

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION  
DOCKET NO. E-100 SUB 194**

	)	
In the Matter of:	)	
Biennial Determination of Avoided Cost	)	<b>PARTIAL PROPOSED ORDER OF CCEBA</b>
Rates for Electric Utility Purchases from	)	
Qualifying Facilities — 2023	)	
	)	

BY THE COMMISSION: This is the 2023 biennial proceeding held by the North Carolina Utilities Commission pursuant to the provisions of Section 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA), 18 U.S.C. 824a-3, and the Federal Energy Regulatory Commission (FERC) implementing those provisions,<sup>1</sup> which delegated to this Commission certain responsibilities for determining each utility’s avoided costs with respect to rates for purchases from qualifying cogenerators and small power production facilities. These proceedings are also held pursuant to N.C.G.S. § 62- 156, which requires this Commission to determine the rates to be paid by electric utilities for power purchased from small power producers as defined in N.C.G.S. § 62-3(27a).

Section 210 of PURPA and the regulations promulgated pursuant thereto by FERC establish the responsibilities of FERC and state regulatory authorities, such as this Commission, relating to the development of cogeneration and small power production. Section 210 of PURPA requires FERC to prescribe such rules as it determines necessary to encourage cogeneration and small power production, including rules requiring the purchase and sale of electric power by

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<sup>1</sup> Order No. 69, Docket No. RM79-55, FERC Stats. & Regs. 30, 128 (1980); see also 45 Fed. Reg. 12,214 (1980).

electric utilities to cogeneration and small power production facilities. In adopting such rules, FERC stated:

Under Section 201 of PURPA, cogeneration facilities and small power production facilities that meet certain standards can become “qualifying facilities” (QFs), and thus become eligible for the rates and exemptions established in accordance with Section 210 of PURPA.<sup>2</sup>

Each electric utility is required under Section 210 of PURPA to purchase available electric energy from cogeneration and small power production facilities that obtain QF status. For such purchases, electric utilities are required to pay rates that are just and reasonable to the ratepayers of the utility, are in the public interest, and do not discriminate against cogenerators or small power producers. FERC regulations require that the rates electric utilities pay to purchase electric energy and capacity from qualifying cogenerators and small power producers reflect the cost that the purchasing utility can avoid as a result of obtaining energy and capacity from these sources, rather than generating an equivalent amount of energy itself or purchasing the energy or capacity from other suppliers.

With respect to electric utilities subject to state regulation, FERC delegated the implementation of these rules to state regulatory authorities. State commissions may implement these rules by the issuance of regulations, on a case-by-case basis, or by any other means reasonably designed to give effect to FERC’s rules. The Commission implements Section 210 of PURPA and the

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<sup>2</sup> *Small Power Production and Cogeneration Facilities; Regulations Implementing Section 210 of the Public Utility Regulatory Policies Act of 1978*, Order No. 69, FERC Stats. & Regs. ¶ 30,128 (cross-referenced 10 FERC ¶ 61,150), *order on reh’g*, Order No. 69-A, Order No. 69-A, FERC Stats. & Regs. ¶ 30,160 (1980) (cross-referenced at 11 FERC ¶ 61,166), *aff’d in part & vacated in part sub nom. Am. Elec. Power Serv. Corp. v. FERC*, 675 F.2d 1226 (D.C. Cir. 1982), *rev’d in part sub nom. Am. Paper Inst. v. Am. Elec. Power Serv. Corp.*, 461 U.S. 402 (1983).

related FERC regulations by holding biennial proceedings. This proceeding is the latest to be held by this Commission since the enactment of PURPA. In prior biennial proceedings, the Commission has determined separate utility-specific avoided cost rates to be paid by the electric utilities to the QFs with which they interconnect. The Commission also has reviewed and made determinations regarding other related matters involving the relationship between the electric utilities and such QFs, such as terms and conditions of service, contractual arrangements, and interconnection charges.

This proceeding also follows the mandate of N.C.G.S. § 62-156, which was enacted by the General Assembly in 1979. This statute provides that “no later than March 1, 1981, and at least every two years thereafter” the Commission shall determine the rates to be paid by electric utilities for power purchased from small power producers according to certain standards prescribed in FERC regulations regarding factors to be considered in the determination of avoided cost rates. The General Assembly recently amended N.C.G.S. § 62-156 in 2017 through enactment of Session Law 2017-192 (House Bill 589) and again in 2019 through enactment of Session Law 2019-132 (House Bill 329).

On August 7, 2023, the Commission issued its Order Establishing Biennial Proceeding, Requiring Data, and Scheduling Public Hearing. Pursuant to that Order, Duke Energy Carolinas, LLC (DEC), Duke Energy Progress, LLC (DEP) (together, Duke or Duke Energy), Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina (Dominion or DENC), Western Carolina

University (WCU), and Appalachian State University, d/b/a New River Power and Light (New River) were made parties to these proceedings.

The following parties filed Petitions to Intervene that were granted by the Commission: the North Carolina Office of the Attorney General (AGO), Carolina Industrial Group for Fair Utility Rates I (CIGFUR I), Carolina Industrial Group for Fair Utility Rates II (CIGFUR II), and Carolina Industrial Group for Fair Utility Rates III (CIGFUR III) (collectively, CIGFUR), the North Carolina Sustainable Energy Association (NCSEA), Southern Alliance for Clean Energy (SACE), and the Carolinas Clean Energy Business Association (CCEBA). Participation of the Public Staff was recognized pursuant to N.C.G.S. § 62-15(d) and Commission Rule R1-19(e).

On November 1, 2023, DENC filed its Initial Statement and Exhibits and confidential avoided cost information. Also on November 1, 2023, Duke Energy filed its Joint Initial Statement and Exhibits and confidential avoided cost information.

On November 1, 2023, WCU and New River filed Joint Comments and Proposed Rates.

On January 9, 2024, DENC filed an update to its Initial Statement.

On January 18, 2022, WCU filed an Affidavit of Publication of Public Notice to serve as proof of publication and in compliance with the Commission's August 17, 2023 Order.

On January 19, 2024, New River filed an Affidavit of Publication of Public Notice to serve as proof of publication and in compliance with the Commission's August 7, 2023 Order.

On January 22, 2024, DENC filed an Affidavit of Publication of Public Notice to serve as proof of publication and in compliance with the Commission's August 7, 2023 Order.

On January 30, 2024, NCSEA, CCEBA, and SACE filed a Joint Motion for Extension of Time to file initial and reply comments.

On February 5, 2024, Duke Energy filed Affidavits of Publication of Public Notice for both DEP and DEC to serve as proof of publication and in compliance with the Commission's August 7, 2023 Order.

On February 6, 2024, the Commission granted the Joint Motion for Extension of Time, extending the date for the parties to file initial comments to through and including February 21, 2024 and extended the date for parties to file reply comments to through and including March 27, 2023.

On February 6, 2024 the public hearing was held, as scheduled. Duke Energy, DENC, and the Public Staff appeared at the public hearing.

On February 6, 2024, Duke Energy filed a Proposal to Update Avoided Cost Rates to reflect the new "P3 Fall Base reference portfolio" as identified in Duke Energy's Carbon Plan to address Duke Energy's Updated 2023 Fall Load Forecast.

On February 15, 2024, Duke Energy filed Public and Confidential Updated Exhibits to its Initial Statement.

On February 21, 2024, the Public Staff filed confidential and redacted versions of its Initial Comments and the AGO, CCEBA, SACE and NCSEA all filed Initial Comments.

On March 4, 2024, DENC filed for reference public and confidential versions of all public contracts between VEPCO/DENC and qualifying facilities.

On March 27, 2024, DENC, Duke Energy, NCSEA, SACE, and CCEBA all filed Reply Comments; the Public Staff filed both public and confidential versions of its Reply Comments. The AGO did not file Reply Comments.

On April 10, 2024, the Commission issued its Order Requiring the Filing of Proposed Orders and Briefs by May 10, 2024.

On May 3, 2024, Duke Energy, and the Public Staff filed a Joint Motion for Extension of Time to file Proposed Orders.

On May 7, 2024, the Commission issued an Order Granting the Motion for Extension, allowing the parties until May 20, 2024 to file Proposed Orders or Briefs.

The Parties filed Proposed Orders or Briefs on May 20, 2024.

Based on the foregoing and the entire record in this proceeding, the Commission makes the following:

#### **FINDINGS OF FACT**

1. The Gas Peaker Methodology used by Duke Energy to determine its 2023 avoided cost rates is unlikely to continue to provide accurate results in a carbon-constrained environment.

2. While for the purposes of this 2023 proceeding the Gas Peaker Methodology is appropriate for determination of avoided cost rates, the Commission would benefit from additional information and analysis to determine the appropriate methodology to determine avoided costs in future biannual proceedings, including the next proceeding beginning in 2025.

## **EVIDENCE AND CONCLUSIONS SUPPORTING**

### **FINDINGS OF FACT NOS. 1 and 2**

The evidence supporting these Findings of Fact is found in Duke Energy's Initial Statement, the Initial Statement of the Public Staff, the Initial Comments of SACE, the Initial Comments of CCEBA, the Initial Comments of the AGO, the Reply Comments of Duke Energy, the Reply Comments of the Public Staff, the Reply Comments of NCSEA, the Reply Comments of SACE and the Reply Comments of CCEBA.

#### **Summary of the Comments**

In its filing, Duke discusses its consideration of alternatives to the CT Gas Peaker methodology of determining avoided cost. Duke states, "In both North and South Carolina, the Companies have historically applied the 'peaker methodology' (the 'peaker method') to quantify each utility's avoided costs, and the Companies believe this method continues to be reasonable and appropriate for calculating DEC's and DEP's forecasted avoided costs as presented in this proceeding." Joint Initial Statement and Proposed Standard Avoided Cost Rate Tariffs of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC ("Joint

Initial Statement”) at 22, *In the Matter of Biennial Determination of Avoided Cost Rates for Electricity Utility Purchases from Qualifying Facilities – 2023* (“2023 Avoided Cost Docket”), Docket No. E-100, Sub 194 (N.C.U.C. Nov. 1, 2023).

Duke asserts that “the Companies have continued to utilize the current Commission-approved methodology for quantifying as-available energy delivered by a QF and have determined that it is not necessary to further update their PURPA implementation framework to adopt any of the methodologies identified in Order No. 872 for purposes of setting long-term fixed rates for avoided capacity and energy at this time.” Joint Initial Statement at 14. Duke’s position for this Avoided Cost proceeding is that “[c]ontinued use of the Commission-approved peaker method to calculate the Companies’ forecasted avoided costs of capacity and energy is consistent with the Companies’ current, standardized approach to calculating avoided costs under N.C.G.S. § 62-156(b) and (c) remains non-discriminatory to QFs and just and reasonable to the electric consumer and in the public interest at this time.” *Id.*

In its Initial Statement, the Public Staff states that the Commission has consistently approved use of the peaker method in prior proceedings. The Public Staff states that while the Utilities have chosen F-frame CTs as the basis for peaker-method calculations, more advanced H-class CTs are becoming increasingly available and “will likely replace F-frame CTs in the future as the preferred source of peaking capacity.” Moreover, the Public Staff states that due to their higher efficiency, H-class CTs will likely also be used as a source for energy, not just capacity.



The Public Staff points out, however, that while cost data on F-frame CTs is and has been readily available, H-class CTs currently have limited available data on their operations and actual construction costs. As such, the Public Staff supports the use of an F-frame CT as proposed by the Utilities in this proceeding. However, if no other publicly available cost data exists, the Public Staff recommends that “the Utilities calculate their avoided capacity payments based upon more advanced CTs in the next avoided cost proceeding, along with an offset to the cost of the unit based upon the energy value associated with an advanced CT, should such an adjustment be found to be material – a calculation known as the “net peaker’ method.” (Public Staff Initial Statement at 13-14.)

In their initial comments, both CCEBA and the AGO note that in its E-100, Sub 175 Order the Commission ordered the Companies to “explain in their next biennial avoided cost filings how the Carbon Plan has been incorporated into avoided cost rates and how any Commission-approved avoidable cost of carbon is factored into Duke’s calculation of avoided cost rates.” Both CCEBA and the AGO argue that Duke failed to comply with this mandate.

CCEBA requests that the Commission “order Duke and DENC to undertake a process that will, in light of the changing energy and regulatory landscape, *fully* consider all alternatives to the peaker method and identify the most accurate method for calculating avoided costs going forward.” (CCEBA Initial Comments at 5.) CCEBA proposed that the Commission address this issue and Duke’s non-compliance in one of three ways: through a stakeholder process with a defined timeframe, a technical conference, or an evidentiary hearing.

CCEBA maintains that this process is necessary, and should include efforts to appropriately value both the energy and capacity contribution of renewable resources as measured in the carbon-constrained environment required by HB951.

In its initial comments, the AGO states that “the Companies’ proposed avoided cost rates do not reflect the value of carbon emissions reductions of many QFs and thus fail to fully reflect the Companies’ avoided costs as required by PURPA.” (AGO Initial Comments at 8.) The AGO notes that the Companies’ avoided cost calculations do not comply with the PURPA mandate to represent “the costs that the electric utility would have been required to spend ‘but for’ the purchase from the QFs” where HB951 restrains the amount of carbon-emitting resources that Duke can include in its system. (*Id.* at 9-10.) The AGO argues that “not only are there serious concerns regarding the adequacy of natural gas supply, but in order to achieve the carbon emission reduction targets... the Companies would be required to account for the carbon emission impact of a carbon-free QF versus a CT.” (*Id.*)

The AGO also argues that the adoption of the initial Carbon Plan renders the costs of carbon compliance more “known and verifiable” than they were in previous avoided cost proceedings. (*Id.* at 10.) As the AGO points out, in the Sub 175 Order the Commission approved DENC’s assignment of a cost of carbon in its “Alternative Plan B,” which included participation in the Regional Greenhouse Gas Initiative (“RGGI”) – thus, the concept of a carbon cost in avoided cost rates is not new or inappropriate. (*Id.* at 11.)

The AGO requests the Commission reject Duke’s avoided cost proposal and order “the Companies, in consultation with the AGO, the Public Staff, and other interested intervenor, to develop a method of deriving the value of carbon emission reductions from the CPIRP to be included in avoided cost rates for carbon free QFs” or if such carbon value cannot be accurately reflected in the peaker methodology, to require the Companies, in consultation with those same parties “to propose an alternative method for calculating avoided cost rates.” (AGO Initial Statement at 20.)

In its Reply Comments, Duke Energy argues that this Commission has consistently approved the continued use of the peaker method. Duke Energy maintains that, contrary to CCEBA’s assertions, it “*fully* considered alternatives to the peaker method in the months leading up to the November 1, 2023, avoided cost filing in this docket.” (Duke Energy Reply Comments at 6.) Duke objects to CCEBA’s proposed stakeholder process, technical conference, or evidentiary hearing, stating that the current biennial process “provides ample and regular opportunity for the Companies to re-assess and for the Commission to review this issue.” (*Id.*)

In its Reply Comments, the Public Staff requests that, “in lieu of stakeholder meetings, the Commission require the Utilities to evaluate other least-cost capacity resources as they become commercially viable, in future avoided cost proceedings.” (Public Staff Reply Comments at 3.)

NCSEA, in its Reply Comments, agrees that the methodology for calculating future avoided cost rates needs to be reevaluated. (NCSEA Reply

Comments at 3.) NCSEA agrees with CCEBA that no “meaningful engagement” occurred on this issue prior to the filing of Duke Energy’s Initial Statement. (*Id.* at 4.) While NCSEA agrees with the Public Staff that, for the purposes of this avoided cost proceeding, the peaker method and the use of the F-Frame CT as proposed is appropriate, but that “this is the last proceeding that this method and proxy resource should be used.” (*Id.*) NCSEA supports CCEBA’s argument for a stakeholder process to fully consider and recommend alternative approaches.

In its Reply Comments, CCEBA agrees with the AGO that the CT-peaker method does not accurately address the value that carbon-free resources bring to the grid given that HB951 restricts the deployment of carbon-based generation. (CCEBA Reply Comments at 10.) CCEBA agrees with the AGO that “improper valuation of carbon free resources through long-term continuation of the peaker methodology fails to account for externalities and will eventually result in a disconnect between value and system planning.” (*Id.*) CCEBA points out that in its Initial Comments, it particularly addressed the failure of the current methodology to accurately account for avoided capacity costs, but that it agrees with the AGO that the peaker methodology also fails to capture energy costs avoided by carbon-free resources. (*Id.* at n. 5.) CCEBA notes that Duke’s current avoided cost methodology may fail adequately to address the seasonal nature of the value of solar energy, particularly the capacity value of solar in meeting significant summer afternoon peaks, or the effect of significant addition of storage assets on that value. (*Id.* at 8.)

CCEBA further argues that Duke Energy’s “apparent assumption” that existing solar PURPA-Qualifying Facilities (“QFs”) will continue to provide power even after the expiration of their current PPAs underscores the problems with its avoided cost method. (*Id.* at 11.) Because the PPAs of some QFs on Duke Energy’s system will begin to expire in 2027, CCEBA notes that the QF owners and Duke Energy must understand the value those projects provide to the grid and begin planning by 2026 for “the future contribution of those resources to Duke’s system and to HB951 compliance.” (*Id.*) CCEBA points out that QFs face the choice of seeking a new PPA, or seeking another offtake arrangement, such as bidding into a future competitive solicitation, or becoming a GSA supplier. CCEBA states that the increasing frequency of PPA terminations over the next several years will mean the true avoided cost value of these resources must be established sooner rather than later. (*Id.*)

CCEBA states that this situation “presents two options for the Commission – either to address this issue in this proceeding in the manner proposed by the AGO or to require Duke to initiate an expedited stakeholder process that would allow the Commission to make any necessary modifications to its approved avoided cost methodology well before the next biennial avoided cost proceeding.” (*Id.* at 12.) CCEBA supports the latter approach. (*Id.*)

In its Reply Comments, SACE characterized Duke’s compliance with this Commission’s prior order to consider alternative methodologies as “halfhearted,” and supported CCEBA’s proposed stakeholder process. SACE further requested

that any such process be overseen by an independent third party. (SACE Reply Comments at 5.)

### **Discussion and Conclusions**

The Commission determines that the peaker methodology as applied by Duke Energy is appropriate for this biennial proceeding. Based upon the information presented to the Commission and the arguments of the parties, and the lack of a concrete alternative methodology put forth by any party, the Commission finds that the peaker methodology is a reasonable approach for the 2023 avoided cost process.

However, the Commission also finds that given the enactment and implementation of HB951 and its restrictions on carbon emissions from Duke's generating fleet (which are reflected in the 2022 Carbon Plan approved by the Commission and in Duke's proposed 2024 plan), the peaker methodology will soon (if it does not already) fail to accurately reflect the costs avoided by new carbon-free generating resources on the Companies' systems. CCEBA and the AGO are also correct that because of the imminent expiration of many existing QF PPAs over the next several years, a diligent effort must be made to determine a new measure for the capacity and energy value of carbon-free resources and the costs they avoid in North Carolina prior to the next biennial avoided cost proceeding.

The Commission further agrees with CCEBA that the AGO's request for urgency can best be met not through rejecting the current avoided cost rates, but through a "defined and collaborative process for establishing an avoided cost

methodology that accurately and appropriately accounts for the value of carbon-free resources and the costs they avoid, and to consider QF recontracting options.” (see CCEBA Reply Comments at 12.) The Commission therefore orders Duke Energy to undertake such a stakeholder process to formulate a defensible alternative methodological approach (or approaches) for consideration by the Commission; and that the parties report back to the Commission on the results of that process by June 1, 2025 so that the process may be addressed by the Commission prior to the filing of the next biennial avoided cost filings in November 2025 and incorporated into Duke Energy’s next proposed avoided cost rates.

The Commission further finds that Duke Energy did not fully comply with this Commission’s previous Order that Duke Energy consider alternative approaches prior to filing its Initial Statement, and therefore orders that the stakeholder process required by this Order should be directed and overseen by an independent third party and open to all stakeholders.

IT IS, THEREFORE, ORDERED as follows:

1. That Duke Energy is directed to undertake a comprehensive stakeholder process, overseen by an independent third party, with input and participation of interested stakeholders with the goal of providing options to the Commission allowing the Commission to approve an alternative methodological approach that appropriately and fully values the capacity and energy and avoided cost value of renewable resources in future avoided cost proceedings.
2. That Duke Energy report back to the Commission on the results of that process by June 1, 2025 so that the process may be addressed by the Commission prior to the filing of the next biennial avoided cost filings in November 2025.

ISSUED BY ORDER OF THE COMMISSION.

This the \_\_\_ day of \_\_\_, 2024.

NORTH CAROLINA UTILITIES  
COMMISSION

A. Shonta Douglas, Chief Clerk



**CERTIFICATE OF SERVICE**

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

This, the 20th day of May 2024.

/s/ John D. Burns  
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