

STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH

DOCKET NO. E-2, SUB 1197  
DOCKET NO. E-7, SUB 1195

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of: )  
Application by Duke Energy Carolinas, )  
LLC, and Duke Energy Progress, LLC, for ) INITIAL COMMENTS OF  
Approval of Proposed Electric ) CALSTART’S COALITION FOR  
Transportation Pilot ) COMMERCIAL ELECTRIC VEHICLES  
Request for Approval of Respective Make )  
Ready Credit Programs )

**Introduction**

Pursuant to the North Carolina Utilities Commission’s (“Commission”) May 28, 2021 Order, CALSTART’s Coalition for Commercial Electric Vehicles submits the following comments regarding Duke Energy’s proposed Electric Vehicle (“EV”) transportation pilot proposed make ready credit programs. CALSTART is a member-based 501c3 non-profit with regional offices across the country, including in Florida, Michigan, and New York. CALSTART seeks to accelerate the commercialization of clean transportation technologies in the U.S., and with our “Global Drive to Zero” program, across the world. CALSTART has over 280 organizational members including vehicle and component manufacturers, transit agencies, goods movement operators, investor-owned utilities, publicly-owned utilities, and electric vehicle service providers. CALSTART has engaged in utility proceedings in Michigan, Missouri, New York, California and many other states.

CALSTART’s Coalition for Commercial Electric Vehicles “CCEV” includes the following commercial vehicle and commercial electric vehicle charging providers: Arrival, Daimler, EVgo, Greenlots, Lion Electric, Morgan Olsen, Nikola, and Volvo Group. The goal of CCEV is to collectively advance utility programs that support fleet electrification and affordable commercial charging solutions. CCEV works to ensure that utility programs support the growth of commercial electric vehicles through thoughtful program and rate design and adoption of best practices for fleet solutions, as we are confident

that the role of the utility is paramount for fleet adoption of electric vehicles. Where CCEV members have differing perspectives on this proposed program, these will be addressed in their separately filed comments.

Our coalition appreciates the opportunity to comment on Duke's filing under E-2 Sub 1197 and E-7 Sub 1195 and specifically the proposed electric vehicle make-ready programs. Our coalition identified North Carolina early on as a key market where we expect to see rapid adoption of commercial electric vehicles, given the state's commitments to transportation electrification, and it is an important market for CCEV. However, the pace and scale of adoption of EVs in North Carolina depends in part upon the necessary policy and regulatory frameworks being implemented to support the state's goals. For these reasons, we decided to formally engage in this proceeding.

Through CALSTART's work with our members across the country, it has become clear that there are certain utility programs that are foundational to transportation electrification, and without such programs it is likely that states will get left behind on the rapid progress towards electrification. These key program designs CCEV advocates for include:

- 1) Utility-side make-ready infrastructure support, both in the form of interconnection assurances and by utilities installing and owning the necessary distribution-system upgrades;
- 2) Incentives for customer-side "make-ready" costs and EV supply equipment (EVSE);
- 3) Rate-design that makes the cost of charging clear, and ensures that it is cost-competitive with diesel as a fuel source;
- 4) Fleet planning and support services that help fleets to not only install their first few chargers, but to plan for EV adoption over 5-10 years.

CCEV agrees that make-ready investment is a foundational element to utility investment in EV infrastructure, although it is only one of several needed incentives and mechanisms by which utilities can accelerate EV adoption. Often, we have found that these critical programs are most likely to develop after a state-wide plan has been created for transportation electrification that clarifies the role of utilities, through a framework policy document or Commission developed "roadmap". It is very helpful if these roadmaps clearly lay out the vision for the role of the utility in this transformation to clean transportation. It was a key milestone for North Carolina to release its ZEV plan in 2019, highlighting the importance of

converting to electric fleets,<sup>1</sup> however this plan focused on overall statewide activities and not only on the Commission's activities. In recognizing that Duke is developing a suite of EV programs in the absence of a Commission-developed policy roadmap for utility programs, and with our commendation for Duke's efforts, we offer these comments on the present filing.

1) *Merits of Utility Support for Customer-Side Infrastructure*

CCEV applauds Duke's dedication to proposing new and innovative EV program designs. Make-ready infrastructure and distribution system upgrades necessary to meet a customer's need for electricity service is a foundational role of utilities. Make-ready EV programs implemented across the country have expanded utility contributions to line extensions and bring electrical equipment on the customer's side of the meter into the utility scope, while generally leaving charger equipment, siting, ownership, marketing, customer service, and network operation in the hands of experienced EVSPs or independent site hosts that own and operate EVSE on their premises.

2) *The Proposed Design of the Make Ready Credit makes it challenging for commercial customers to anticipate how much of a project's likely costs could be covered by the credit, which means the credit is unlikely to incent more rapid fleet adoption of EVs.*

When fleet managers or commercial charging providers/ developers (EVSPs) consider which markets to expand their electric vehicle fleets or charging installations, they look to states and regions where there are utility and state incentives for vehicles and charging. To be truly effective at incenting fleets or commercial EVSPs to focus their growth on a given region, the available incentive amount must be clear. Duke's make-ready credit program for commercial customers would be based on either the customer's "Demonstrated Costs" or the Company's expected increase in revenue in the first three years, whichever is less. Therefore, we assume that the expected revenue increase in the first three years would determine the incentive amount for most fleets. However, it is unclear to our coalition if there is a calculation that a customer can easily make in advance to ascertain the likely amount of the credit. The requirement for a

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<sup>1</sup> North Carolina Department of Transportation, "North Carolina ZEV Plan", October 2019, at 17.

“customer usage profile” with “estimated usage for each EVSE including hours per day and per week” seems perhaps too onerous for this type of program, and for customers adopting their first electric vehicle. Also, we do not see a justification for the time-period for the revenue calculation being shorter for commercial customers than for residential customers, when in fact commercial vehicle fleets generally own their vehicles for a longer time-period than the average residential customer, and their driving patterns are much easier to predict in advance, and therefore the revenue generation is much more certain.

This proposed incentive could somewhat ease the cost barrier of installation for commercial customers, while ensuring that it doesn’t affect other ratepayers. However, the proposed incentive amount is quite opaque and difficult to ascertain, which makes it hard for our coalition to comment on whether it would be effective at incenting commercial EV adoption by Duke’s customers. Without more guidance about how the three-year revenue increase would be calculated, and a utility-provided calculator, it is hard to understand how much each customer is likely to receive and how this will compare to actual costs.

Even a ballpark estimate that allows customers to calculate a ratio of covered vs. uncovered costs would be extremely helpful. It does not appear that there is an easy way for the customer to calculate in advance how much their credit would be so that they can understand how much of their costs would be credited back by the utility. Therefore, while this proposal certainly does no harm to Duke’s customers, our coalition is unsure that it will act as an incentive without any estimates from Duke as to what likely incentive amounts could be for different charging applications, or how much of a customer’s actual costs they might expect to have shared by the utility. We encourage Duke to consider publishing such estimates or a customer calculator with a revised filing.

3) *Suggestions for Improving the Design of the Make Ready Credit*

As discussed above, the proposed program would provide a nominal incentive—not objectionable in its design but also not as helpful as it could be to encourage commercial EV adoption. We therefore offer the following suggestions about how this program design could be improved:

- a) At a minimum, Duke should provide a publicly available calculator so that a customer can at least pencil out a rough estimate of the potential revenue credit, based on the average miles driven per

day of the vehicles, the vehicles' battery sizes, charging rates, and other factors. Even though subsequent conversation between Duke and the customer may lead to adjusting this revenue estimate based on the expected usage profile, a transparent up-front calculator should be helpful to customers in making an initial determination of project feasibility.

- b) As an improvement, we encourage Duke to consider setting a flat incentive based on expected charging capacity, or set the incentive to cover either 100%, or a lower, fixed percentage of customer costs. Other progressive utilities are covering 25-100% of customer-side costs,<sup>2</sup> depending on the type of fleet or charging application. Factors such as fleet type (publicly or privately owned), charger location (public or private, located in a low-income or disadvantaged community) have been used elsewhere to determine this range. Setting a flat or percentage of cost incentive is a more transparent approach that helps residential and commercial customers alike with budgeting for these installations.
- c) We recommend allowing different revenue projection methods for publicly accessible and private chargers. The proposed approach whereby customers are credited based on the additional revenue from incremental load will make it easier for private users to reduce the make-ready costs. For publicly accessible chargers, we suggest the flat or percentage-based incentives as discussed above.
- d) The proposed credit design may not encourage smart charging in those applications where it should be encouraged. If the value of the credit is based on the additional electricity of that incremental load and the time-of-day rate, this seems to create a disincentive for customers to manage their charging, because charging during higher rate periods times makes their credit higher. For example, a customer might theoretically want to charge at the most expensive time of

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<sup>2</sup> See for example, STATE OF NEW YORK PUBLIC SERVICE COMMISSION CASE 18-E-0138 - Proceeding on Motion of the Commission Regarding Electric Vehicle Supply Equipment and Infrastructure, ORDER ESTABLISHING ELECTRIC VEHICLE INFRASTRUCTURE MAKE-READY PROGRAM AND OTHER PROGRAMS, July 16, 2020; *see also*, California Public Utilities Commission A. 18-06-015 DECISION AUTHORIZING SOUTHERN CALIFORNIA EDISON COMPANY'S CHARGE READY 2 INFRASTRUCTURE AND MARKET EDUCATION PROGRAMS, August 27, 2020.

day to get the largest credit, which we assume would not be beneficial to the grid. Perhaps this was not Duke's intention, and if not we would appreciate Duke clarifying this in a revised filing to ensure that managed charging is encouraged.

CCEV recommends a fixed maximum incentive amount per kW of charging capacity, or a fixed incentive per charging port as a customer "credit" as a preferable design vs an unknown incentive amount based on future utility revenues. Knowing the total amount up-front would be very valuable to fleets and commercial charging developers.

Furthermore, the proposed program design is based on the concept that the only benefit to Duke's ratepayers is the immediate increased revenues from EV charging, when in fact, the numerous and quantifiable benefits that will result from utility customer's adoption of EVs have been well studied and documented.<sup>3</sup> The benefits of EVs for Duke's ratepayers and North Carolinians load go far beyond the extra revenue from rates that the EV customers are going to pay, therefore, a charging incentive that is rate-based, and which goes beyond just the incremental revenue from the customer's charging would be appropriate, especially for public charging. As highlighted in the North Carolina ZEV Plan<sup>4</sup> EV charging also helps better utilize grid assets, and with vehicle-grid-integration, commercial EVs can have the ability to support the grid at critical times, to balance renewable load, and to support critical emergency services when vehicles are able to provide backup power. It should be noted that electrifying medium- and heavy-duty vehicles have the most clean air benefits per vehicle. This program proposal seems to suggest that the only benefit to the grid or ratepayers comes from the increased energy usage and increased revenue paid by EV drivers and fleets, when in fact the increased load is only one of a large host of benefits to ratepayers.

As laid out in the program filing, North Carolina has made a bold commitment to an electric transportation future. Because North Carolina is clearly committed to the role of the utility in growing the

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<sup>3</sup> See Natural Resources Defense Council, "Electric Vehicles Are Driving Electric Rates Down", June 2020, available at [https://www.synapse-energy.com/sites/default/files/EV\\_Impacts\\_June\\_2020\\_18-122.pdf](https://www.synapse-energy.com/sites/default/files/EV_Impacts_June_2020_18-122.pdf)

<sup>4</sup> available at <https://www.ncdot.gov/initiatives-policies/environmental/climate-change/Documents/nc-zev-plan.pdf>

EV market—it would be more impactful for this Commission to approve an overall multi-year budget for a comprehensive suite of EV programs, including customer-side and utility make-ready, as well as a vision for the overall role of the utility and utility ownership. This would allow Duke to have a clear fixed funding amount from which to propose a suite of maximally impactful make-ready, rate-design, fleet assistance and line extension programs, and then individual programs, such as the one proposed here could be approved by the Commission. This type of comprehensive overarching policy framework would better ensure EV market growth, provide certainty to the industry regarding future investments, and recognize that the benefits of expanding EV's go far beyond additional revenue for Duke from electricity sales.

4) *A clear distribution system Line-Extension Plan policy should be discussed as part of this program proposal.*

This filing references the company's existing "Distribution Line Extension Plan" but does not discuss how that existing plan will work for the grid upgrades that are often necessary to serve commercial fleets and high-capacity DC fast charging (DCFC). For commercial charging customers and commercial fleets, knowing in advance whether distribution system upgrade costs will be covered in whole or in part by Duke's line extension policy is even more important than knowing whether customer-side infrastructure costs will be covered by a make-ready credit. This proposal makes only a passing reference to the line extension policy, but is not explicit regarding how the existing line extension policy is complemented by this proposal or how the two will work in tandem to incentivize EV adoption.

From the customer perspective, it is the total costs that matter. If customers are to be expected to cover part of the line extension costs, that needs to be explicit and up-front. We would appreciate Duke expanding upon how their existing policy will serve commercial charging so that it can be more clearly understood whether that policy needs to be revised to encourage EV adoption and DCFC.

## Conclusion

CALSTART's Coalition for Commercial EVs applauds Duke's efforts to advance the EV market and encourage EV adoption by its customers. North Carolina's leadership on transportation electrification can be solidified by strong utility programs that support the growth of commercial EVs and commercial charging. While this proposal for a make ready customer credit would shave off some customer-side infrastructure costs, we are concerned that it will not be effective in incentivizing EV adoption or stimulating the market. Our comments provide some suggestions for how to improve the design of this program, primarily by providing a fixed incentive based on charging capacity or by the number of ports, or minimally by making the incentive amount clearer up-front and using the appropriate number of years to calculate future revenue from charging.

As discussed earlier, CCEV believes an ecosystem of utility programs are necessary to bring about transportation electrification, and it would be helpful for the Commission to advance such programs through one proceeding, weighed in comprehensive comments by the parties. The benefits of one program design can only be fully considered alongside their complementary and alternative program designs. We interpret the make-ready credit as an alternative to the "EV tariff" for EVSE proposed under the Phase II Electric Transportation Pilot Programs because one envisions customer-owned infrastructure and the other envisions utility ownership.

Therefore, we encourage the Commission to hold off action on one until reviewing the full record for the related filings. It would help the parties to comment on both of these proposals as a whole, and for the Commission to comprehensively weigh the pros and cons of each program design to see whether and how each design encourages EV adoption. It would be more effective for the Commission to link the review and comments for these two filings so that these two alternative incentive designs can be considered together. Also, upon reviewing these programs holistically we encourage the Commission to consider additional programs and policies, such as line extension policy changes and rate design that may be necessary pieces of the program landscape to encourage rapid EV adoption in North Carolina.

Thank you for your consideration of our comments and perspectives.

Respectfully Submitted

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*On behalf of the Coalition for Commercial Electric Vehicles*

CERTIFICATE OF SERVICE

I certify that the persons on the service list have been served with the foregoing *Petition to Intervene* on behalf of CALSTART, either by electronic mail or by deposit in the U.S. Mail, postage prepaid.

This the 8th day of July, 2021

/s / Meredith L. Alexander