

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-100, SUB 165

In the Matter of:)	NC WARN AND THE CENTER
2020 Biennial Integrated Resource)	FOR BIOLOGICAL DIVERSITY'S
Plans and Related 2020 REPS)	MOTION FOR EVIDENTIARY
Compliance Plans)	HEARING
)	

NC WARN and The Center for Biological Diversity (“The Center” or “CBD”), through undersigned counsel, pursuant to North Carolina Utilities Commission (the “Commission”) Rule R8-60(k), move the Commission to hold an evidentiary hearing in the above-mentioned docket concerning the 2020 Integrated Resource Plans (“IRP”) of Duke Energy Carolinas, LLC (“DEC”) and Duke Energy Progress, LLC (“DEP”) (collectively, the “Companies”). In support of this motion, NC WARN and The Center show the following:

LEGAL BACKGROUND

1. Commission Rule R8-60 requires that the Companies provide to the Commission a biennial IRP report in even-numbered years. The biennial report must contain the detailed information described in Commission Rule R8-60(i).

2. During biennial IRP proceedings, the Commission relies upon reports, comments and other evidence, and determines the sufficiency of the information provided in addition to the reasonableness of the utility plans, and the Commission may direct further action based upon its conclusions in the proceeding. See, e.g., Order Accepting Integrated Resource Plans and

Accepting REPS Compliance Plans, Docket No. E-100, Sub 147, at p. 60 (June 27, 2017) (concluding that the evaluations of battery storage “have not been fully developed to a level sufficient to provide guidance as to the role this technology should play going forward” and that “the utilities should provide in future IRPs or IRP updates a more complete and thorough assessment of battery storage technologies”).

3. The Commission has the discretion to convene an evidentiary hearing during any biennial IRP docket. Pursuant to Commission Rule R8-60(k), “[t]he Public Staff or any intervenor may identify any issue that it believes should be the subject of an evidentiary hearing. . . . A hearing to address issues raised by the Public Staff or other intervenors may be scheduled at the discretion of the Commission.”

4. Evidentiary hearings on IRPs used to be commonplace. For example, an evidentiary hearing was held during the 2005 IRP proceeding (Docket No. E-100, Sub 103) and the 2007 IRP proceeding (Docket No. E-100, Sub 114). Upon information and belief, no evidentiary hearing has been held since the 2007 IRP proceeding.

PROCEDURAL BACKGROUND

5. The year 2020 being an even-numbered year, the Companies filed their biennial IRPs on September 1, 2020. The Companies’ IRPs advocate for an excessively high planning reserve margin (“PRM”) of seventeen percent (17%).

6. In order to meet that excessive PRM, DEC proposes to add 3,453 MW of natural gas-fired generation by 2034, and DEP proposes to add 3,051 MW of natural gas-fired generation by 2028, both under their Base Case With Carbon Policy portfolios. See DEC's IRP, pp 102-04; DEP's IRP, pp 105-06. Under their Base Case Without Carbon portfolios, DEC proposes to add 4,678 MW of natural gas-fired generation through 2035, and DEP proposes to add 5,337 MW of natural gas-fired generation through 2033. See DEC's IRP, p 109; DEP's IRP, p 110.

7. These extensive buildouts of natural gas-fired generation implicate the Commission's crucial role during IRP proceedings of "avoid[ing] the costly overbuilding of generation resources." *State ex rel. Utilities Comm. v. Empire Power Co.*, 112 N.C. App. 265, 278, 435 S.E.2d 553, 560 (1993).

8. Accordingly, the Companies' 2020 IRPs represent a significant moment for the energy future of North Carolina, and it is crucial that any disputes of fact be thoroughly analyzed and resolved based upon a robust factual record.

9. In recognition of the crucial importance of the present IRP docket, NC WARN and The Center's Initial Comments and Corrected Reply Comments forecasted that it may be appropriate for the Commission to hold an evidentiary hearing on various disputes of fact. NCWARN/CBD's Initial Comments, pp 35-36; NCWARN/CBD's Corrected Reply Comments, p 18.

10. NC WARN and The Center were not alone in forecasting the need for an evidentiary hearing. In fact, several intervenors within the present docket

recognized the existence of numerous important disputes of fact and suggested that the Commission exercise its discretion to schedule an evidentiary hearing.

11. For instance, the Attorney General's Office's ("AGO") Reply Comments called for an evidentiary hearing: "Finally, there are disputes about certain critical facts, and the AGO believes the Commission would benefit from an evidentiary hearing to consider issues identified by Strategen" AGO's Reply Comments, pp 26. The AGO proceeded to enumerate nine (9) disputed issues of fact which are ripe for an evidentiary hearing. *Id.* at 26-27.

12. As the Commission is aware, the Companies filed identical IRPs before the Public Service Commission of South Carolina (the "SC Commission") on September 1, 2020. S.C. Public Service Commission, Docket Nos. 2019-224-E & 2019-225-E. The SC Commission held an evidentiary hearing on the Companies' IRPs on April 26, 2021 through May 5, 2021.

13. Following that evidentiary hearing, the SC Commission entered a Commission Directive on June 17, 2021, which rejected several portions of the Companies' IRPs. A copy of the SC Commission's Directive is attached hereto as **Exhibit A**. The process in South Carolina, which included an evidentiary hearing, illustrates that the receipt of expert testimony during a hearing is an essential procedural mechanism for ensuring that the Companies' IRPs comply with North Carolina law.

THE DISPUTES OF FACT

14. The present docket is replete with disputes of fact which require development through an evidentiary hearing.

15. By way of example, the Companies' IRPs alleged that their operating reserve margins ("ORM") frequently dropped below ten percent (10%) during several extreme winter weather events during the 2014-2019 time period. DEC's IRP, pp 69-72; DEP's IRP, pp 71-74. These supposedly narrow ORMs are used by the Companies to justify their proffered seventeen percent (17%) PRM and accompanying natural gas buildout. However, NC WARN and The Center have come forward with evidence tending to prove that the Companies' ORMs during these winter weather events never dropped below 19.8% (DEC) or 11.6% (DEP). NCWARN/CBD's Corrected Reply Comments, pp 5-13. This dispute as to the Companies' ORMs goes to the heart of the present docket and should be the subject of expert witness testimony at an evidentiary hearing.

16. As a further example, NC WARN and The Center have proffered evidence tending to show that a natural gas buildout is unnecessary because the Companies presently have access to sufficient capacity to reliably meet demand. *E.g.*, NCWARN/CBD's Initial Comments, pp 7-13. This excess capacity is partly due to the availability of ample, reliable imports from neighboring utilities. *Id.* The Companies, on the other hand, deny the feasibility of relying upon imports to reliably meet demand. The Companies' Reply Comments, pp 42, 62-66. This crucial dispute of fact should be the subject of expert testimony at an evidentiary hearing.

17. Moreover, NC WARN and The Center came forward with evidence showing that the Companies understated the cost of natural gas-fired generation and overstated the cost of battery storage. NCWARN/CBD's Initial Comments,

pp 28-31. In their Reply Comments, the Companies attempted to dispute the accuracy of NC WARN and The Center's evidence concerning natural gas-fired generation costs. The Companies' Reply Comments, pp 105-107, 147-148. Again, this crucial dispute of fact should be the subject of expert testimony at an evidentiary hearing.

18. Furthermore, NC WARN and The Center submitted evidence showing that the Companies' overstated their demand growth projections. NCWARN/CBD's Initial Comments, pp 11-12. The Companies, of course, have stood behind their demand growth projections. Yet again, this crucial dispute of fact should be the subject of expert testimony at an evidentiary hearing.

19. The Companies (incorrectly) attacked the credibility of several experts in the present docket by alleging that numerous intervenors, including NC WARN and The Center, "present[ed] studies conducted by consultants designed to advance their organizational interests" The Companies' Reply Comments, p 12. Of course, issues of credibility are particularly appropriate for a fact-finder's adjudication following an evidentiary hearing. *See Thompson v. Bradley*, 142 N.C. App. 636, 642, 544 S.E.2d 258, 262 (2001) ("This Court found that summary judgment should not have been granted, noting that if a witness is interested in the outcome of a suit, the witness's credibility should be submitted to the jury, to avoid the trial judge conducting a 'trial by affidavit.'). Indeed, it is expected that substantial testimony proffered during an evidentiary hearing would demonstrate that the Companies' IRPs are designed merely to "advance their organizational interests."

20. At a minimum, NC WARN and The Center believe that the following issues appear to be important factual disputes in the present docket:

- a. The accuracy of DEC and DEP's stated operating reserves;
- b. Whether DEC and DEP have sufficient capacity to achieve reliability;
- c. The cost of battery storage and the cost of gas-fired generation;
- d. The accuracy of the conclusions in the National Renewable Energy Laboratory (NREL) study concerning the impact and productivity of integrating increasing levels of solar and battery storage; and
- e. The reasonableness of DEC and DEP's demand growth projections.

21. NC WARN and The Center note that the AGO likewise identified several important disputes of fact which should be the subject of an evidentiary hearing. AGO's Reply Comments, pp 26-27.

22. As demonstrated, there are numerous disputes of fact concerning the Companies' IRPs. These crucial disagreements should not be resolved merely on a paper record. Instead, it is necessary to schedule an evidentiary hearing at which experts can appear and testify.

RELIEF REQUESTED

23. NC WARN and The Center respectfully request that the Commission enter a scheduling order which sets an evidentiary hearing on the discrete factual issues identified by NC WARN and The Center (see paragraph 20 above), the AGO (see the AGO's Reply Comments, pp 26-27), and any other dispute of fact to be identified by the Commission.

CONCLUSION

NC WARN and The Center respectfully request that the Commission schedule an evidentiary hearing pursuant to the Requests for Relief appearing above.

[Signatures Appear on Next Page]

This the 29th day of June, 2021.

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*Attorneys for Petitioners NC WARN and
Center for Biological Diversity*

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the foregoing document upon all counsel of record by email transmission.

This the 29th day of June, 2021.

/s/ Matthew D. Quinn
Matthew D. Quinn

EXHIBIT A

**PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
COMMISSION DIRECTIVE**

ADMINISTRATIVE MATTER	<input type="checkbox"/>	DATE	<u>June 17, 2021</u>
MOTOR CARRIER MATTER	<input type="checkbox"/>	DOCKET NO.	<u>2019-224-E/2019-225-E</u>
UTILITIES MATTER	<input checked="" type="checkbox"/>	ORDER NO.	_____

SUBJECT:

[DOCKET NO. 2019-224-E](#) - South Carolina Energy Freedom Act (House Bill 3659) Proceeding Related to S.C. Code Ann. Section 58-37-40 and Integrated Resource Plan for Duke Energy Carolinas, LLC;

-and-

[DOCKET NO. 2019-225-E](#) - South Carolina Energy Freedom Act (House Bill 3659) Proceeding Related to S.C. Code Ann. Section 58-37-40 and Integrated Resource Plan for Duke Energy Progress, LLC - Staff Presents for Commission Consideration South Carolina Energy Freedom Act (House Bill 3659) Proceeding Related to S. C. Code Ann. Section 58-37-40 and Integrated Resource Plans for Duke Energy Carolinas, LLC and Duke Energy Progress, LLC.

COMMISSION ACTION:**Motion #1:**

I move that the Commission find and conclude that the Integrated Resource Plan (IRP) with its six portfolios, in totality, combines to make the Integrated Resource Plan of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC (the Duke Companies) submitted for Commission approval. This proposed Duke IRP, together with the modifications and clarifications provided by Duke, does satisfy the requirements of S.C. Code Ann. Section 58-37-40. This IRP, including its modifications and clarifications should be accepted and approved by the Commission. The Base Case presented by Duke "represents the most reasonable and prudent means of meeting the electrical utility's energy and capacity needs as of the time the plan is reviewed." [1]

As the agency charged with the responsibility of interpreting and enforcing Section 58-37-40 and Act 62, the Commission must "determine whether the integrated resource plan is the most reasonable and prudent means of meeting energy and capacity needs, the commission, in its discretion, shall consider whether the plan appropriately balances" additional factors. I further believe that there are differences between this docket and other IRP dockets, as well as in the approaches used by a company to prepare its IRP.

Having reviewed the evidence before the Commission, it is my opinion that the Duke IRP includes the requirements of Act 62 and that it represents a reasonable and meaningful resource plan.

The record is replete with testimony concerning whether the Company asserts an "appropriate" plan as opposed to a "preferred" plan. Whether a specific portfolio has been indicated as being "preferred" or "appropriate," in my view, is not part of the "plan"

contemplated under Act 62. These two words – “appropriate” and “preferred” -- are, in my opinion, functionally equivalent for the purposes of this proceeding. I would additionally note that, if one reads all of Act 62, the word, “preferred” simply does not appear. In fact, witness Snider does testify that the base plan is the appropriate portfolio. The statute is primarily an outline of all that the IRP must have or contain to be satisfactory. Similarly, I believe that our analysis and evaluation should focus on the elements emphasized and required by Act 62. Therefore, I move that the Commission accept and approve the Duke Companies IRP together with the modifications and clarifications provided in the Rebuttal Testimonies and Exhibits of the Duke Witnesses.

The integrated Resource Plan must be a working document that is updated as new information becomes available. The Commission understands that a preferred plan is one of many best management practices. While not specially required in Act 62, I move for approval of Duke’s IRP which is predicated upon Duke’s commitments to comply, and that Duke must comply, with the requests of ORS to change, modify, and enhance the future IRP updates and IRPs beginning with the 2021 Update due in September 2021 from the Duke Companies.

The approval of this IRP will be discussed in more detail in our order. I so move.

[1] S.C. Code Ann. § 58-37-40(C)(2) (Supp. 2020).

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PRESIDING: J. Williams SESSION: Regular TIME: 11:00 a.m.

	MOTION	YES	NO	OTHER	
BELSER	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Present in Hearing Room
CASTON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Present in Hearing Room
ERVIN	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Voting via WebEx
POWERS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Present in Hearing Room
THOMAS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Voting via WebEx
C. WILLIAMS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Not Voting</u>	Absent from Hearings
J. WILLIAMS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Present in Hearing Room

(SEAL)

RECORDED BY: J. Schmieding



**PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
COMMISSION DIRECTIVE**

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COMMISSION ACTION:

Motion #2:

I would move that the Commission find that the Companies did NOT prove by the preponderance of the evidence that their 2020 IRPs are the MOST reasonable and prudent means of meeting their energy and capacity needs at the time of review. Therefore, the Companies should modify their 2020 IRPs to identify a preferred portfolio from the six plans presented in their IRPs.

In addition, I request that the Commission modify their 2020 IRP in the following manner:

- Prepare additional load forecast scenarios (such as high and low scenarios.), as required by Act 62.
- Make changes to its development of Effective Load Carrying Capabilities (ELCC) and revisions to its capacity expansion modeling that incorporates those ELCC values.
- Remodel its portfolios using natural gas pricing forecasts that rely on market prices for eighteen months before transitioning over eighteen months to the average of at least two fundamentals-based forecasts, as recommended by CCEBA Witness Lucas.
- Include third-party solar Purchase Power Agreements (PPAs) priced at 38 MWh as a selectable resource.
- For purposes of modeling solar PPAs as a selectable resource, the Company shall assume a contract term of at least 20 years with operational characteristics identical to CPRE

ACCEPTED FOR PROCESSING 2021 June 18 8:26 AM - SCPSC - 2019-224-E - Page 3 of 6

projects.

- Include sensitivities in the modified IRP for PPA pricing at 36 MWh and 40 MWh.
- Modify its IRP and adjust its IRP modeling to account for the effect of the December 2020 Investment Tax Credit extension by Congress for solar development.
- Adjust its modeling as suggested by witness Lucas to take into account the increasing market saturation of single-axis solar systems in the DEC and DEP territories.
- In its Modified IRP Duke shall use the National Renewable Energy Laboratory's Annual Technology Baseline (NREL ATB) Low figures for battery storage costs.
- In its Modified IRP and next IRP Update, Duke shall assume a 750 MW annual limitation on the interconnection of solar and storage resources.

Further to the IRP Update in the order:

- Additional load forecast scenarios, such as high and low scenarios that account for economic and other types of uncertainty or risks.
- Use of the Utility Cost Test (UCT) when developing Energy Efficiency Demand Side Management (EE DSM) scenarios and savings projections in its future IRPs, IRP updates and market potential studies.
- Collaboration with the EE DSM Collaborative to identify a set of reasonable assumptions surrounding 1) increased market acceptance of existing technologies and 2) emerging technologies to incorporate into EE DSM saving forecasts.
- Evaluation of high and low EE DSM cases across a range of fuel and carbon dioxide (CO₂) assumptions to better understand what level of EE DSM should be implemented if fuel costs rise or higher CO₂ costs are imposed.
- A study of the relationship between extreme winter weather load and develop more sophisticated methods for estimating the potential impact of future extreme winter weather on load.

A comprehensive coal retirement analysis to inform development in their 2022 IRP.

- An assessment of the risks of natural gas transportation and delivery, including re-orientation of cancellation of pipeline projects; and quantitatively address the potential impacts of transport and delivery risks of natural gas availability and pricing.
- A limitation that is analytically justified, nondiscriminatory, and accounts for the expected benefits of queue reform and the possibility of making further investments in the Companies' capacity to interconnect new generation if the Companies elect to impose any limitation on interconnections.
- A solar purchase power agreement ("PPA") resource option as a sensitivity.

In connection with the Company's implementation of its retirement plan in accordance with ORS 65.001, the Company is required to file a report with the Oregon Public Utility Commission (OPUC) regarding the Company's retirement plan. The report should include information regarding the Company's retirement plan, including the Company's retirement plan documents, the Company's retirement plan assets, and the Company's retirement plan liabilities. The report should also include information regarding the Company's retirement plan funding, including the Company's retirement plan contributions and the Company's retirement plan benefits. The report should be filed with the OPUC by June 1, 2021.

In addition, I o e t t e Co nie in ude in uture IRP t e o o in :

- A technical appendix that more fully describes each of the models, presents the statistical results and shows the individual energy and peak load forecast results that were actually developed.
- A more detailed discussion of the specific methodology used to develop the synthetic loads for extreme low temperature periods.
- Further development of the methodology to model the effects of extreme low temperatures on winter peak load.
- Continued engagement with stakeholders to identify additional cost-effective EE DSM programs to achieve greater levels of energy savings.
- Continued engagement with stakeholders to determine if additional EE DSM sensitivities could be modeled, including exploration of other approaches for deriving the low EE DSM forecast.
- A review of their natural gas price forecasting methodology and investigation of alternative approaches.
- Enhanced coal retirement analysis methodology.
- Corrected capital and variable cost assumptions for combustion turbine and battery storage resources and re-evaluate the reasonableness of the assumptions.
- An additional solar generic resource option modeling assumptions that reflects the kind of solar purchase power agreements ("PPA") prices that may be available in the market.
- Further investigation regarding solar capacity values and solar plus battery energy storage capacity values, with stakeholder input, discussed as part of a stakeholder engagement process.
- Minimax regret analysis and other risk analyses.
- Revised calculation of the average retail rate impact on customers so that the assumptions and methodologies are consistent with the calculations of the Present Value Revenue Requirement (PVRR), except for the levelization of the capital-related costs.
- Details regarding the status of the Southeast Energy Exchange Market ("SEEM"), details regarding important current and planned activities, and information regarding the monetary benefits that have been or could be achieved by implementation of the Southeast Energy Exchange Market (SEEM). I would so move.

PRESIDING: J. Williams

SESSION: Regular

TIME: 11:00 a.m.

	MOTION	YES	NO	OTHER	
BELSER	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Present in Hearing Room
CASTON	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Present in Hearing Room
ERVIN	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Voting via WebEx

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J. WILLIAMS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Present in Hearing Room

(SEAL)

RECORDED BY: J. Schmieding

