BEFORE THE NORTH CAROLINA UTILITIES COMMISSION DOCKET NO. E-100, SUB 179

In the Matter of:	
Duke Energy Progress, LLC, and	JOINT RESPONSIVE
Duke Energy Carolinas, LLC, 2022	COMMENTS OF THE NORTH
Biennial Integrated Resource Plans)	CAROLINA SUSTAINABLE
and Carbon Plan	ENERGY ASSOCIATION,
)	SOUTHERN ALLIANCE FOR
)))	CLEAN ENERGY, SIERRA CLUB,
	AND NATURAL RESOURCES
	DEFENSE COUNCIL

The North Carolina Sustainable Energy Association (NCSEA), the Southern Alliance for Clean Energy (SACE), the Sierra Club, and the Natural Resources Defense Council (NRDC) (NCSEA, SACE, the Sierra Club, and NRDC, collectively, the Coalition of Low-Cost Energy And Net-Zero Intervenors or CLEAN Intervenors) provide the following responsive comments on the topics and sub-issues identified in ordering paragraph number six in the *Order Scheduling Expert Witness Hearing, Requiring Filing Of Testimony, And Establishing Discovery Guidelines* issued by the North Carolina Utilities Commission (Commission) on July 29, 2022.

I. PROCEDURES FOR THE NEXT BIENNIAL CARBON PLAN UPDATE PROCEEDING AND FUTURE IRP PROCEEDINGS

CLEAN Intervenors expressed support for Duke Energy Carolinas, LLC's (DEC) and Duke Energy Progress, LLC's (DEP, and together with DEC, Duke Energy or the Companies) request that the first biennial carbon plan update proceeding and the Companies' biennial IRPs be held in 2024 in Joint Comments filed on July 15. Since that

¹ Joint Comments of the North Carolina Sustainable Energy Association, Southern Alliance for Clean Energy, Sierra Club, and Natural Resources Defense Council, p. 32 (July 15, 2022).

time, the Inflation Reduction Act, Public Law 117-169 (IRA) was passed, dramatically altering the policy landscape in ways that will significantly reduce the costs of resources that can help the Companies achieve the state's carbon reduction requirements.

In light of the significant changes in the federal policy landscape caused by the passage of the IRA, CLEAN Intervenors recommend that the Commission allow for the possibility of supplemental modeling to make adjustments to the short-term action plan prior to commencement of the 2024 carbon plan process. Policies in the IRA have an immediate and material effect on the prices for zero-carbon emitting resources such as wind, solar, and battery storage, and will also provide additional support for early retirement and replacement of coal fired generation facilities. To the extent that the 2022 Carbon Plan's short-term action plan does not take policies under the IRA into account, CLEAN Intervenors recommend an opportunity to provide supplemental modeling to update the Carbon Plan in early 2023 for the limited purpose of determining whether any modifications to the short-term action plan would be in the public interest.

In addition to ensuring the new economic realities created by the IRA are reflected in the carbon plan, CLEAN Intervenors share the concerns raised by others about using

modeling best practices² and incorporating consensus reached through a meaningful stakeholder process³ to develop the Carbon Plan.

Due in part to the expedited statutory timeline imposed on this inaugural carbon plan proceeding, Duke Energy's timeline for developing its proposed plan overlapped with the stakeholder process. This overlap made it difficult for parties to work collaboratively to develop the kind of consensus positions that the use of a shared modeling platform, like EnCompass, would otherwise enable. CLEAN Intervenors recognize that this proceeding is the first time the Companies have used EnCompass software to develop a plan filed with the Commission, possibly the first time the Companies have used modeling software common to other intervenors, and that there is a learning curve to collaborating during the modeling exercise.

The next carbon plan update proceeding should begin with a stakeholder process that seeks to align parties as to the inputs, assumptions, and modeling best practices that

² Both the Attorney General's Office (AGO) and the Tech Customers expressed concerns with the Companies' modeling approach. See Attachment 1 to Comments of the Attorney General's Office, Analysis of the Duke Energy 2022 Carbon Plan, p. 10 (July 15, 2022) ("In future iterations of its Carbon Plan, the Commission should require Duke to minimize the number of out-of-model adjustments made . . . [and] provide full transparency on what specific resource additions were made through reliability adjustments, or other out-of-model changes, and the reasons for those changes.") The AGO also highlights a number of model inputs and "out of model" changes that influence the portfolios the Companies created using an objective modeling software (EnCompass). *See* Comments of the Attorney General's Office, p. 14-15 (July 15, 2022). Similarly, the Tech Customers' Gabel Report characterizes many of the recommendations it contains as necessary to correct flaws in the Companies' modeling and analytic approach, assumptions, and strategies. See Gabel Report at pp. 1, 8-9, 45, 47-48 (July 15, 2022).

³ See City of Asheville and Buncombe County Initial Comments on Carbon Plan, p. 14 (July 14, 2022) ("[I]t is unclear how our feedback is being received and we are concerned that the comments we have provided to date have been underutilized in developing the Carbon Plan... We request that there be better integration of existing feedback from stakeholders into the Carbon Plan, including a record of where and how Duke and the NCUC integrate that feedback."); see Initial Comments by NC Council of Churches, p. 2 (July 15, 2022). ("It remains unclear why NCUC delegated the monumental task of drafting and engaging stakeholders in North Carolina's decarbonization planning process to Duke Energy when House Bill 951 clearly tasked NCUC with such responsibilities. Now is the time for NCUC to act to ensure racial and economic equity and justice are centered meaningfully during every step of the process going forward.")

will create a shared foundation for developing the carbon plan and enable meaningful review and critique. The Commission's procedural order should establish deadlines for iterative and collaborative sharing of EnCompass modeling inputs as all parties work to develop plan updates. This process should entail (i) Duke Energy sharing methodology and model inputs before the Companies have begun model runs of scenarios, (ii) incorporating stakeholder feedback on modeling methodology and best practices and the model inputs, and (iii) sharing scenarios while still in the draft stage and early results of model runs prior to finalizing portfolios. This structure would allow parties that are not performing unique modeling to engage more meaningfully in the Companies' modeling exercise and give parties that do present unique modeling equal time with the Companies to do so.

A. RULE-MAKING PROCEDURES FOR REVISIONS TO THE COMMISSION'S IRP RULE R8-60 AND RELATED RULES FOR CERTIFICATING NEW GENERATING FACILITIES TO SUPPORT EXECUTION OF THE CARBON PLAN

With respect to Duke Energy's request to be directed by the Commission to develop and propose for comment, together with the Public Staff, revisions to the Commission's IRP Rule R8-60 and related rules for certificating new generating facilities by January 31, 2023⁴, CLEAN Intervenors agree with the Public Staff that all parties should be afforded more time to develop draft rules.⁵ Consistent with the Commission's *Order Requiring Filing of Carbon Plan and Establishing Procedural Deadlines*, issued November 19, 2021, the Commission should initiate a generic rulemaking proceeding after developing its initial carbon plan. Prior to any party proposing rule revisions, the Commission should appoint

⁴ Verified Petition for Approval of Carbon Plan, p.17 (May 16, 2022).

⁵ See Comments of the Public Staff, p. 163 (July 15, 2022); CCEBA also stressed the importance of "stakeholder and intervenor participation, comment, and feedback" in any rulemaking proceeding to review Rule R8-60. See Comments and Issues of the Carolinas Clean Energy Business Association, p. 58 (July 15, 2022).

an independent third party or Commission staff to facilitate a collaborative process for interested parties to propose revisions to Rule R8-60. The outcomes of long-range resource planning affect us all. A broader array of stakeholders than those who have the resources to formally intervene in the docket should be engaged prior to the Commission revising its IRP rules. If only the Companies and the Public Staff are involved in proposing initial revisions to Rule R8-60, important, diverse perspectives will be lost.

CLEAN Intervenors agree with Carolina Industrial Group for Fair Utility Rates II and Carolina Industrial Group for Fair Utility Rates III (CIGFUR),⁶ Apple Inc., Google LLC, and Meta Platforms, Inc. (together, the Tech Customers),⁷ the North Carolina Electric Membership Corporation (NCEMC),⁸ Carolina Utility Customers Association, Inc. (CUCA),⁹ and Walmart Inc.,¹⁰ that inclusion or "selection" by the Commission of an asset in its carbon plan does not relieve the Companies of their obligations to provide the critical, detailed information required in a Certificate of Public Convenience and Necessity (CPCN) application to enable the Commission's finding and conclusion that any particular resource is required by the public convenience and necessity pursuant to N.C. Gen. Stat. § 62-110.1(a). CLEAN Intervenors may support certain revisions to the rules for certificating new generation facilities, but not with the aim in mind of weakening the level of scrutiny required by the CPCN review process.

 $^{^{\}rm 6}$ See Comments of CIGFUR II and II, pp. 32-35 (July 15, 20220).

⁷See Tech Customers' Comments on Proposed Carbon Plan, pp. 13-14 (July 15, 2022).

⁸ Comments of North Carolina Electric Membership Corporation, p. 15 (July 15, 2022).

⁹ CUCA's Comments Regarding Carbon Plan, pp. 4-5 (July 15, 2022).

¹⁰ Comments of Walmart Inc., pp 2-3 (July 15, 2022).

B. THE COMMISSION'S AUTHORITY TO EXTEND THE 2030 INTERIM 70% CARBON EMISSION REDUCTION TARGET PURSUANT TO N.C. GEN. STAT. § 62-110.9(4)

H951 sets clear deadlines for achieving its carbon-reduction requirements: a "seventy percent (70%) reduction in emissions of carbon dioxide (CO2) emitted in the State from electric generating facilities owned or operated by electric public utilities from 2005 levels by the year 2030 and carbon neutrality by the year 2050. . . ."¹¹ Although the General Assembly empowered the Commission with significant discretion in planning to achieve the statutory reductions, that discretion has limits. First, the Commission may extend the 70 percent reduction deadline to 2032 only where doing so would have a "more significant and material impact on carbon reduction."¹²

The AGO reads the statute in a way that is consistent with the statutory language, and concludes—correctly—that Duke's Portfolios 2, 3 and 4 do not satisfy the statutory criteria that would justify a delay in achieving the 70-percent interim carbon reduction. CCEBA, likewise, posits that "Duke Energy fails to explain why it needs extra time for compliance in its additional portfolios or how these options would satisfy the least cost requirement." The Clean Energy Buyers Association agrees, declaring:

Duke's proposed Carbon Plan significantly delays HB 951's statutorily mandated goal deadline of a 70% reduction in CO2 by 2030. Large energy buyers and independent clean energy suppliers are ready to lead North Carolina toward carbon neutrality on a shorter timeline . . . Duke needs to propose, or this Commission needs to independently develop and adopt, a Carbon Plan that is consistent with that timeline. ¹⁵

¹¹ N.C.G.S. § 62-110.9(4).

¹² *Id*.

¹³ AGO Comments at 7-13.

¹⁴ CCEBA Comments at 10.

¹⁵ Initial Comments and Proposed Issues of Clean Energy Buyers Association at 4-5.

Certain parties urge a more expansive interpretation of the Commission's authority to extend the deadline to achieve the interim 70-percent reduction in carbon emissions. CIGFUR goes so far as to assert that "[t]he General Assembly clarified this specific discretion by providing that the Commission may extend the time frame for compliance with the carbon reduction goals set forth in HB 951 by two years *for any reason*." It is difficult to square this assertion with the plain language of the statute. For its part, the Public Staff states in its initial comments that "the Public Staff's starting point is to attain 70% CO2 emissions reduction by 2030," but suggests that the Commission consider the "relative costs of earlier compliance" in Duke's proposed Portfolio 1. Although CLEAN Intervenors are sensitive to cost considerations and mindful of the law's least-cost mandate, postponing taking the necessary actions to reduce carbon emissions to delay incurring costs is not a valid reason to extend the 70-percent compliance year beyond 2030. As CCEBA correctly notes, "[s]imply delaying action to defer costs is not consistent with the intent of HB951 or existing least cost principles." 18

Further, even if Duke had demonstrated a "more significant and material impact on carbon reduction" to warrant a two-year extension to comply with H951's interim emission reduction requirement—which it has not—any discussion of portfolios that extend the 70-percent reduction deadline beyond 2032 is entirely premature. The Commission may extend that deadline beyond 2032 only under specific, enumerated circumstances: "in the event the Commission authorizes construction of a nuclear facility or wind energy facility that would require additional time for completion due to technical, legal, logistical, or other

¹⁶ CIGFUR Comments at 9 (emphasis added)

¹⁷ Comments of the Public Staff at 28.

¹⁸ CCEBA Comments at 10, fn. 16.

factors beyond the control of the electric public utility" or "in the event necessary to maintain the adequacy and reliability of the existing grid." With regard to the first prong, the AGO explains:

[T]he Commission cannot exceed the statutory deadline by more than two years unless the delay is due to an *unforeseen event beyond the control of the public utility* related to the construction of a wind or nuclear facility. Recognizing the immense complexity involved with the construction of offshore wind and nuclear facilities, the General Assembly included a safe harbor provision to allow the Commission and Duke to avoid the scenario where they are required by law to accomplish the impossible. *The Commission cannot, as Duke proposes, prospectively plan to fail to meet the statutory deadlines by more than two years.* ²⁰

With regard to the second prong, the AGO reasons that "Duke does not argue that adoption of Portfolios 3 and 4 are necessary to maintain the adequacy and reliability of the existing grid at this time—nor could it." The legislature's use of the phrase "in the event" makes clear that an extension pursuant to one of these triggering circumstances is to be granted only if ("in the event") such a circumstance arises—not prospectively, or at any rate not a decade or more prior to the extended compliance date proposed by the utility. Accordingly, the Commission should disregard any proposed portfolios that would not achieve the 70 percent reduction on time, because any argument that they have satisfied the statutory criteria required to justify a delay is simply untenable.

C. COMMENTARY PERTAINING TO LEGALITY OF PURCHASING THIRD PARTY-OWNED GENERATION EXCLUDED FROM N.C. GEN. STAT. § 62-110.9(2)

There is a potential inconsistency in the text of N.C.G.S. § 62-110.9(2), which first states that the Commission shall "Comply with current law and practice with respect to the

¹⁹ N.C.G.S. § 62-110.9(4).

²⁰ AGO Comments at 11-12 (emphasis added).

²¹ *Id.* at 12.

least cost planning for generation." This provision references N.C. Gen. Stat. § 62-2(a)(3a), which declares it the policy of the state of North Carolina:

To assure that resources necessary to meet future growth through the provision of adequate, reliable utility service include use of the entire spectrum of demand-side options, . . . to require energy planning and fixing of rates in a manner to result in the least cost mix of generation and demand-reduction measures which is achievable. . . .

"Current law and practice" for achieving the "least cost mix" of resources requires the utility to consider all resources, including purchasing third-party-owned capacity. *See, e.g.*, Commission Rule R8-60(c)(1), (d). The new law explicitly affirms that current law and practice for least-cost planning governs the carbon planning process as well; current law includes Commission rules that require consideration of "Purchased Power," obligating the utility "to assess on an on-going basis the potential benefits of soliciting proposals from wholesale power suppliers and power marketers to supply it with needed capacity." Rule R8-60(d). Current law also requires the Commission to consider "arrangements for pooling power" and "other arrangements with other utilities and energy suppliers" before granting a Certificate of Public Convenience and Necessity. N.C. Gen. Stat. § 62-110.1(c). Consistent with this longstanding law and practice, Duke Energy's current IRP includes purchased power as part of its resource mix, and Duke allowed the EnCompass model to select purchased wind from outside of North Carolina for inclusion in Duke's proposed carbon plan.²²

²² See, e.g., DEP Integrated Resource Plan 2020 Biennial Report, Table 12-E at p. 103 (showing contracts for purchased power); Duke Carbon Plan, Appendix J, Wind, at p. 13 (Duke assumed DEC purchased wind from PJM or Midcontinent Independent System Operator, Electric Reliability Council of Texas, or other jurisdictions).

The second sentence of § 62-110.9(2) reads that "[a]ny new generation facilities or other resources selected by the Commission in order to achieve the authorized reduction goals. . . shall be owned and recovered on a cost of service basis by the applicable electric public utility." This provision is seemingly at odds with the current law and practice in which purchases of energy and capacity from independent power producers can and do play an important role in least-cost planning.

CLEAN Intervenors agree with Tech Customers (pp. 18-21) that the repeated insistence on achieving a "least cost" Carbon Plan in HB 951 demonstrates that the General Assembly did not intend to sacrifice that long-standing principle. CUCA (pp. 2-3) also argued that the least-cost requirement is paramount. To the extent that the two sentences are in conflict, the Commission should resolve the resulting ambiguity in accordance with the declaration of policy, which requires adhering to the least-cost mix of generation and demand-side resources to fulfill the carbon plan requirements, which can include non-utility owned resources.

D. THE PROPER ANALYSIS OF THE IMPACTS OF METHANE EMISSIONS FROM NATURAL GAS

CLEAN Intervenors agree that the Commission has the authority to consider the impacts of methane emissions that are related to any existing or planned gas-fired power plants as part of the Carbon Plan.²³ While N.C. Gen. Stat. § 62-110.9 is focused on carbon emissions reduction requirements, considering methane emissions from leaks in the gas pipeline, storage, compression, and transmission system is consistent with the public policy

²³ See Joint Comments of NC WARN and the Charlotte-Mecklenburg NAACP at 20-22.

of the state.²⁴ Because methane is about 80 times more potent of a greenhouse gas than carbon dioxide in the short term, even seemingly small amounts of leakage can cause significant warming.²⁵ To the extent that Duke Energy plans to rely on new gas generation to help facilitate short-term carbon reductions from the early retirement of coal plants, it is sensible for the Commission to consider the potential for those emissions reductions to be counterbalanced by the accelerated global warming potential of downstream methane leaks.²⁶ To the extent that Duke plans to rely on so-called "renewable" natural gas, or biogas from swine waste, those facilities may also exacerbate methane pollution in ways that make them worse than conventional or fracked gas.²⁷

But putting to one side the Commission's authority to account for greenhouse gas emissions beyond carbon in the Carbon Plan, addressing those leaks will impose new costs that the Commission should consider. New provisions of the Clean Air Act that were included in the IRA will require the gas industry to reduce methane leaks or face significant financial costs of \$900 per metric ton of methane leaked in 2024, increasing to \$1,500 per metric ton after two years.²⁸ Those costs—either in fines or in the costs to reduce methane

²⁴ See N.C. Gen. Stat. § 62-2(a)(5); see also Exec. Order 246, Sec. 6 (encouraging non-Cabinet agencies, specifically including the North Carolina Utilities Commission, to incorporate the social cost of greenhouse gas emissions, and not just carbon pollution, into their decisions).

²⁵ Methane Emissions are Driving Climate Change. Here's How to Reduce Them, U.N. ENV'T PROGRAMME (Aug. 20, 2021), https://www.unep.org/news-and-stories/story/methane-emissions-are-driving-climate-change-heres-how-reduce-them.

²⁶ See Benjamin Storrow, "Methane Leaks Erase Some of the Climate Benefits of Natural Gas," Scientific American (May 5, 2020) (citing an EDF study that found "that gas burned to generate electricity loses its climate benefits in the near term relative to coal when the leakage rate along the supply chain exceeds 2.7% of production"), https://www.scientificamerican.com/article/methane-leaks-erase-some-of-the-climate-benefits-of-natural-gas/

²⁷ See Comments on 2022 Draft Swine Digester System General Permit (AWG400000), Southern Environmental Law Center on behalf of Duplin County Branch of the NC NAACP, et al. (May 5, 2022), https://southernenvironment.sharefile.com/share/view/sbe0aff4bd2754c16997b05f9e09ad1ee

²⁸ Congressional Research Service, Inflation Reduction Act Methane Emissions Charge: In Brief (Aug. 29, 2022), https://crsreports.congress.gov/product/pdf/R/R47206

leaks in the gas transmission system—will ultimately affect the costs that Duke Energy will pay to fuel its gas plants, costs that are typically passed on to ratepayers. Costs of complying with environmental regulations and fuel costs are foundational issues for consideration in integrated resource planning and should be taken into account.²⁹

E. ALL SUB-ISSUES DESIGNATED UNDER THE TOPIC IDENTIFIED AS "GENERAL/OTHER"

1. LEAST-COST PLANNING REQUIRES CONSIDERATION OF MULTIPLE FACTORS, INCLUDING RISK.

In enacting H951, the legislature made clear its command that the law's carbon-reduction requirements be achieved at least cost. Indeed, both NCEMC and the Tech Customers observe that the General Assembly reiterated the least-cost requirement of the Carbon Plan no less than four times.³⁰ As the Tech Customers point out, H951 explicitly admonishes the Commission to "[c]omply with current law and practice with respect to the least cost planning for generation, pursuant to G.S. 62-2(a)(3a), in achieving the authorized carbon reduction goals and determining generation and resource mix for the future." N.C.G.S. § 62-110.9. That section of the General Statutes provides that resources for future growth include use of the "entire spectrum of demand-side options" and "require energy planning and fixing of rates in a manner to result in the *least cost mix of generation* and

³⁰ NCEMC Comments at 7; Tech Customers' Comments at 18-19, citing N.C. Session Law 2021-165, § 1(1) (Commission shall develop a plan to achieve the least cost path for compliance with law's carbon-reduction goals); N.C. Session Law 2021-165, § 1(2) (Commission shall "[c]omply with current law and practice with respect to the least cost planning for generation, pursuant to G.S. 62-2(a)(3a)"); N.C. Session Law 2021-165, § 1(2)(b) (to the extent the Commission selects new solar resources, it must do so "in adherence with least cost requirements"); N.C. Session Law 2021-165, § 1(4) (Commission shall "[r]etain discretion to determine optimal timing and generation and resource-mix to achieve the least cost path to compliance with the authorized carbon reduction goals"). Several other parties' initial comments emphasized the least-cost requirement n H951, including Appalachian Voices, Carolina Industrial Group for Fair Utility Rates, Carolina Utility Customers Association, Walmart, and the Public Staff.

²⁹ Commission Rule R8-60(g).

demand-reduction measures which is achievable. . . ." N.C.G.S. § 62-2(a)(3a) (emphasis added).

These least-cost principles are incorporated into the Commission's rules implementing the provisions of N.C. Gen. Stat. § 62-2(3a), as well as the long-range planning requirements of N.C.G.S. § 62-110.1(c).³¹ Commission Rule R8-60 requires electric utilities to develop and submit integrated resource plans that, "at a minimum" must incorporate a "comprehensive analysis of all resource options (supply-and demand side)" including resources chosen to provide reliable electric utility service "at least cost over the planning period."32 In developing their IRPs, utilities must "compare a comprehensive set of potential resource options, including both demand-side and supply-side options, to determine an integrated resource plan that offers the *least cost combination* (on a long-term basis) of reliable resource options for meeting the anticipated needs of its system."³³ This comparative analysis must "analyze potential resource options and combinations of resource options to serve its system needs" taking into account sensitivity to "variations in future estimates of peak load, energy requirements, and other significant assumptions, including, but not limited to, the risks associated with wholesale markets, fuel costs, construction/implementation costs, transmission and distribution costs, and costs of complying with environmental regulation," as well as applicable "system operations, environmental impacts, and other qualitative factors."34

³¹ NCUC Rule R8-60(a) ("The purpose of this rule is to implement the provisions of G.S. 62-2(3a) and G.S. 62-110.1 with respect to least cost integrated resource planning by the utilities in North Carolina.").

³² NCUC Rule R8-60(c) (emphasis added).

³³ NCUC Rule R8-60(g) (emphasis added).

³⁴ *Id*.

In light of the foregoing provisions, it is evident that current law and practice with respect to least-cost planning focuses on two key considerations, cost and risk—both of which are typically borne by ratepayers. Although a key metric in least-cost planning is the present value of revenue requirements (PVRR)—the long-term system cost to ratepayers associated with a given resource or portfolio—the PVRR is not the only metric, nor should it be.

One important question in the least-cost analysis is "least-cost for whom?" Answering this question requires consideration of how the costs of a portfolio are distributed across and within ratepayer classes. For example, Appalachian Voices points out that "least-cost" and "affordable," while related, do not mean the same thing, and affordability should be a core principle in the Carbon Plan. 35 The disparate rate impacts to customers of the two Duke utilities, as calculated by both the Public Staff and CLEAN Intervenors' consultant RMI, are another key consideration not captured by PVRR estimates.

In addition to cost considerations, risk is an important factor in least-cost planning. As the Public Staff rightly observes, "[s]imply selecting the least cost portfolio based on PVRR, without considering other factors, would put ratepayers at significant risk of higher than projected costs if the lower costs do not materialize."³⁷ The Commission's IRP rules recognize the importance of factoring in risk when comparing combinations of resources (i.e., portfolios) in resource planning. In the case of the Carbon Plan under development,

³⁵ Initial Comments of Appalachian Voices at 7.

³⁶ Comments of the Public Staff at 96-97.

³⁷ Comments of the Public Staff at 12. Other parties also advocated for consideration of risk and other factors in the least-cost determination, including the Environmental Justice Community Action Network, Down East Coal Ash Environmental and Social Justice Coalition, and Appalachian Voices.

these risks include (but are not limited to) fuel price risk, execution risk, stranded asset risk, and risk associated with non-commercial technologies. Depending how future conditions unfold, these risks have the potential to expose ratepayers to billions of dollars in excess costs. A Carbon Plan that minimizes those risks will result in a path to compliance with H951's requirements that is not only least-cost, but also "least-regrets."

2. BIOFUELS ARE NOT CARBON-FREE RESOURCES.

CLEAN Intervenors agree with the Red Tailed Hawk Collective and the Robeson County Cooperative for Sustainable Development that biofuels, particularly from biogas derived from swine waste lagoons at concentrated animal feeding operations, should not be considered carbon-free.³⁸ Likewise, fuels derived from forest biomass should also not be considered "low-carbon" or carbon-free, despite Duke Energy's characterizations. As noted above with regard to the Commission's authority to consider methane leaks when assessing gas-fired generation in the Carbon Plan, the Commission should be sure that Duke does not count electricity generated by burning swine waste biogas as a carbon-free resource³⁹ for purposes of accounting for its achievement of the carbon reduction requirements in N.C.G.S. § 62-110.9. In addition, the Commission should consider whether current efforts to capture swine-waste biogas are causing an increase in methane or other

³⁸ Red Tailed Hawk Collective et al. at 22-26.

³⁹ Henrik Moller et al., Agricultural Biogas Production—Climate and Environmental Impacts, SUSTAINABILITY, Feb. 6, 2022 ("[m]ethane leakages can have significant effect on the total climate impact, with 7 percent of the positive climate impact being lost for each percentage point of leakage in a manure-based biogas Scenario"); see also Charlotte Scheutz & Anders M. Fredenslund, Total Methane Emission Rates and Losses From 23 Biogas Plants, 97 WASTE MGMT. 38, 38–46 (Sept. 2019), https://doi.org/10.1016/j.wasman.2019.07.029

harmful air pollution that would place those operations out of harmony with the environment. 40 N.C.G.S. § 62-2(a)(5).

F. ANY MISCELLANEOUS ISSUES PREVIOUSLY RAISED BY ANY PARTY BUT OMITTED FROM THE ISSUES REPORT OR NOT DESIGNED TO THE HEARING TRACK BY THIS ORDER.

In its comments, the AGO discussed the standard of review applicable to this proceeding, noting that in its initial order setting forth the procedure for this docket, the Commission announced its intent to "look to, but . . . not strictly adhere to, Rule R8-60 in establishing the initial procedures" for this docket and "generally . . . employ the same review process as set forth in Rule R8-60(k)[.]". 41

Rule R8-60, as discussed previously, governs the Commission's integrated resource planning process. Our Court of Appeals has held that an IRP proceeding is similar to a legislative hearing, "wherein a legislative committee gathers facts and opinions so that informed decisions may be made at a later time." CLEAN Intervenors recognize that the Commission subsequently announced that "[i]n developing the Carbon Plan, the Commission intends to act in a judicial capacity by conducting hearings to receive evidence, including testimony under oath, pursuant to its authority pursuant to N.C. Gen. Stat. § 62-60." By adopting this dual perspective—both investigatory and quasi-judicial—the Commission is taking a sensible approach, one that is consistent with its "discretion to determine optimal timing and generation and resource-mix to achieve the

⁴⁰ See *supra* Note 25, SELC Comments on Swine Digester General Permit at pp. 15-20; 33-39.

⁴¹ AGO Comments at 6 (quoting November 19, 2021 Order Requiring Filing of Carbon Plan and Establishing Procedural Deadlines at 1, 2).

⁴² State ex rel. Utilities Commission v. North Carolina Electric Membership Corp., 105 N.C. App. 136, 412 S.E.2d 166 (1992)).

⁴³ Order Clarifying Opportunities for Public Participation in the Development of the Carbon Plan Pursuant to House Bill 951 (January 28, 2022) at 2.

least cost path to compliance with the authorized carbon reduction goals" under N.C.G.S. § 62-110.9(4).

The fact that the Commission is acting in its judicial capacity does not, however, mean that Duke Energy should be accorded any special status, such that its proposed plan is entitled to a presumption of reasonableness. In its August 17, 2022 *Order Denying the AGO's Motion to Direct Duke to Perform Additional Modeling*, the Commission stated that "to the extent that parties seek to rebut Duke's proposed portfolios, the burden is on those parties to develop and present the Commission with evidence in furtherance of their positions, and those parties are encouraged to elucidate for the Commission any unresolved modeling flaws." To the extent the Commission implied that it would apply a rebuttable presumption in favor of Duke's proposed plan or portfolios, CLEAN Intervenors respectfully ask the Commission to reconsider. Duke has the burden to show that its proposed plan and supporting portfolios are reasonable without any rebuttable presumption in their favor. Any party to this docket may provide evidence that any of the proposed plans are impacted by flawed assumptions, inputs, and/or adjustments, and such evidence should be given due weight by the Commission. Any other presumption would be improper.

II. CONCLUSION

CLEAN Intervenors appreciate the opportunity to be heard on these issues and to highlight the areas of overlap and consensus with fellow stakeholders.

Respectfully submitted, this the 9th day of September 2022.

/s/ Taylor M. Jones
Taylor M. Jones
N.C. State Bar No. 58831
Counsel for NCSEA
4800 Six Forks Road, Suite 300

Raleigh, NC 27609 919-832-7601 taylor@energync.org

Attorney for North Carolina Sustainable Energy Association

/s/ Gudrun Thompson
Gudrun Thompson
N.C. Bar No. 28829
David L. Neal
N.C. Bar No. 27992
Nicholas Jimenez
N.C. Bar No. 53708
SOUTHERN ENVIRONMENTAL
LAW CENTER
601 W. Rosemary Street, Suite 220
Chapel Hill, NC 27516
Telephone: (919) 967-1450
Fax: (919) 929-9421

Attorneys for Southern Alliance for Clean Energy, Sierra Club, and Natural Resources Defense Council

CERTIFICATE OF SERVICE

I hereby certify that all parties of record on the docket service list have been served true and accurate copies of the foregoing filing by hand delivery, first class mail deposited in the U.S. mail, postage pre-paid, or by email transmission with the party's consent.

This the 9th day of September 2022.	
	/s/ Gudrun Thompson