vehicle-to-Home Storage Applications

The NCUC Carbon Plan fails to fully quantify the potential benefits of vehicle-to-home storage. Such applications would allow the utility to meet its emissions reduction targets more quickly while also reducing community vulnerability to outages during extreme weather events. The Carbon Plan also fails to fully consider the cost of hardening the grid without incorporating distributed energy resources. Though the Order does specify these issues may be addressed in a separate docket, it lacks the teeth required to expedite regulatory approval of programs such as vehicle-to-home storage applications outside of the traditional energy efficiency realm.

C. Climate-Related Vulnerabilities of Centralized Infrastructure

From more frequent storm damage to the cost of hardening infrastructure, maintaining the grid is increasingly expensive. Distributed clean energy resources reduce climate-related vulnerabilities of transmission and distribution systems and reduce emissions at the same time by reducing grid load and improving reliability. Over time, distributed generation reduces costs

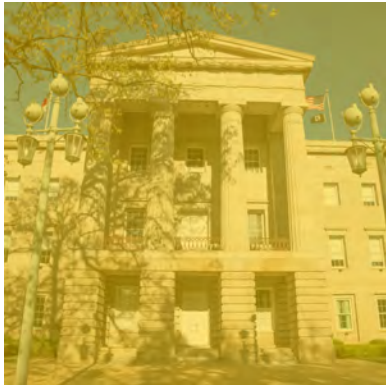
for ratepayers and increases the reliability of service during storms when compared to expanding centralized, usually fossil fuel-based, infrastructure.

The NCUC Carbon Plan explicitly allows the expansion of new natural gas plants, which are economically and environmentally costly. These large fossil fuel power plants are also dependent on being regularly supplied with expensive, and possibly hard-to-obtain, fuel, unlike renewable energy resources like wind and solar. This leaves them vulnerable to supply chain disruptions and volatile commodity prices, both of which are made more likely by the effects of climate change, and for which ratepayers must pay.

The Carbon Plan should have fully embraced the significant potential for cost-effective energy savings in North Carolina through measures like high-efficiency heat pumps, insulation, duct sealing, and distributed energy resources that reduce morning and evening energy peaks, especially during volatile climate events. Though the Commission does acknowledge that Duke should pursue every opportunity for federal tax incentives to benefit its customers, specifically Inflation Reduction Act funding for energy efficiency resources and distributed energy, the Carbon Plan does not outline how this funding can be utilized to address climate-related vulnerabilities.

Grade: F

12. Identify & Drive Changes in State/Local Policies Necessary for Plan Execution



Summary

Despite the participation of several local governments on issues that include facility siting, energy efficiency, and electric vehicles, the NCUC's Carbon Plan does not acknowledge the need for Duke to collaborate with state and local governments to fill policy gaps. The Order did direct Duke to do more robust electric vehicle planning in the next Carbon Plan, but it left key policy areas off the table entirely and did not direct Duke to work with state and local governments.

Discussion

While the NC General Assembly and the NCUC make most of the major decisions around the state's energy future, local governments and other state agencies hold a significant amount of power to shape this future. In the 12 Principles, we outlined several areas in which neither Duke nor the NCUC have direct decision-making power, and therefore are key areas for collaboration to ensure a successful Carbon Plan. These areas include but are not limited to:

- Existing building energy codes
- Poorly funded weatherization initiatives
- Land-use planning processes
- Electric vehicle system planning
- Laws restricting renewable energy financing

The NCUC adopted an initial Carbon Plan that largely ignored the need for Duke to collaborate with local and state governments.

Four local governments intervened in the Carbon Plan docket: the City of Asheville and Buncombe County jointly, the City of Charlotte, Durham County, and Person County. These groups highlighted three specific areas in which they could collaborate with Duke: growing Duke's EE offerings, the siting of new electric generation, and planning for electric vehicles.

Asheville/Buncombe County and the City of Charlotte argued that Duke's energy efficiency targets could be higher and offered pathways forward. State and local governments are [core drivers](#) of energy efficiency due to their purview over building codes, financing options, and direct connections to the communities they serve. Many local governments across the country [collaborate with their utilities](#) to improve available EE offerings. However, the NCUC declined to require a higher EE standard from Duke and did not direct Duke to work with state and local governments on this key topic.

Person County requested new generation assets to be sited in Person County to alleviate the economic impacts of closing other plants. The NCUC acknowledged their request, but the Carbon Plan only decides a direction for Duke Energy to take, and generally does not approve specific new projects. Discussions around siting new resources will come later.

The City of Charlotte and Durham County chimed in on the electric vehicle section, noting how fast EV adoption is increasing and how important it is to ensure that EV adoption occurs in such a way as to minimize the impact on the grid and to keep costs low. Duke even states that strong support from local governments could accelerate the EV adoption rates that they assumed in their models. In perhaps the only win for local governments, the NCUC ordered Duke to include a more robust EV analysis in the next Carbon Plan and to facilitate locating charging infrastructure that minimizes the need for system upgrades, which means working with local governments.

While the Carbon Plan Order does acknowledge the comments by the four intervening local governments, the Order leaves a significant amount of the potential collaboration off the table.

The Order completely ignores the role that updating and enforcing building codes can have in “shrinking the challenge.” It does not address the desperate need for robust weatherization programs for the most vulnerable of North Carolina’s citizens to survive the more frequent extreme weather events we experience due to climate change and to be able to afford their bills. It does not support renewable energy financing options to empower customers to take charge of their own energy production, nor does it direct any effort to train and educate the multitudes of a new clean energy workforce needed in every corner of the state to achieve carbon neutrality by 2050.

North Carolina’s first Carbon Plan missed the mark on connecting the dots between state/local action and Duke’s efforts. In the next Carbon Plan, the NCUC should take the critical step of outlining and requiring these foundational collaborations.

Grade: D-

Next Steps: What You Can Do to Clean Up the NC Carbon Plan

The word “climate” occurs only four times in the NCUC’s Carbon Plan. All four occurrences are in the section relating to public comments. It would appear that the public is extremely concerned about climate change and the NCUC is oblivious to it.

It is uncertain that the Carbon Plan as presented will get us to the goals of HB 951. Meanwhile, it is certain that the goals of HB 951 are not enough to prevent climate catastrophe, as it does not even consider methane emissions and pays inadequate attention to the voices of frontline communities suffering the impacts of climate change already.

So we have our work cut out for us...and you can help. First, [sign up to receive updates from Fossil Free NC](#). When you do, we’ll keep you posted on ways to help North Carolina become carbon-free, including:

- Keeping Duke Energy honest in upcoming rate-increase cases at the NCUC
- Defeating Duke’s applications for permits to build new gas plants (CPCN proceedings)
- Stopping the Mountain Valley Pipeline and cutting off Duke’s supply of Appalachian gas. You can also join one or more of these groups that are working to stop the MVP: [350 Triangle](#), [Appalachian Voices](#), [7 Directions of Service](#), [Haw River Assembly](#), [Clean Water for NC](#), [NC-APPPL](#) and [Sierra Club](#).
- Getting involved at the local level to influence decision-making and planning
- Working for improvements to the 2024 iteration of the Carbon Plan

We need you, and any organizations you are affiliated with, to get involved and make sure North Carolina achieves a truly clean energy future in a timely manner.