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July 22, 2022

VIA ELECTRONIC FILING

Ms. A. Shonta Dunston
Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4300

**RE: Issues Report Submitted on Behalf of Duke Energy Carolina, LLC
and Duke Energy Progress, LLC
Docket No. E-100, Sub 179**

Dear Ms. Dunston:

Enclosed for filing in the above-referenced docket, please find the Issues Report Submitted on Behalf of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC.

If you have any questions, please do not hesitate to contact me. Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Jack Jirak", written in a cursive style.

Jack E. Jirak

Enclosure

cc: Parties of Record

OFFICIAL COPY

JUL 22 2022

CERTIFICATE OF SERVICE

I certify that a copy of Issues Report Submitted on Behalf of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC, in Docket No. E-100, Sub 179, has been served by electronic mail, hand delivery or by depositing a copy in the United States mail, postage prepaid, to parties of record.

This the 22nd day of July, 2022.

A handwritten signature in black ink, appearing to read "Jack Jirak", written in a cursive style.

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**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-100, SUB 179

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)	
Duke Energy Progress, LLC, and Duke)	ISSUES REPORT SUBMITTED ON
Energy Carolinas, LLC, 2022 Biennial)	BEHALF OF DUKE ENERGY
Integrated Resource Plans And Carbon Plan)	CAROLINAS, LLC AND DUKE
)	ENERGY PROGRESS, LLC

NOW COME Duke Energy Progress, LLC (“DEP”) and Duke Energy Carolinas, LLC (“DEC” and, together with DEP, “Duke Energy” or the “Companies”), through counsel, and respectfully submit this issues report (“Issues Report”) to the North Carolina Utilities Commission (“Commission”) as directed by the Commission’s April 1, 2022, *Order Establishing Additional Procedures and Requiring Issues Report* (“April 1 Order”).

INTRODUCTION AND SUMMARY

Based on the Companies’ review of the extensive comments filed on July 15th and assessment of the parties’ positions presented therein, the Companies believe that an expert witness hearing addressing a broad range of topics may be needed in this proceeding. Despite good faith efforts to identify and narrow issues to be decided by the Commission as it considers whether the Companies’ proposed Carolinas Carbon Plan (“Carbon Plan”) meets the requirements of Section 1 of S.L. 2021-165 (“HB 951”),¹ it is apparent that there is not consensus across all parties regarding the vast majority of the Companies’ proposed Carbon Plan and requests for relief presented in the Companies’ May 16, 2022 Petition for Approval of Carbon Plan (“Petition”). Nevertheless, the Companies will continue to seek

¹ Section 1 of HB 951 has now been recodified at N.C. Gen. Stat. § 62-110.9.

to identify areas of consensus after the date of this filing and, as described below, believe that there may be some opportunities for consensus with a subset of parties that could be achieved either prior to or after the scheduled expert witness hearing, such as near-term procurement activities.

As directed by the April 1 Order, the Companies have conferred with all parties that have been granted intervention in this proceeding and are presenting, as Attachment 1, a consolidated list of issues identified by each party as being appropriate for expert witness hearing (“Issues Report Summary Table”) for the Commission’s consideration. In the Issues Report Summary Table, the Companies compiled the issues separately identified by the Companies, the Public Staff, and other interested parties, and further provided an opportunity for comments from each party as to whether such party agrees that the disputed issues identified by particular parties are appropriate for expert witness hearing (as shown in the Issues Report Summary Table, not all parties elected to offer comment in this respect). Subject to further direction from the Commission, the Companies plan to develop and present testimony on August 19, 2022 supporting the requests for relief presented in the Companies’ Petition and further demonstrating the Carbon Plan’s compliance with the requirements of HB 951.

PROCEDURAL HISTORY AND BACKGROUND

On November 19, 2021, the Commission issued in the above captioned proceeding an *Order Requiring Filing of Carbon Plan and Establishing Procedural Deadlines* (“November 19 Order”), requiring the Companies to file an initial Carbon Plan by April 1, 2022, meeting the requirements of HB 951, and permitting intervening parties to file comments on the Companies’ proposed Carbon Plan within 60 days of the Carbon Plan

filing. By order issued November 29, 2021, the deadline for the Companies' initial Carbon Plan filing was extended to May 16, 2022, and intervening parties were directed to make their responsive filings by July 15, 2022.

Recognizing HB 951's directive for the Commission to consider "stakeholder input" in developing the Carbon Plan, the November 19 Order directed the Companies to engage with all interested stakeholders and to "gather[] and incorporate[e] stakeholder input on the Carbon Plan" as it was developed and to report to the Commission during this stakeholder engagement phase on issues on which there is consensus and issues in dispute. November 19 Order, at 3. As addressed in the Carbon Plan itself² and in prior filings with the Commission, the Companies engaged in unprecedented stakeholder engagement efforts between January and May 2022 as part of the Companies' development of the proposed Carbon Plan. The Companies did identify certain elements of the near-term action plan to be generally supported by most parties. Participating parties generally agreed there would be a need to pursue energy efficiency and demand-side programs, procure additional solar and wind resources in the near-term, along with the need for grid investments and energy storage to support renewable integration, though there were certainly differences of opinion expressed regarding the exact pace and parameters of such elements. However, due to the complexity of the resource planning task required by HB 951 and the differing policy positions of interested stakeholders, only limited areas of general consensus were achieved between the Companies, the Public Staff, and stakeholders in advance of filing the Carbon Plan with the Commission.

² Carbon Plan, Appendix B (Stakeholder Engagement).

In the April 1 Order, the Commission stated its intention to attempt to resolve all issues arising in this proceeding based on a record developed through public witness testimony, verified filings made by persons who would otherwise be qualified to present expert testimony in a formal hearing, and written comments, rather than conducting an expert witness hearing for the purpose of receiving expert testimony. Nevertheless, recognizing the significance of the proceeding and the potential for disputed issues, the Commission determined that an expert witness hearing may be needed to resolve disputed issues, but reserved judgment on the need for such a hearing and the potential scope of expert testimony required until after the filing of comments on the Carbon Plan by intervenors. The Commission accordingly directed the parties to confer prior to July 15, 2022, with the goal of identifying and narrowing the issues in controversy. In addition, the Commission directed intervening parties to “identify in their July 15, 2022 filings the substantive issues, if any, that should be the subject of an expert witness hearing.” April 1 Order, at 1-2.

The Commission further directed Duke Energy to “confer with all parties” subsequent to July 15 in furtherance of development of the Issues Report. *Id.* at 2. The Commission specified that the Issues Report should identify all substantive issues that are anticipated to come before the Commission for determination in this proceeding, including: (1) those issues where agreement exists or can reasonably be expected to be reached; (2) those issues that are in controversy, but do not merit consideration at an expert witness hearing; and (3) those issues that are in controversy and merit consideration at an expert witness hearing. *Id.*

In its June 15, 2022, *Procedural Order* (“June 15 Order”), the Commission confirmed that it would consider allowing further written comments of all parties to the extent the parties identified issues in dispute that do not require expert testimony and the Commission determined could be resolved without an expert witness hearing (a “non-hearing track”). The Commission further identified its intent, barring the unforeseen, to issue an order establishing the scope of the expert witness hearing by July 29, identifying any non-hearing track issues, and establishing procedural deadlines necessary to resolve all contested issues. The Commission noted that, if any issues are to be determined via a non-hearing track, all parties will be given equal opportunity to file responsive comments on these issues, the timing of which will be determined by the subsequent order, but which will likely overlap with the prehearing procedures outlined in the April 1 Order. June 15 Order, at 2-3.

As directed by the Commission and previously addressed in the Companies’ July 8, 2022, informational update letter filed in this docket, Duke Energy made good faith efforts to engage with all known parties in advance of the July 15, 2022 comment filing deadline. During this time period, counsel for Duke Energy contacted counsel for the majority of intervenors to attempt to identify and narrow issues in dispute in advance of the July 15th comment deadline. Intervenors engaged in this effort in good faith but in many cases, due to the tight timelines, were not able to share detailed recommendations prior to July 15, 2022 or were only able to provide high level positions and not detailed comments. During this accelerated 60-day review timeframe, the Companies also responded to nearly 1,400 distinct data requests on the Carbon Plan and engaged in an unprecedented and proactive effort to provide intervenors information and assistance in

their review of the Companies' Carbon Plan, including hosting two informational meetings to provide a forum in which Public Staff and intervenor technical experts could ask questions of Duke Energy's technical modeling experts regarding the EnCompass modeling process. However, despite these diligent efforts, due to the expedited nature of this proceeding as well as the complexity of the issues involved, the parties were unable to meaningfully identify and narrow issues in controversy in advance of July 15th.

ISSUES REPORT

I. Engagement with Parties and Overview of Issues Report Summary Table

As a threshold matter, the Companies note that participation in the comment phase of this docket has been unprecedented and robust. More than 40 parties³ have been allowed to intervene in this docket, including numerous parties that sought to intervene close in time to the July 15 comment deadline. Over 30 distinct sets of comments were filed on the Companies' Carbon Plan on or before July 15th. Since July 15th, the Companies have devoted significant resources to reviewing and analyzing more than 2,000 pages of comments, technical expert reports and other exhibits of significantly varying scope and depth, with the goal of identifying issues of consensus and issues in dispute as directed in the April 1 Order.

Due to the volume, varied positions and complexity of comments presented, however, it is clear that consensus across all parties has not been achieved with respect to the vast majority of issues in this proceeding. Moreover, as shown in the Issues Report Summary Table, the parties to this proceeding have identified substantive issues for expert hearing that cover essentially the entirety of the Companies' proposed Carbon Plan and

³ Certain parties have intervened jointly. In addition to participation by the Public Staff, the Commission has issued 33 orders granting intervention to parties or co-parties in this proceeding.

nearly all requests for relief. Therefore, given the lack of consensus and the parties' numerous and, in some cases, very generalized requests for an expert hearing across the entire range of the Carbon Plan, the Companies believe that a broad expert hearing may be needed (as is discussed further below).

Attachment 1 to this filing contains a summary list of each issue identified—either by Duke Energy, in parties' comments, or subsequently provided by counsel through additional engagement post-July 15—as appropriate for consideration in an expert witness hearing. Recognizing the number of issues that parties identified as in dispute and appropriate for expert witness hearing, Duke Energy endeavored to compile those issues for the benefit of all parties and the Commission.

This Issue Report Summary Table was circulated to all parties on July 20th in order to allow all parties an opportunity to (1) confirm each party's respective proposed issues for expert witness hearing were accurately stated (or to refine such issues if a party elects to do so); (2) provide comment to the Commission on any areas of consensus/potential consensus identified in the list; and (3) provide comment to the Commission on whether issues identified by other parties are appropriate for expert witness hearing or, instead, are more appropriate for a non-hearing track (legal briefing and/or comments).

Therefore, the Issues Report Summary Table now contains both a summary of the substantive issues identified by all parties for hearing, as well as feedback from all parties that desired to provide feedback. The Companies also appreciate the Commission's consideration that certain issues could appropriately be considered on a non-hearing track and have identified a limited number of legal and technical issues that would be better

suited to be addressed in legal briefing and/or comments, at the discretion of the Commission and other parties have the had opportunity to do the same.

To assist the Commission in its review and at the suggestion of parties during the July 21 discussion, the Companies have categorized issues in the Issue Report Summary Table using a color coding system. Duke Energy has exercised good faith judgement to categorize issues appropriately but recognizes that numerous issues could have been included in more than one category. Importantly, there was not sufficient time to allow parties to provide feedback with respect to categorization (either the categories used or the Companies' categorization determinations). Therefore, the Commission should utilize this categorization only if helpful, with the understanding that parties have not had an opportunity to review the categorizations. In a similar vein of assisting the Commission's consideration of the Issues Report Summary Table, those items in the Issues Report Summary Table that have been recommended by one or more parties for consideration in the non-hearing track (and not warranting or appropriate for expert testimony in an expert witness hearing) have been identified through the use of bold, italicized font. For the sake of clarity, parties also desired that Duke Energy make clear that a party's decision not to provide further comment with respect to the Issues Report Summary Table or not to comment on all positions of other parties does not indicate either support for or opposition to the expert witness hearing requests reflected therein.

The Companies note that despite the current lack of consensus on significant aspects of the Carbon Plan and the broad requests for expert hearing, the Companies believe that there is some degree of agreement amongst many parties on certain items. For instance, there was a substantial amount of support for the Companies' request for approval

of the near-term procurement of solar, batteries, and onshore wind, though differences of opinion exist with respect to the exact amount and certain aspects of the mechanics of any such related procurement process. There was little or no direct opposition to the Companies' proposed actions with respect to existing supply-side resources, including (pursuit of Subsequent License Renewals ("SLRs") for the Companies' existing nuclear fleet). Therefore, there remain opportunities for consensus, and the Companies are committed to continued engagement with the Public Staff and other interested parties in advance of an expert witness hearing (as is further discussed below) with the goal of potentially narrowing the issues in controversy.

II. Continued Engagement with Public Staff and Other Interested Parties

In addition to engaging with all parties regarding preparation of the Issues Report Summary Table, the Companies have additionally engaged with the Public Staff regarding certain of its modeling recommendations and have agreed to develop a supplemental "P5" portfolio analysis requested by the Public Staff in a further effort to seek consensus. P5 will incorporate many of the recommendations set forth in Public Staff's comments, and the Companies are working diligently with the Public Staff to agree on a final set of inputs and assumptions and are aiming to complete this supplemental modeling by August 19 (barring any unforeseen challenges). Duke Energy witnesses would then present the results of such analysis as part of Direct Testimony (as described further below).

Duke Energy also continues to engage with the Public Staff on the need for proactive transmission planning and has committed to develop supplemental transmission planning analysis addressing the need for Red Zone Transmission Expansion Plan ("RZEP") projects addressed in Appendix P of the Carbon Plan (Transmission Planning and Grid Transformation). The Companies are also aiming to complete this supplemental

planning analysis by August 19 (barring any unforeseen challenges) in order to provide evidence that the RZEP projects are necessary to achieve the objectives of the Carbon Plan. Duke Energy witnesses would then present the results of such analysis as part of Direct Testimony (as described further below).

Together, these two additional pieces of analysis may serve to facilitate further opportunities for consensus prior to the expert hearing. The Companies will keep the Commission and all parties apprised of any further consensus that can be achieved based on this analysis.

Duke Energy will continue to evaluate opportunities for engagement with other parties regarding potential consensus issues or areas of alignment that would assist the Commission in narrowing the disputed issues to be presented at the expert witness hearing, including near-term procurement (solar, solar + storage, storage and onshore wind), proactive transmission investments, and carbon baseline accounting. In parallel with that engagement, however, the Companies will also be turning to preparation of testimony and preparation for other processes as directed by the Commission and, as explained in the Companies' July 8 informational letter, the Companies will not be in a position to respond to further detailed discovery on the Carbon Plan in the short-term.

III. Duke Energy's Proposal for Expert Witness Hearing and Other Procedural Options

In light of the general lack of consensus and the broad set of issues identified by parties for the expert hearing (as summarized in the Issues Report Summary Table), the Companies are prepared to present witnesses to broadly defend the Companies' requests for relief presented in the Petition, present the additional analysis described above (P5 and additional transmission planning analysis), and to specifically address any additional issues

identified by this Commission. More specifically, Duke Energy intends to present witnesses to address the following topics:

1. The Companies overall approach to developing the proposed Carbon Plan to achieve HB 951's authorized CO2 emissions reductions targets and whether the Carbon Plan is consistent with HB 951's requirements to achieve the least cost path and represents prudent utility planning to maintain or improve upon the adequacy and reliability of the existing grid;
2. The reasonableness of the Companies' Carbon Plan modeling for planning purposes which will be further informed by Duke Energy's additional modeling of P5 and addressing the Companies' modeling approach and use of Encompass;⁴
3. The appropriate near-term supply-side development and procurement activities, including whether any potential changes to such near-term actions are appropriate in response to intervenor comments and the Companies' further engagement through development of P5;
4. The Companies plans for Consolidated System Operations and/or Merger of DEC and DEP as presented in the Carbon Plan and process for evaluating Commission and concerns regarding rate disparity between the Companies;
5. The need for and framework for implementing Transmission Planning/Proactive Transmission/RZEP;
6. The reasonableness of Duke Energy's plans for Development Activities for Long-Lead Time Recourses – Bad Creek II, small modular reactors, offshore wind; and
7. The reasonableness of the Companies Grid Edge / EE/DSM assumptions in the Carbon Plan.

The Companies support Commission consideration of these issues at expert witness hearing (as determined necessary) as well as any other specific issues identified by intervening parties that the Commission finds would be beneficial for parties to address in testimony. The Companies also request the Commission consider the issues identified in the Issues Report Summary Table as appropriate for briefing and/or comments and

⁴ The modeling witness panel will be prepared to discuss the modeling issues outlined in Attachment B.

establish a procedural schedule for parties to brief and/or comment on those issues in advance of the scheduled expert witness hearing.

However, recognizing the broad scope of issues that parties believe are appropriate for an expert witness hearing, the Companies believe that certain issues could be more effectively addressed through a technical conference. The Commission has recently utilized technical conferences to more efficiently assess technical and other issues in the context of the 2020 Integrated Resource Plan proceeding in Docket No. E-100, Sub 165. Technical conference(s) could be used in this proceeding for a variety of purposes, including for targeted topics such as those issues which the Commission determines may not require a final decision to develop this initial Carbon Plan. The Commission's obligation to "[d]evelop a plan, no later than December 31, 2022, with the electric public utilities, including stakeholder input" does not require that every issue raised by parties in this proceeding be resolved.⁵ Nor would that be possible given the wide range of issues raised by parties. In fact, the Companies' proposed Carbon Plan contemplated that numerous issues would need to be resolved in future proceedings (*e.g.*, the processes to consider changes to the derivation of utility system benefits as defined in the Companies' approved EE/DSM Cost Recovery Mechanism "must necessarily follow this initial development of the Carbon Plan"⁶). Similarly, the manner in which the Companies and the Commission ultimately determine to attempt to address rate disparity issues (including through future consideration of a potential merger) will require future proceedings and therefore cannot be finally resolved in this proceeding. The Companies' view is that the most critical issues for resolution in this proceeding are the Companies' proposed near-

⁵ N.C. Gen. Stat. § 62-110.9(1).

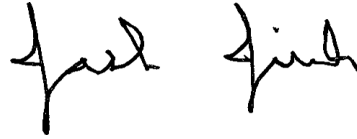
⁶ Carbon Plan, Executive Summary at 25.

term (2022-2024) procurement and development activities (including through “selection” of near-term resources under HB 951) but that other issues do not require final resolution at this time. In other cases, the Commission may determine that it needs to gather information in order to provide direction for future Carbon Plan proceedings, but such issues do not impact the substance of the initial Carbon Plan adopted in this proceeding.

CONCLUSION

WHEREFORE, Duke Energy Carolinas, LLC and Duke Energy Progress, LLC respectfully request that the Commission issue an order accepting this Issues Report, identifying issues for expert witness hearing or any needed technical conferences, along with briefing or comments consistent with the Companies’ discussion provided herein, and providing any further relief the Commission deems to be just and reasonable and in the public interest.

Respectfully submitted, this 22nd day of July, 2022.



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*Counsel for Duke Energy Carolinas, LLC
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ISSUES REPORT SUMMARY TABLE
Submitted by Duke Energy Progress, LLC and Duke Energy Carolinas, LLC
Docket No. E-100, Sub 179

Topic	Highlight Color ¹
Modeling—Methodology, assumptions and other modeling issues	Light Red
Coal unit retirement schedule; securitization	Light Grey
Near-Term Procurement Activity—solar, solar+storage, standalone storage, onshore wind, natural gas generation	Light Orange
Near-Term Development Activity—prudence of development work and need for long-lead time resources (Bad Creek II, small modular reactors, offshore wind)	Light Yellow
Work on Existing Resources (natural gas and SLR)	Light Green
Transmission Planning, Proactive Transmission, and RZEP	Light Blue
Rate Disparity / Merger / State Alignment	Light Purple
EE/DSM Issues/Grid Edge	Pink
Cost	Dark Orange
Reliability	Dark Yellow
Execution Risks	Dark Green
General/Other	Dark Blue
Legal	Dark Purple
Issues where more than one party has identified that the issue is appropriate for briefing/comment (non-hearing track).	<i>Bold, Italicized</i>

¹ As noted in the Companies' filing, to assist the Commission in its review and at the suggestion of parties during the July 21 discussion, the Companies have categorized issues in the Issue Report Summary Table using a color coding system. Duke Energy has exercised good faith judgement to categorize issues appropriately but recognizes that numerous issues could have been included in more than one category. Importantly, there was not sufficient time to allow parties to provide feedback with respect to categorization (either the categories used or the Companies' categorization determinations). Therefore, the Commission should utilize this categorization only if helpful, with the understanding that parties have not had an opportunity to review the categorizations. In a similar vein of assisting the Commission's consideration of the Issues Report Summary Table, those items in the Issues Report Summary Table that have been recommended by one or more parties for consideration in the non-hearing track (and not warranting or appropriate for expert testimony in an expert witness hearing) have been identified through the use of bold, italicized font. For the sake of clarity, parties also desired that Duke Energy make clear that a party's decision not to provide further comment with respect to the Issues Report Summary Table or not to comment on all positions of other parties does not indicate either support for or opposition to the expert witness hearing requests reflected therein.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
Duke Energy	Petition, Req. for Relief, ¶ 1, p. 15	Affirm that the Companies' Carbon Plan modeling is reasonable for planning purposes and presents a reasonable plan for achieving HB 951's authorized CO2 emissions reductions targets in a manner consistent with HB 951's requirements and prudent utility planning;	Duke Energy: Consensus has not been reached that Carbon Plan is reasonable for planning purposes to achieve HB 951 targets. Numerous aspects of modeling are disputed. Appropriate for evidentiary hearing. The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.
	Petition, Req. for Relief, ¶ 2.(a), p. 15-16	Approve the near-term supply-side development and procurement activities identified in Table 3 of the Carbon Plan's Executive Summary, including by: (a) Deeming the following resources as being selected in this initial Carbon Plan for purposes of HB 951, Section 1.(2), in all cases subject to the obligation to obtain a CPCN (where applicable) and to keep the Commission apprised of material changes in assumed pricing or schedule: <ul style="list-style-type: none"> (i) 3,100 MW of solar generation (including 750 MW requested to be procured through the 2022 Solar Procurement Program), of which a substantial portion is assumed to include paired storage; (ii) 1,600 MW of battery storage (1,000 MW stand-alone storage, 600 MW storage paired with solar); (iii) 600 MW of onshore wind; (iv) 800 MW of CTs; and (v) 1,200 MW of CC 	Duke Energy: There is a material amount of support amongst parties for DEC and DEP to pursue solar, battery storage and onshore wind in near-term (2022-2024). However, the volume of these resources to be developed and procured in the near-term are in dispute and parties have offered various recommendations regarding aspects of the procurement process and the balance between solar and solar+storage. Consensus has not been reached on the near-term need for CC and CT resources as part of the Carbon Plan. All issues above are therefore appropriate for evidentiary hearing. The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
	Petition, Req. for Relief, ¶ 2.(b), p. 16	(b) Approving the Companies' plans to pursue initial development activities to support the future availability of offshore wind, SMRs and new pumped storage hydro at Bad Creek to ensure that these resources are available options for the Companies' customers on the timelines identified the portfolios if selected in future Carbon Plan updates;	<p>Duke Energy: Consensus has not been reached on the need for initial development activities to support the future availability of offshore wind, SMRs and new pumped storage hydro at Bad Creek. Appropriate for evidentiary hearing.</p> <p>The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.</p>

	<p>Petition, Req. for Relief, ¶ 2.(c), p. 16</p>	<p><i>(c) Making the following additional determinations with respect to the project development activities summarized in Table 3:</i></p> <ul style="list-style-type: none"> <i>(i) Engaging in initial project development activities for these resources is a reasonable and prudent step in executing the Carbon Plan to enable potential selection of these generating facilities in the future;</i> <i>(ii) To the extent not already authorized under applicable accounting rules, that the Companies are authorized to defer associated project development costs for recovery in a future rate case (including a return on the unamortized balance at the applicable Companies then authorized, net-of-tax, weighted average cost of capital), subject to the Commission's review of the reasonableness and prudence of specific costs incurred in such future proceeding; and</i> <i>(iii) That in the event the long lead time resources are ultimately determined not to be necessary to achieve the energy transition and the CO2 emission reduction targets of HB 951, such project development costs will be recoverable through base rates over a period of time to be determined by the Commission at the appropriate time;</i> 	<p><i>Duke Energy: Consensus has not been reached on the legal significance of the Commission's determination in this proceeding or on the Commission's authority to authorize rate-related relief as part of Carbon Plan. This is a legal issue appropriate for briefing. Recommend for non-hearing track.</i></p> <p><i>The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.</i></p> <p><i>NC WARN: All of these issues involve important disputes of fact. Indeed, these issues are typically litigated during rate-increase evidentiary hearings. Recommended for evidentiary hearing track.</i></p> <p>CIGFUR:</p> <p><i>Issue (c)(i): Agree this sub-issue is appropriate for resolution via non-hearing track.</i></p> <p><i>Issue (c)(ii): The "extraordinary expenditure" test required for approval of deferral accounting outside of a general rate case is a mixed question of law and fact. Thus, it is more appropriate for an evidentiary hearing.</i></p> <p><i>Issue (c)(iii): Whether costs should be allowed for recovery through base rates and/or amortized is a mixed question of law and fact. Thus, it is more appropriate for an evidentiary hearing.</i></p> <p><i>App Voices: These are substantive issues recommended for evidentiary hearing.</i></p>
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Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
			<i>EWG: These are substantive issues recommended for evidentiary hearing.</i>
	Petition, Req. for Relief, ¶ 3, p. 16	<i>Approve the Companies' proposed actions with respect to existing supply-side resources, including through expanding flexibility of the existing gas fleet and continued disciplined pursuit of SLRs for the Companies' existing nuclear fleet;</i>	<p><i>Duke Energy: Potential consensus item with other parties. Not necessary for evidentiary hearing and can be addressed in comments. Recommend for non-hearing track.</i></p> <p><i>Public Staff believes this is appropriate for a comment track.</i></p> <p><i>The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.</i></p> <p><i>NC WARN: SLR expansion presents important disputes of fact and should be placed on the evidentiary hearing track.</i></p> <p><i>CIGFUR: These issues are mixed questions of law and fact. Thus, they are more appropriate for an evidentiary hearing.</i></p>
	Petition, Req. for Relief, ¶ 4, p. 16	Approve the Companies' plans to advance Grid Edge and Customer Programs and to update the underlying determination of the utility system benefits in the Companies' approved EE/DSM Cost Recovery Mechanism;	<p>Duke Energy: Consensus has not been reached on modeling EE/DSM in the Carbon Plan nor on issues relating to Grid Edge and Customer Program plans presented in Appendix G. Appropriate for evidentiary hearing.</p> <p>The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.</p>

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
	Petition, Req. for Relief, ¶ 5, p. 16	Acknowledge that HB 951 establishes new public policy goals requiring new generation and other resources that will necessarily inform the Companies' transmission system planning processes as outlined in the Open Access Transmission Tariff and direct the Companies to continue to study future transmission needs to reliably implement the Carbon Plan through the NCTPC and other appropriate forums;	<p>Duke Energy: General recognition that HB 951 establishes new public policy goals and there is a material amount of support amongst parties for proactive transmission planning.</p> <p>Duke has also committed to perform supplemental planning analysis for the Public Staff to address the need for Red Zone Transmission Expansion Plan projects. However, consensus has not been reached at this time. Appropriate for evidentiary hearing</p>

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
	Petition, Req. for Relief, ¶ 6, p. 16	<i>Approve the Companies' methodologies outlined in Appendix A (Carbon Baseline and Accounting) for tracking compliance with HB 951's CO2 emissions reductions targets and confirm the Commissions' accounting requirements for emissions from new out-of-state resources selected by the Commission (if any) as described above;</i>	<p><i>Duke Energy: Numerous parties accept/do not oppose the Companies carbon accounting methodologies outlined in Appendix A (Carbon Baseline and Accounting); however, certain parties recommend additional analysis and reporting be required, which the Companies do not support (See CIGFUR comment below). No party addressed Duke's requested confirmation with respect out-of-state resources. This is a legal issue appropriate for briefing. Recommend for non-hearing track.</i></p> <p><i>CIGFUR: This is incorrect. See Section VIII.a-e of CIGFUR's comments (pp. 30-31). As these are clearly factual issues, recommend for evidentiary hearing.</i></p> <p><i>App Voices: The treatment of out of state resources if selected by the Commission is a substantive issue appropriate for evidentiary hearing.</i></p> <p><i>EWG: The treatment of out of state resources if selected by the Commission is a substantive issue appropriate for evidentiary hearing.</i></p> <p><i>CPSA: agrees that this is appropriate for non-hearing track.</i></p>

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
	Petition, Req. for Relief, ¶ 7, p. 16	<i>Affirm that the first biennial Carbon Plan update proceeding should be held in 2024 and that the Companies' next biennial IRPs will be held in abeyance to 2024 to align with the Carbon Plan update, as further discussed in Chapter 4 (Execution Plan);</i>	<i>Duke Energy: No party opposes the Companies' request to hold the next biennial IRP in abeyance until 2024 or advocates for a comprehensive IRP to be filed in 2023. Public Staff recommends that the Companies should be required to file a IRP Update in 2023. Potential consensus item. Recommend for non-hearing track.</i>
	Petition, Req. for Relief, ¶ 8, p. 16	<i>Direct the Companies and Public Staff to develop and propose for comment by January 31, 2023, revisions to the Commission's IRP Rule R8-60 and related rules for certificating new generating facilities to support execution of the Carbon Plan; and</i>	<i>Duke Energy: Potential consensus item. Recommend for non-hearing track.</i> <i>Public Staff: Recommended that the comment deadline be April 28, 2023.</i> <i>CLEAN Intervenors: Disagree that this is a consensus item, but agree that it is appropriate for the non-hearing track.</i> <i>CIGFUR: This is incorrect. Amending rules related to CPCNs is far from a consensus item. No fewer than 5 intervenors (CIGFUR, Tech Customers, NCEMC, CLEAN Intervenors, CUCA) raised the CPCN issue and made the point that future generation and transmission investments should still be subject to full scrutiny afforded by complete, unabridged CPCN regulatory process.</i>
	N/A	<i>Application of the HB 951's extension periods under N.C. Gen. Stat. § 62-110.9(4).</i>	<i>Duke Energy: legal issues appropriate for legal briefing. Recommend for non-hearing track.</i> <i>CPSA: agrees that this is appropriate for non-hearing track</i>

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
	N/A	Ownership requirements that new generation facilities or other resources selected by the Commission in order to achieve the authorized reduction goals for electric public utilities shall be owned and recovered on a cost of service basis under N.C. Gen. Stat. § 62-110.9(2).	<p>Duke Energy: legal issue appropriate for legal briefing. Recommend for non-hearing track.</p> <p>App Voices: Recommends that Duke Energy model the cost saving and carbon reduction benefits from participation in competitive wholesale market for energy. To the extent this recommendation impacts ownership and cost of service recovery questions, those are substantive issues appropriate for evidentiary hearing.</p> <p>EWG: Recommends that Duke Energy model the cost saving and carbon reduction benefits from participation in competitive wholesale market for energy. To the extent this recommendation impacts ownership and cost of service recovery questions, those are substantive issues appropriate for evidentiary hearing.</p>
Public Staff ²	164-65	Proactive transmission upgrade planning;	<p>Duke Energy: Appropriate for evidentiary hearing. Duke Energy also developing proactive transmission planning analysis in response to Public Staff in a further effort to seek consensus.</p> <p>CPSA: this is an issue of critical importance, but it can be addressed on the non-hearing track.</p>
		Approval of the near-term development activities outlined in Duke's Petition;	Duke Energy: Appropriate for evidentiary hearing.

² The Public Staff notes that the additional recommendations listed in Appendix B to its comments that were not identified by the Public Staff as "Substantive Issues for Evidentiary Hearing" may be appropriate for comment or legal briefing. In other words, the specific issues identified in this document are not an exhaustive list of the issues discussed in the comments of the Public Staff.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
		The Public Staff's recommendation that Duke, in the 2024 Carbon Plan filing and the next general rate cases, propose cost allocations that address the rate disparity between DEC and DEP and equitably allocate costs of new generation and transmission in a manner that is proportionate to the benefits received by each utility's customers as an interim measure; and	Duke Energy: Appropriate for evidentiary hearing.
		The Public Staff's recommendation that Duke should promptly evaluate the steps necessary to consolidate the DEC and DEP utilities into a single operating entity and present the Commission with a timeline for implementation.	Duke Energy: Appropriate for evidentiary hearing. CLEAN Intervenors: Appropriate for non-hearing track.
		In addition, the Public Staff has recommended that Duke run the requested P5 model and submit the results as a supplemental filing no later than August 19, 2022. The Public Staff anticipates that Duke will be able to complete the requested model run, potentially with certain modifications agreeable to the Public Staff. However, if Duke believes certain specific recommendations are not able to be included in the P5 model run, the Public Staff recommends that those contested recommendations related to P5 be resolved in an evidentiary hearing.	Duke Energy: Duke Energy is agreeable to developing a supplemental "P5" analysis for Public Staff in a further effort to seek consensus. Appropriate for evidentiary hearing if contested recommendations remain. TCs: No objection to this approach; but to extent DE is performing additional modeling for presentation in this proceeding, that modeling should be made available to all parties with full opportunity to comment.
		Last, if the Commission determines that the request in Duke's Petition to defer project development costs for recovery in a future rate case is appropriate to consider in this proceeding, this issue should be resolved in an evidentiary hearing. The Public Staff reiterates, however, that deferral requests should be handled on a case-by-case basis, and that it is premature in this proceeding to authorize any deferrals related to the Carbon Plan.	Duke Energy: Legal issues appropriate for briefing. Recommend for non-hearing track. CIGFUR: The "extraordinary expenditure" test required for approval of deferral accounting outside of a general rate case is a mixed question of fact and law. Thus, it is more appropriate for an evidentiary hearing.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
Attorney General's Office	15	Strategen identified a number of “out of model” changes to Duke’s modeling results, which included: Delaying retirement of coal generating facilities; Setting a fixed solar plus storage output profile; Replacing standalone batteries with additional natural gas generation; Setting a fixed level of demand-side management and energy efficiency resources (DSM/EE); Proposing to shift to a less accurate method of accounting for DSM/EE savings; and setting a fixed level of residential rooftop solar. To facilitate that evidentiary hearing, Duke should be required to conduct sufficient modeling to develop scenarios that reflect the changes described in these comments.	<p>Duke Energy: Certain modeling recommendations identified by AGO and the Strategen report were also identified by the Public Staff and will therefore be incorporated into the supplemental “P5” analysis that Duke Energy plans to develop for Public Staff. However, Duke Energy disputes certain other alternative modeling assumptions and recommendations as not reasonable for planning purposes. Duke Energy agrees at this time to work Public Staff but does not believe that it is reasonable for Duke to perform modeling requested by intervenors. Appropriate for evidentiary hearing.</p> <p>AGO: The AGO agrees that this issue is appropriate for evidentiary hearing. Further, in order for the Commission to fully analyze the impacts of the various modeling problems identified in the AGO’s comments, for apples to apples comparisons of modeling results, and to allow sufficient time for modeling revisions to be fully vetted prior to the Commission’s December 31, 2022 deadline to finalize its Carbon Plan, the AGO recommends that Duke be directed to perform the modeling requested in the AGO comments.</p>
	14-15	Annual Constraints on Solar additions	Duke Energy: Modeling issue appropriate for evidentiary hearing.
		Postponement of the first year of solar additions until 2027	Duke Energy: Modeling issue appropriate for evidentiary hearing

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
		Annual constraints on onshore wind additions	Duke Energy: Modeling issue appropriate for evidentiary hearing
		Cumulative limits on onshore wind additions	Duke Energy: Modeling issue appropriate for evidentiary hearing
		Postponement of the first year of wind additions until 2029	Duke Energy: Modeling issue appropriate for evidentiary hearing
		Cumulative limits on solar plus storage additions	Duke Energy: Modeling issue appropriate for evidentiary hearing
		Limited configurations of solar plus storage additions	Duke Energy: Modeling issue appropriate for evidentiary hearing
		Using natural gas prices that do not match real-world conditions	Duke Energy: Modeling issue appropriate for evidentiary hearing
		Using unrealistic assumptions regarding natural gas supply	Duke Energy: Modeling issue appropriate for evidentiary hearing
		Allowing limited natural gas combined cycle configurations	Duke Energy: Modeling issue appropriate for evidentiary hearing
		Using unrealistic Effective Load Carrying Capacity (ELCC) values for natural gas generation	Duke Energy: Modeling issue appropriate for evidentiary hearing
		Speculative assumptions regarding the transition to green hydrogen	Duke Energy: Modeling issue appropriate for evidentiary hearing
Clean Power Suppliers Assoc. (CPSA)	70-71	CPSA alternative portfolios	Duke Energy: Modeling issue appropriate for evidentiary hearing CPSA: this issue is appropriate for an evidentiary hearing.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
		Solar interconnection cap	<p>Duke Energy: Modeling issue appropriate for evidentiary hearing</p> <p>CPSA: This is a critical issue. Based on the Carbon Plan and comment as filed, this issue is appropriate for an evidentiary hearing.</p> <p>However, this issue may be resolved without a hearing if Duke's "P5" modeling analysis includes (discussed by Duke herein) includes an additional modeling run that reflects CPSA's proposed solar caps (as in proposed portfolios CPSA3 and CPSA5), that analysis is included in Duke's written submissions, and intervenors have an opportunity to respond.</p>
		Solar + storage configurations modeled	<p>Duke Energy: Modeling issue appropriate for evidentiary hearing</p> <p>CPSA: This issue is appropriate for non-hearing track.</p>
		SMR risks / assumptions	<p>Duke Energy: Modeling issue appropriate for evidentiary hearing</p> <p>CPSA: This this issue may be addressed either in written submissions or at the evidentiary hearing.</p>
		Modeling Cost assumptions	<p>Duke Energy: Modeling issue appropriate for evidentiary hearing</p> <p>CPSA: Issues related to the modeling cost assumptions raised in CPSA's comments may be resolved on the non-hearing track.</p>

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
		<i>Legality of extending compliance with 70% mandate beyond 2032</i>	<i>Duke Energy: Legal issue appropriate for briefing. Recommend for non-hearing track.</i> <i>CPSA: This issue may be resolved on the non-hearing track.</i>
		Comparison of portfolios (execution risk, affordability, CO2 reductions, reliability)	Duke Energy: Appropriate for evidentiary hearing. CPSA: This issue is appropriate for an evidentiary hearing.
		Execution Plan	Duke Energy: Appropriate for evidentiary hearing. CPSA: Certain aspects of the Execution Plan (e.g. near-term procurement of solar) are appropriate for an evidentiary hearing. However, other aspects of the EP not raised in CPSA's comments may be resolved on the non-hearing track.
		2022 solar procurement volume	Duke Energy: Appropriate for evidentiary hearing as part of near-term procurement activities. However, Duke Energy has requested an expedited determination on 2022 solar procurement target volume by November 1, 2022. CPSA: This issue is appropriate for an evidentiary hearing.
		Red Zone Upgrades	Duke Energy: Appropriate for evidentiary hearing. CPSA: This issue is appropriate for an evidentiary hearing.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
		Need for proactive transmission planning	Duke Energy: Appropriate for evidentiary hearing. CPSA: this is an issue of critical importance but it can be addressed on the non-hearing track.
		Grid enhancing technologies	Duke Energy: Appropriate for evidentiary hearing. CPSA: this issue can be addressed on the non-hearing track.
		Need to factor benefits as well as costs of transmission improvements.	Duke Energy: Appropriate for evidentiary hearing. CPSA: this issue can be addressed on the non-hearing track.
NCSEA / SELC	38-39	<p>The appropriate inputs for EnCompass modeling, including:</p> <ol style="list-style-type: none"> 1. Assumptions regarding the potential for energy efficiency, demand response and behind-the-meter customer generation, including rooftop solar; 2. Assumptions regarding the availability and cost of different resources; 3. Assumptions regarding the price of fuel; 4. Assumptions regarding the cost of transmission upgrades; 5. Whether cost inputs should be publicly available information or proprietary; Whether modeling should include firm, out-of-state clean energy generation as a selectable resource; and 6. The appropriate role of non-commercialized technologies, such as SMRs and hydrogen resources, in the Carbon Plan; 	Duke Energy: Modeling issue appropriate for evidentiary hearing. NC WARN: Presents important factual issues. Recommended for an evidentiary hearing.
		The role of transmission upgrades, planning, and strategy in the Carbon Plan;	Duke Energy: Appropriate for evidentiary hearing.
		The appropriate schedule for retirement of Duke's coal-fired units;	Duke Energy: Appropriate for evidentiary hearing.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
		Whether any of the statutory criteria justifying delay in meeting the interim 70% reduction requirement have been met;	Duke Energy: Legal issue appropriate for legal briefing. Recommend for non-hearing track.
		The near-term supply-side development and procurement activities necessary to implement the plan;	Duke Energy: Appropriate for evidentiary hearing.
		Scope of initial development activities for long-lead-time resources, such as OSW;	Duke Energy: Appropriate for evidentiary hearing.
		Costs and benefits of consolidating DEC and DEP system operations, including but not limited to combining balancing authority areas and/or merger of the two utilities.	Duke Energy: Appropriate for evidentiary hearing.
	Supp. 8	Whether the modeling input sources that Duke identified or those used by Synapse better reflect real-world conditions and should be used by the Commission in developing its Carbon Plan	Duke Energy: Modeling issue appropriate for evidentiary hearing.
	Supp. 9	Whether the manual changes made by Duke to override the endogenous selection of optimized resources in EnCompass was reasonable.	Duke Energy: Modeling issue appropriate for evidentiary hearing.
Tech Customers (Apple Inc., Google LLC, and Meta)	25	Planning, optimization, and cost of intrastate and interstate transmission	Duke Energy: Appropriate for evidentiary hearing.
		Whether the Commission should select new natural gas as requested in the proposed Carbon Plan	Duke Energy: Appropriate for evidentiary hearing.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
Platforms, Inc.)		The availability and prices of power sold by third-party energy suppliers	<p>Duke Energy: Legal issues appropriate for briefing. Recommend for non-hearing track.</p> <p>NC WARN: Presents important factual issues. Recommended for an evidentiary hearing.</p> <p>CLEAN Intervenors: Disagree that availability and pricing are legal issues. Appropriate for evidentiary hearing.</p> <p>CIGFUR: This is a mixed question of fact and law, and thus, is more appropriately addressed in an evidentiary hearing.</p> <p>App Voices: Substantive issue recommended for evidentiary hearing.</p> <p>TCs: We disagree that this is solely a legal issue. To extent DE contends that they are prohibited from third-party purchases, they can brief that legal issue. But whether third-party purchases are available for purposes of modeling, and how that might impact the generation portfolio, is a factual issue.</p> <p>EWG: Substantive issue recommended for evidentiary hearing.</p>
		Whether Duke's proposed Carbon Plan is the least-cost pathway	<p>Duke Energy: Appropriate for evidentiary hearing.</p> <p>The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.</p>
		Whether the Companies have accurately accounted for the price volatility and supply risk of natural gas	<p>Duke Energy: Appropriate for evidentiary hearing.</p> <p>The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.</p>

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
		Whether the proposed Carbon Plan adequately and sufficiently models the potential benefits achievable through new and improved voluntary customer renewable programs <i>[Note: Tech Customers believe that this issue is subsumed in DE's issued specified on page 2 referencing Petition Req. For Relief, ¶ 4, p. 16]</i>	Duke Energy: Appropriate for evidentiary hearing.
Environmental Working Group	3-4	Whether Duke Energy has underestimated the costs, risks, and reliability of its proposed new nuclear technology and nuclear generation?	Duke Energy: Appropriate for evidentiary hearing.
		Whether Duke Energy has failed to adequately consider grid modernization, storage, energy efficiency measures, and the latest technological breakthroughs to achieve the least cost mix?	Duke Energy: Appropriate for evidentiary hearing.
		Whether Duke Energy has adequately assessed demand needs for DEP and DEC customers?	Duke Energy: Appropriate for evidentiary hearing.
		Whether Duke Energy's proposed portfolios are varied enough to enable the Commission to objectively evaluate and adopt a least cost path to achieve compliance with the carbon reduction goals of HB 951?	Duke Energy: Appropriate for evidentiary hearing.
		Whether Duke Energy has adequately taken into account the social costs of carbon?	<p>Duke Energy: Appropriate for legal briefing/comments. Recommend for non-hearing track.</p> <p>The RTHC, RCCSD, EJCAN, and DECAESJC believe that this raises issues of cost relevant to the Commission's determination on least cost when evaluating the proposed Portfolio options; therefore, it is appropriate for an evidentiary hearing.</p> <p>NC WARN: Presents important factual issues. Recommended for an evidentiary hearing.</p> <p>App Voices: Substantive issue recommended for evidentiary hearing.</p> <p>EWG: Substantive issue recommended for evidentiary hearing.</p>

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
		Whether Duke Energy has addressed potential nitrogen oxide emissions and related air pollution in the context of any of its four portfolios and its possible disproportionate impact on customer classes?	<p>Duke Energy: Appropriate for legal briefing/comments. Recommend for non-hearing track.</p> <p>The RTHC, RCCSD, EJCAN, and DECAESJC believe that this raises issues of cost relevant to the Commission's determination on least cost when evaluating the proposed Portfolio options; therefore, it is appropriate for an evidentiary hearing.</p> <p>NC WARN: Presents important factual issues. Recommended for an evidentiary hearing.</p> <p>App Voices: Substantive issue recommended for evidentiary hearing.</p> <p>EWG: Substantive issue recommended for evidentiary hearing.</p>
		Whether Duke Energy adequately considers the potential technical challenges and operational problems associated with its proposed advanced nuclear reactors?	Duke Energy: Appropriate for evidentiary hearing.
		Whether Duke Energy has demonstrated that greater energy efficiency measures; demand-side management; renewable energy resource generation; combined heat and power generation; or any combination thereof, would not establish or maintain a more cost-effective and reliable generation system than adding its proposed new nuclear technology?	Duke Energy: Appropriate for evidentiary hearing.
NC WARN ³	46-47	Were there flaws in the Companies' analysis of the likely performance of solar paired with storage?	Duke Energy: Appropriate for evidentiary hearing.
		Have the Companies failed to properly account for and analyze the uncertain nature of 100% use of hydrogen in natural gas plants by 2050?	Duke Energy: Appropriate for evidentiary hearing.

³ The Charlotte NAACP has incorporated NC WARN's issues list by reference.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
		Have the Companies failed to properly analyze the significant impacts of methane emissions from natural gas?	Duke Energy: Legal issues appropriate for legal briefing or comments. Recommend for non-hearing track. App Voices: Substantive issue recommended for evidentiary hearing. EWG: Substantive issue recommended for evidentiary hearing.
		Have the Companies failed to properly and reasonably project future natural gas prices?	Duke Energy: Appropriate for evidentiary hearing.
		Have the Companies made critical errors on their capital cost assumptions?	Duke Energy: Appropriate for evidentiary hearing.
		Have the Companies used unnecessarily conservative planning reserve margins?	Duke Energy: Appropriate for evidentiary hearing.
		Are the Companies' demand growth projections reasonable?	Duke Energy: Appropriate for evidentiary hearing.
		Should the Companies' proposed Grid Edge program be bolstered?	Duke Energy: Appropriate for evidentiary hearing. The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.
		Have the Companies failed to prove that SMRs are economically viable and practical?	Duke Energy: Appropriate for evidentiary hearing.
		Should NC WARN et al.'s Counter Carbon Plan be adopted by the Commission?	Duke Energy: Appropriate for evidentiary hearing.
Avangird Renewables	2-3, 18	Artificial constraint the development of offshore wind resources for North Carolina by proposing inefficient project design capacities.	Duke Energy: Appropriate for evidentiary hearing.
		Assumption that timelines cannot meet HB951's deadlines.	Duke Energy: Appropriate for evidentiary hearing.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
		Failure to articulate a low-cost transmission strategy for the near-term build out of offshore wind.	Duke Energy: Appropriate for evidentiary hearing.
		<p>Initiation of an independent, objective third party study to evaluate and prioritize each wind lease offshore of the Carolinas and determine the best pathway to incorporate offshore wind generation resources into Duke's planning portfolio, including:</p> <ol style="list-style-type: none"> 1. Consideration of LCOE, viability, schedule, size and overall plan, along with any other Commission-determined metrics, in making recommendations; 2. Stakeholder input and regular reports to the Commission about the status of the study, filing of the final study, and an opportunity for intervenors to file comments regarding the study; 3. Following a comment period and any further actions that the Commission deems fit, require that Duke select offshore wind resource additions in a prioritized order, beginning with the project that provide NC ratepayers with the best overall combination of reliability, schedule, and cost. 	Duke Energy: Appropriate for evidentiary hearing.
CIGFUR	36-37	In the event the PSCSC disapproves the Carbon Plan in Duke's next South Carolina IRP docket, North Carolina ratepayers should be held harmless from the South Carolina jurisdictional allocable portion of related costs incurred between the date upon which the NCUC approves an initial Carbon Plan and the 2024 biennial Carbon Plan/IRP proceeding before the NCUC. As a related matter, Duke should be required to model four additional alternative portfolios in the event the PSCSC disapproves the Carbon Plan in Duke's 2023 South Carolina IRP docket.	CIGFUR: Appropriate for evidentiary hearing.
	41-42	Duke's proposal fails to adequately model or evaluate power quality considerations in determination of portfolio reliability scoring; similarly, Duke's proposal fails to adopt certain reliability and power quality metrics to be evaluated on an ongoing basis to ensure compliance with the maintaining or improving reliability mandate set forth in HB 951. [40]	Duke Energy: Modeling issue appropriate for evidentiary hearing.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
		Duke's proposal fails to provide an "all-in" total cost and projected rate impact for all planned spending both related and unrelated to the Carbon Plan. Without more transparency and clarity into the bigger picture of total and cumulative cost and rate impacts, it is impossible to ascertain whether the Carbon Plan as proposed constitutes a "reasonable step" as that term is used in HB 951.	<p>Duke Energy: Legal issue appropriate for legal briefing/comments. Recommend for non-hearing track.</p> <p>The RTHC, RCCSD, EJCAN, and DECAESJC believe that this raises issues of cost relevant to the Commission's determination on least cost when evaluating the proposed Portfolio options; therefore, it is appropriate for an evidentiary hearing.</p> <p>CIGFUR: This is a mixed question of fact and law and, as such, is more appropriate for an evidentiary hearing.</p>
		Duke's proposal fails to provide sufficient guardrails, spending caps, and other parameters around its proposed near-term supply-side activities. Similarly, Duke's proposal fails to ensure that Duke is bearing some of the risk in the event these investments do not result in assets that eventually become used and useful in the provision of electric service to ratepayers.	Duke Energy: Appropriate for evidentiary hearing.
		Duke's proposal fails to capture emissions leakages associated with price-induced demand erosion.	<p>Duke Energy: Legal issue appropriate for legal briefing/comments. Recommend for non-hearing track.</p> <p>CIGFUR: This is a mixed question of fact and law and, as such, is more appropriate for an evidentiary hearing.</p>
		Duke's proposal fails to sufficiently leverage flexible load of certain commercial and industrial customers as a demand response resource.	Duke Energy: Appropriate for evidentiary hearing.
		Duke's proposal fails to sufficiently leverage non-residential customers' demand for expanding existing and implementing new customer renewable energy programs.	Duke Energy: Appropriate for evidentiary hearing.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
		Duke's proposal fails to demonstrate that its membership in SEEM could enable it to avoid certain new buildout of generation or otherwise to provide some savings to ratepayers or costs avoided.	Duke Energy: Appropriate for evidentiary hearing.
		Duke's proposal fails to satisfy the least-cost requirement in that it does not guarantee it will utilize and maximize securitization of early-retired coal assets for the benefit of ratepayers to the extent required by HB 951.	Duke Energy: Appropriate for evidentiary hearing. The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.
		<i>The Carbon Plan is not an appropriate, practical, or legal substitute for CECPCN and CPCN proceedings, respectively, on a project-by-project basis. Individual, unabridged, complete CECPCN and CPCN proceedings will provide each project proposed in Duke's Carbon Plan with the requisite level of scrutiny, including but not limited to a more exhaustive analysis of potentially more cost-effective alternatives to simply building out and rate-basing as much generation and transmission plant as possible.</i>	<i>Duke Energy: Legal issue appropriate for legal/briefing comments. Recommend for non-hearing track.</i> <i>The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.</i> <i>App Voices: These are substantive issues recommended for evidentiary hearing.</i>
Clean Energy Buyers Assoc.	Appendix A (p.11 of Comments)	Duke's proposal fails to model planned consolidation of DEC's & DEP's system generation operations into one transmission zone with one set of tariff rates in the modeled Portfolios and rate impacts.	Duke Energy: Appropriate for evidentiary hearing.
		Duke's proposal unreasonably relies on offshore wind generation with no cost containment measures to protect ratepayers, and the timeline for in-service operation does meet the 2030 timeframe.	Duke Energy: Appropriate for evidentiary hearing.
		Duke's proposal unreasonably fails to develop a broad range of scenarios with several customer choices, that relies on distributed resources which allow large energy users to play a direct role in creating clean energy generation resources that can serve their and the State's—clean energy needs.	Duke Energy: Appropriate for evidentiary hearing.
		Duke's modeled Portfolios and rate impacts fail to account for the potential economic or operational consequences that may flow from the separation of the existing transmission and distribution systems if South Carolina chooses a different path forward.	Duke Energy: Appropriate for evidentiary hearing.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
		In the event that Duke demonstrates that it cannot be reliably expected to plan transmission with the goal in mind of meeting regional needs cost-effectively, the Commission should encourage Duke to join a RTO or ISO.	Duke Energy: Legal issues appropriate for legal briefing/comments. Recommend for non-hearing track. EWG: These are substantive issues recommended for evidentiary hearing.
		Duke's proposal unreasonably fails to include any new or expanded programs designed to allow meaningful and scalable carbon-free energy options to customers, including programs that would allow customer self-sourced renewable energy options.	Duke Energy: Appropriate for evidentiary hearing. The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.
		Duke's proposed Portfolios 2, 3 & 4 significantly and unreasonably delay HB 951's statutorily mandated goal deadline of a 70% reduction in CO2 by 2030 and are therefore unreasonable for planning purposes.	Duke Energy: Appropriate for evidentiary hearing.
CCEBA	59-60	Solar interconnection capacity during the Near-Term Execution Plan timeframe.	Duke Energy: Appropriate for evidentiary hearing.
		Nature of needed transmission process improvements.	Duke Energy: Appropriate for evidentiary hearing.
		Needed transmission improvements for the Near-Term Execution Plan.	Duke Energy: Appropriate for evidentiary hearing.
		Proper modeling input / structure and final selection of portfolios for inclusion in the Carbon Plan.	Duke Energy: Appropriate for evidentiary hearing.
Electricities, NCEMPA, NCMPPA	3	Failure to provide for implementation of cost-effective load reduction and management efforts and programs by wholesale customers in Carbon Plan is inconsistent with HB951's least cost mandate	Duke Energy: Issue appropriate for comments. Recommend for non-hearing track. Electricities et al.: Issue merits evidentiary hearing.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
	7	Carbon Plan's inclusion of significant transmission upgrades is inconsistent with HB 951's least cost mandate because the need for such upgrades is unproven.	Duke Energy and Electricities et al.: Appropriate for evidentiary hearing. Electricities et al.: Agree issue is appropriate for evidentiary hearing.
MAREC Action	2	The capability of offshore wind developers to complete their North Carolina projects by 2030	Duke Energy: Appropriate for evidentiary hearing.
NCEMC ⁴	2	Carbon Plan should ensure that the least cost and reliability requirements of HB 951 are followed. Commission should utilize its discretion to extend milestones for 70% emission reduction in order to create a diverse generation portfolio, make sure new facilities can be reliably integrated, and minimize rate shock to customers	Duke Energy: Legal issues appropriate for legal briefing/comments. Recommend for non-hearing track.
		Commission should address cost allocation issues between the DEP and DEC balancing areas in the Carbon Plan to ensure that DEP customers will not pay a disproportionate share of costs to achieve system wide carbon reductions that benefit all of NC.	Duke Energy: Appropriate for evidentiary hearing.
		Commission should direct Duke to combine its two balancing areas as it will reduce costs, improve reliability, and eliminate cost allocation issues between the balancing areas.	Duke Energy: Appropriate for evidentiary hearing.
		T&D investments must be reviewed fully through the current transmission planning process in NC to determine the reliability and enhanced capacity values that the T&D investments provide, as well as the need for the T&D investments for compliance with the authorized carbon reduction goals.	Duke Energy: Appropriate for evidentiary hearing.

⁴ NCEMC did not specifically identify any issues for evidentiary hearing. However, Electricities et al. incorporated NCEMC's comments by reference and stated that Electricities believes a hearing is needed on all issues identified in its and NCEMC's comments.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
	3	Duke should be required to continue to work with NCEMC's Distribution Operator on the coordination and integration of distributed energy resources ("DER"). As the amount of DER in the state increases, it is vital that Duke works with distribution operators to reliably integrate DER located on the distribution system into Duke's operations and planning.	<p>Duke Energy: Issue appropriate for comments. Recommend for non-hearing track.</p> <p>App Voices: Substantive issue recommended for evidentiary hearing.</p> <p>Electricities et al.: Issue merits evidentiary hearing.</p> <p>EWG: These are substantive issues recommended for evidentiary hearing.</p>
Appalachian Voices	Att. D	Will the Companies' failure to address energy affordability through targeted energy efficiency, distributed energy and demand response investments increase total energy costs and increase energy burdens for all customers?	<p>Duke Energy: Appropriate for evidentiary hearing.</p> <p>The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.</p>
		Have the Companies failed to sufficiently include the entire spectrum of demand side options, including energy efficiency, rooftop solar, and battery storage as additional sources of energy supply and demand reduction, to achieve the least cost mix and meet the 2030 goal of a 70% reduction in carbon emissions?	<p>Duke Energy: Appropriate for evidentiary hearing.</p> <p>The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.</p>
		Have the Companies underestimated the risks and costs of new natural gas-dependent energy generation, including fuel energy volatility and impacts of methane emissions?	<p>Duke Energy: Appropriate for evidentiary hearing.</p> <p>The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.</p>
		Have the Companies failed to sufficiently balance solar and wind portfolios to reduce or eliminate the need for additional peak energy generation?	<p>Duke Energy: Appropriate for evidentiary hearing.</p> <p>The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.</p>

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
		Have the Companies failed to sufficiently utilize solar, offshore wind, and demand-side resources to reduce or eliminate the need for additional gas generation?	Duke Energy: Appropriate for evidentiary hearing. The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.
NC Alliance to Protect our People and the Places We Live ⁵	5-6	What costs are included or inappropriately omitted from the proposed Carbon Plan	Duke Energy: General comment already addressed through initial comment process. Recommend for non-hearing track.
		Whether such costs are comprehensive or reasonable	Duke Energy: General comment already addressed through initial comment process. Recommend for non-hearing track.
		Whether Duke's costs analyses and modeling should be open to public ratepayer disclosure	Duke Energy: Issue appropriate for comment. Recommend for non-hearing track.
CUCA	N/A	No Response	N/A
Person County	Submitted via email on July 19	<ol style="list-style-type: none"> 1. Should the Commission adopt Duke's proposed Portfolio 3 or 4, or another portfolio option that continues the operation of the Mayo and Roxboro generating stations beyond 2029 and 2034, respectively to comply with House Bill 951's least-cost planning and ensuring adequacy and reliability of the grid mandates? 2. Should Duke Energy be required to locate replacement natural gas generation resources in Person County? 3. Does it serve the public interest to require Duke to maintain a corporate presence in Person County, and to provide community support and philanthropic support in Person County to mitigate the impacts to the County and the community that would result from the retirement of Mayo and Roxboro? 	<p>Duke Energy: Issue appropriate for comment, as supported by Person County. Recommend for non-hearing track.</p> <p>Person County believes that these issues have been identified and developed sufficiently in its written comments and can be resolved based on written comments. Person County does not believe that these issues merit consideration at an evidentiary hearing.</p>

⁵ 350 Triangle incorporates by reference the Comments of NC Alliance to Protect our People and the Places We Live and requests an evidentiary hearing on the issues identified in their comments.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
Kingfisher	Submitted via email on July 20	Whether competitive bidding should be used for Duke's procurement of the resources needed to implement the Carbon Plan that are not "selected" by the Commission.	<p>Duke Energy: Appropriate for evidentiary hearing.</p> <p>Kingfisher believes that this issue would be appropriate for consideration at an evidentiary hearing, but remains open to discussion with Duke to resolve this issue by settlement.</p> <p>The RTHC, RCCSD, EJCAN, and DECAESJC agree with this determination.</p>
Walmart	2-5; 7-9	Whether approval of the Carbon Plan as part of this proceeding alters the Companies' burden of proof applicable in future CPCN or base rate proceedings.	Duke Energy and Walmart: Legal issues appropriate for legal briefing/comments. Recommend for non-hearing track.
	4-5	Whether the Companies have justified their proposal to add 2.4 GW of new natural gas as part of their Carbon Plan filing.	Duke Energy and Walmart: Appropriate for evidentiary hearing.
	5-9	<i>Whether the Commission can determine that the Companies' proposed project development activities are "reasonable and prudent" for purposes of cost recovery as part of this proceeding.</i>	<p><i>Duke Energy: Legal issues appropriate for legal briefing/comments. Recommend for non-hearing track and allowing opportunity for post-hearing briefing.</i></p> <p><i>Walmart agrees that this issue would be addressed in briefing, but the necessary facts would be developed in an evidentiary hearing.</i></p>
	5-6	Whether the Companies can recover project development costs of an asset prior to it being placed in service or otherwise used and useful.	<p>Duke Energy: Legal issues appropriate for legal briefing/comments. Recommend for non-hearing track.</p> <p>Walmart agrees that this issue would be addressed in briefing, but the necessary facts would be developed in an evidentiary hearing.</p>

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
	6-7	Whether the Companies have carried their burden of proof under N.C. Gen. Stat. § 62-110.7 to recover project development costs related to nuclear projects.	Duke Energy: Legal issues appropriate for legal briefing/comments. Recommend for non-hearing track. Walmart agrees that this issue would be addressed in briefing, but the necessary facts would be developed in an evidentiary hearing.
	10-14	Whether the Commission can find that the Carbon Plan proposed by the Companies achieves the "least cost" mandate of HB 951 in light of the material issues that remain undecided and unknown.	Duke Energy and Walmart: Appropriate for evidentiary hearing.
TotalEnergies Renewables USA, LLC	N/A	The proposed Carbon Plan should be amended to include multiple paths to obtain a 70% reduction of emissions from public utility owned resources by 2030, and that incentivize and do not foreclose immediate development of non-utility resources that rely on proven technologies and maximize the use of North Carolina's existing and potentially available resources (including three nearby offshore wind lease sites in development off the North Carolina coast.)	Duke Energy: Appropriate for evidentiary hearing. TotalEnergies: Appropriate for hearing track.
		The proposed Carbon Plan should be amended to include significant action plans for 2022-2024, in order to obtain the largest carbon reduction by 2030 and ensure the offshore lease developers' committed investments in local jobs and supply chain are not stranded indefinitely due to the lack of a development path.	Duke Energy: Appropriate for evidentiary hearing. TotalEnergies: Appropriate for hearing track.
		The proposed Carbon Plan should be amended to reflect the effects on the Duke Energy Progress, LLC transmission system and generation operational costs resulting from different scenarios where large quantities of offshore wind production are received.	Duke Energy: Appropriate for evidentiary hearing. TotalEnergies: Appropriate for hearing track.

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
		Should a final order in this proceeding encourage a 2 to 4 gigawatt development goal for offshore wind and coordinated, concurrent development of the already leased offshore wind areas off the coast?	Duke Energy: Appropriate for evidentiary hearing. TotalEnergies: Appropriate for non-hearing track.
Brad Rouse	N/A	No Response	
City of Charlotte	N/A	No Response	
NC Pork Council	N/A	No Response	
Red Tailed Hawk Coalition / Robeson County Cooperative for Sustainable Development	N/A	Under HB951, what factors must the Commission consider within their determination of least cost, and what other factors may they consider?	Duke Energy: Legal issues appropriate for legal briefing/comments. Recommend for non-hearing track. RTHC et al: We believe this issue is proper for inclusion in an evidentiary hearing as it has significant implications on the relative risks and benefits of every type of proposed generation source and how they are then subsequently modeled.
	N/A	<i>Biofuels should neither be considered carbon-less nor a source of "clean energy."</i>	<i>Duke Energy: Recommend for non-hearing track.</i> <i>RTHC et al.: We believe this issue, while factual, considering its small scope relative to other major considerations in the Carbon Plan, would be best handled through briefing.</i>
NC Council of Churches	N/A	No Response	

Party	Page	Substantive Issue Identified for Evidentiary Hearing	Comments on Consensus/Track
Environmental Justice Community Action Network and Down East Coal Ash Environmental and Social Justice Coalition	N/A	See the Red Tailed Hawk Coalition response above.	
Asheville-Buncombe	N/A	No Response	
Sean Lewis	N/A	No Response	

^[1] The Public Staff notes that the additional recommendations listed in Appendix B to its comments that were not identified by the Public Staff as “Substantive Issues for Evidentiary Hearing” may be appropriate for comment or legal briefing. In other words, the specific issues identified in this document are not an exhaustive list of the issues discussed in the comments of the Public Staff.