

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

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

In the Matter of:)
Application by Duke Energy)
Carolinas, LLC and Duke)
Energy Progress, LLC for)
Approval of Proposed Electric)
Transportation Pilot)
JOINT REPLY COMMENTS OF
NORTH CAROLINA JUSTICE
CENTER, SOUTHERN
ALLIANCE FOR CLEAN
ENERGY, AND SIERRA CLUB
ON THE PHASE II ELECTRIC
TRANSPORTATION PILOT
PROGRAMS

The North Carolina Justice Center (NCJC), the Southern Alliance for Clean Energy (SACE), and Sierra Club (together, "Joint Commenters") submit the following joint reply comments on Duke Energy Carolinas, LLC (DEC) and Duke Energy Progress, LLC's (DEP) (together, "the Companies" or "Duke Energy") Joint Request for Approval of Phase II Electric Transportation Pilot Programs filed in docket numbers E-2, Sub 1197 and E-7, Sub 1195 (the "Phase II Pilots"). Joint Commenters strongly support approval of the Phase II Pilots, with the modifications outlined in our June 29, 2021 Comments ("Joint Initial Comments"). Below, we address four aspects of the program, highlighting key points of consensus and addressing certain other critiques set out in intervenors' comments.

I. The Commission should be prepared to clarify the role of utilities in the ET infrastructure buildout after implementation and evaluation of the pilot programs.

After analyzing the valuable data collected from the Phase I and Phase II electric transportation (“ET”) pilot programs, the Commission should clarify the role that utilities will have in the buildout and maintenance of ET infrastructure necessary to reduce carbon dioxide emissions from transportation and create a cleaner future for the state. The comments in this proceeding continue to show “general agreement that there are many potential benefits to electric ratepayers and society at large in the transition from gasoline- and diesel-powered vehicles to electric transportation.” Order Approving Electric Transportation Pilot, In Part at 16 (Nov. 24, 2020) (“Phase I Order”). At the same time, there continue to be challenges to widespread adoption of EVs. Accordingly, the ET pilot programs should help to determine what the utilities’ role should be in overcoming those challenges and realizing the many potential benefits of increased EV adoption.

The Commission should ensure that the Phase II Pilots will generate the information that it needs in order to resolve that question. As the Commission has explained, a central purpose of the Phase II Pilots is “gathering operational data needed to quantify the specific costs and benefits attributable to EV usage and to assign these costs and benefits to the appropriate parties.” *Id.* at 20. However, the ET pilot programs can and should do more than help to establish the proper allocation of ET costs and benefits under the status quo; they should also help the Commission to delineate the utilities’ proper role.

Multiple commenters requested that the Commission provide guidance on this question. For example, CALSTART recommended that upon the conclusion of the Phase II Pilots the Commission should clarify the need for public charging in the state and the role of utility ownership in meeting that need, offering examples from New York, Connecticut, and California. CALSTART Initial Comments 11 (July 29, 2021). The North Carolina Sustainable Energy Association (NCSEA) argued that Duke Energy should follow best practices established in other states, in which the utility enables the market but does not dominate it, in order to foster healthy and robust ET infrastructure buildout. NCSEA Initial Comments 3-6 (July 29, 2021). EVgo Services, LLC urged the Commission to address foundational questions of roles and responsibilities in expanding the state DCFC infrastructure, arguing that there is no need for the Companies to own and operate DCFC charging stations beyond those authorized in Phase I. EVgo Initial Comments at 6-10 (July 29, 2021). Similarly, CCEBA challenged utility ownership. CCEBA Initial Comments at 5-7 (July 29, 2021). Finally, the Public Staff's opposition is driven in part by the perception that the proposed Phase II Pilots would give the Companies too large a share of the EV infrastructure market. See *generally* Public Staff Initial Comments.

By delineating utilities' roles, particularly at this early stage of the market, the Commission would address commenters' concerns while charting a clear path for the utilities to follow. Further, some commenters seem to oppose the Phase II Pilots out of fear that the Companies' role in the ET infrastructure marketplace could continue to expand indefinitely. To alleviate these concerns,

the Commission should commit to providing guidance, at the conclusion of the Phase I and II ET Pilots, delineating the Companies' role in the early development of the EV charging marketplace. However, the Commission does not need to delineate the Companies' role *before* approving the Phase II pilot programs. Rather, Joint Commenters agree with CALSTART that it is appropriate for the Commission to wait until the conclusion of an ET pilot program before definitively setting out the utilities' role in this area. Consistent with the purpose of a pilot program, this will allow the Commission to evaluate the data that comes in before making this important decision.

II. The Commission should require the Companies to clearly define Phase II Pilot goals and metrics for evaluating performance and require the Companies to produce quarterly data and annual reports.

While the Companies agreed to continue the ET stakeholder meetings to share data and information on Phase II Pilot implementation, Application at 2, the Commission should provide clear parameters that establish what data will be shared, how frequently it will be made available, and how pilot effectiveness will be measured. This guidance will help to make sure that the pilots are as effective as possible, lead to robust transportation electrification, and can be expanded into wide-scale deployment as appropriate. See Public Staff Initial Comments at 10 (July 29, 2021). In our Joint Initial Comments, Joint Commenters advocated that the Commission modify the Companies' proposal to require, at the outset, clearly defined goals and metrics to evaluate the effectiveness of the Companies' offerings. Joint Initial Comments at 23-25. Joint Commenters further urged the Commission to require the Companies to provide

quarterly anonymized data on specified aspects of the Phase II Pilots and annual reports setting out specific information, including the Companies' assessment of project implementation and lessons learned, *id.* at 26-27, given the Companies' intention that the Phase II Pilots "allow for direct comparison to the EVSE Tariff Pilot and the Make Ready Credit deployments." Phase II Application at 2. Nothing in any of the filed Comments changes those recommendations. As NCSEA stated in its initial comments, an evaluation, measurement, and verification process "is essential to ensuring pilot learnings are captured and that ratepayer investments maximize long-term value and benefits for all." NCSEA Initial Comments at 2.

Moreover, sharing consistent and up-to-date data, and thereby enabling the regular evaluation of pilot effectiveness are necessary to ensure that the Phase II Pilots meet the Companies' overarching goal of "provid[ing] valuable feedback" on how to most effectively help the State achieve Executive Order 80's goal of 80,000 zero-emission vehicles registered in the State by 2025. Phase II Application at 20. Joint Commenters agree that the Pilots will provide valuable data, and the Commission should ensure that data becomes publicly available on a regular basis. The start of 2025 is a little over three years away, and if the Pilots are to provide instructive lessons on how best to achieve Executive Order 80's goals, the data and lessons learned must be made available during the Pilots, not merely at their conclusion. Moreover, transparency, particularly as to the location of utility-owned charging stations, will help the Commission and stakeholders evaluate the extent to which the Companies' investments are

actually helping to fill market gaps in rural and low-to-moderate income areas, where the Companies plan to own up to 180 DCFC stations at 90 locations, 480 public level 2 chargers, 480 charging stations at multi-family dwellings, and up to 60 electric school buses at 10-15 locations. *Accord*, NCSEA Initial Comments at 5 (supporting data-based analysis of gaps in public charging infrastructure).

Joint Commenters urge the Commission to require the Companies to comply with the specific recommendations for data and reporting obligations set out in our Joint Initial Comments at pages 26-27, while adding the reasonable terms recommended in the initial comments of other intervenors. CALSTART requests that the Companies articulate at the outset what set of metrics will be used to determine whether, at the conclusion of the pilots, the Companies apply to make the pilots full programs. CALSTART Initial Comments at 9. Joint Commenters support this recommendation, and share CALSTART's assessment that it "would also be valuable for the Commission to weigh in on what metrics it thinks are most relevant to pilot evaluation." *Id.* As Greenlots noted in its comments, while the Pilots are an important step, "further filings by Duke are warranted . . . [and] more support by Duke and the state's other utilities will be needed." Greenlots Initial Comments at 8 (July 29, 2021). Articulating transportation electrification pilot metrics here could thus aid future filings in addition to guiding implementation and evaluation of these proposed programs.

The Southeast Sustainability Directors Network (SSDN) recommended that the Companies be required to track and report repair times for customer operated EVSE. SSDN Initial Comments at 3 (July 30, 2021). Joint

Commenters agree this information would be useful in informing long-term planning and should be required. SSDN also noted that, in addition to the Commission and stakeholders to this proceeding, local governments would benefit from regular data on EV charging behavior and electricity consumption, both to inform policy decisions and in their capacity as EV charging site hosts.

Id. at 2.

Establishing clear goals and metrics at the outset, ensuring the Companies provide access to specific data points on prescribed timelines, and requiring annual evaluation and comparison across pilots is crucial to ensuring ratepayer investments are well spent. Although some intervenors recommended against overall pilot approval, none specifically argued against a robust evaluation, measurement and verification process. In addition to the changes described in this section above, Joint Commenters recommend the Commission approve the Phase II Pilots with the additional quarterly and annual reporting and evaluation sideboards set out at pages 26-27 of our July 29, 2021 Joint Initial Comments.

III. Multiple commenters agree on the need for marketing, education, and outreach.

Multiple commenters agree with Joint Commenters about the need for additional marketing, education, and outreach in support of the Phase II Pilots. For example, NCSEA supported the proposed investment of approximately \$500,000 in education and outreach, particularly for rural and low- and moderate-income customers, although NCSEA requested that the program be run by third-party entities that specialize in ET education, and that the Commission include

metrics showing the success of the outreach efforts. NCSEA Initial Comments 10-11. Similarly, Environmental Defense Fund (EDF), although it focused on the electrification of medium- and heavy-duty vehicles, recommended that the Commission require marketing, education, and outreach proposals that are tailored to the anticipated market, particularly customers who may lack relevant experience and disadvantaged communities. EDF Initial Comments 20-21.

Joint Commenters agree with NCSEA's and EDF's recommendations and continue to recommend that outreach and engagement should be done in collaboration and coordination with stakeholders and community organizations already working in rural and low- or moderate-income communities. In order for the pilot programs to provide the Commission with the information that it needs, the pilot programs must engage all constituencies. The failure to involve key constituencies will result in data gaps at the conclusion of the programs that will make it challenging to evaluate the effectiveness of the pilots. Further, involving these constituencies will be necessary to ensure that charging infrastructure is located where communities need it, and at sufficient density within a community that community members will use it and generate sufficient data to evaluate the pilot program.

IV. The Phase II Pilot programs are not a continuation of the Phase I Pilot programs and do indeed meet the criteria set forth in the Commission's ET Pilot Order.

Contrary to comments from the Public Staff and ChargePoint, the Companies' Phase II Pilot programs are not a simple continuation of the Phase I

programs and they comport with the criteria laid out by the Commission in its Phase I Order.

As set forth in more detail below, the Phase II programs address market failures that hinder the installation of public charging infrastructure in low-income and rural areas of the state, which threatens to slow the adoption of electric vehicles in those communities. In addition, the EVSE tariff in particular is designed to address the up-front cost barrier to installing on-site charging infrastructure. Though addressing market failures or finding creative ways to reduce upfront costs for EVSE for customers were not explicit criteria set forth by the Commission in its Phase I Order, they are nevertheless “clearly defined goals” that can be evaluated and provide a reasonable lodestar for establishing the proper scale and scope for the pilots. Addressing these barriers to EV adoption is a relevant and compelling reason to support the Phase II Pilots, which are entirely consistent with the criteria set forth by the Commission. In the Phase I Pilot Order, the Commission explicitly recognized that it is in the public interest to make charging infrastructure available to lower-income households. Phase I Order at 19.

When combined with the already-approved Phase I Pilot programs, the complementary Phase II proposals are appropriately scaled to establish a proof of concept for differing strategies of deploying public and on-site charging infrastructure. As a result, the ET Pilots are well placed to provide the Companies, the Commission, and stakeholders with valuable data for how to build upon that deployment at a larger scale that will serve all customers in the

years to come. When viewed as a whole, the Phase I and Phase II Pilots are robust and will provide real-world data to help inform what the role of utilities needs to be in facilitating the growth of this new market in North Carolina.

- a) Duke Energy's Proposed Phase II Pilots address a market failure to serve rural and lower-income areas and upfront costs of electric vehicle charging infrastructure.

An important theme that runs throughout Duke Energy's Phase II proposed programs is addressing market failures that are otherwise limiting the deployment of public charging infrastructure in lower-income and rural areas, which are barriers that will slow the adoption of EVs amongst lower-income customers in lower-resourced communities. These are precisely the customers who could most benefit from the lower lifetime cost of ownership that EVs promise over internal combustion vehicles. In addition, the proposed EVSE tariff provides an option for customers who might not be able to afford the upfront costs of on-site EV charging equipment, removing a significant barrier to EV adoption for customers who need access to on-site charging options.

In its initial comments on the Phase II Pilots, Greenlots also noted the importance of utility investments in EV charging infrastructure for meeting the state's vehicle electrification goals in an equitable way. Without significant utility involvement, "EV infrastructure buildout will ... be deployed in a scattered and geographically imbalanced manner, concentrated in more urban and wealthier communities while leaving behind rural and lower income communities."

Greenlots Initial Comments at 5. Equitable utility investment is required, to avoid a repeat of the lack of broadband deployment in rural areas, which has proven to

be a barrier to economic growth. *Id.* at 5-6. In its Consumer Statement of Position, the Alliance for Transportation Electrification (ATE) also noted the value of the Companies' Phase II Pilots for filling in market gaps, particularly in reaching low- and moderate-income communities that are unlikely to be served by existing market participants. ATE Letter at 3-5 (July 29, 2021).

If approved with modifications proposed by Joint Commenters, the Phase II Pilots will provide a valuable and unique complement to the Phase I programs. As Greenlots identified in its Comments, it is important to consider all of Duke Energy's EV-related filings in conjunction with the Phase II Pilots, including the dynamic TOU rate designs, EVSE tariff pilot and the Make Ready Credit programs. Trying to serve customers who are not going to be met under the current system is in the public interest and provides additional support for approval of the Phase II programs.

- b) There is no need to wait for evaluation of the Phase I Pilots because Phase II is unique and is designed to gather different information.

The Public Staff suggests in its initial comments in opposition to the Phase II Pilots that the Companies should wait until a more thorough evaluation of the Phase I Pilots is complete before initiating a second phase of ET pilot programs. Public Staff Initial Comments at 14-15. EVgo similarly commented that, at the very least, analysis of Phase I DCFC implementation should precede any authorization of additional stations in a Phase II Pilot. EVgo Initial Comments at 10. But the Public Staff and EVgo do not take into account that the Phase II Pilots are distinct from the approved Phase I Pilots and would not gather the same kinds of information. As Joint Commenters noted in our Joint Initial

Comments, the data gathered during the Phase II Pilots and the Companies' deployment of EVSE, particularly in underserved areas, is important to the future growth of EV adoption in the state and is not duplicative of the lessons that can be learned from Phase I Pilots. See Joint Initial Comments at 9-10.

- c) The Companies complied with the Commission's Order to file a second phase of pilots.

In response to criticisms raised by the Public Staff that suggest the Phase II Pilot proposals are premature, Joint Commenters note that the Commission itself directed the Companies to file its Phase II Pilot proposals within six months of its November 24, 2020 Order, following stakeholder engagement. That is precisely what the Companies did here. While it is apparent from the diverse perspectives raised in comments to the Companies' Phase II filing that consensus was not achieved through that stakeholder process within a six-month timeframe, it was not premature for the Companies to file the Phase II proposals given the Commission's Phase I Order's directive to do so. In part for this reason, Joint Commenters do not agree with the criticisms raised by the Public Staff, ChargePoint, or EVgo that the Phase I programs should be more completely deployed and evaluated before Phase II Pilots should be allowed to proceed.

In addition, the Public Staff and ChargePoint take issue with the scale and scope of the Phase II Pilots, arguing that the Companies have failed to comply with the requirements set forth in the Commission's Phase I Order. Putting to one side the issue of subjectivity that is inherent in consideration of whether the Phase II Pilots are "too big," the Public Staff's criticism is misplaced because the

Companies have been very clear about the reason for the size of the proposed Phase II Pilots. The Companies have proposed deployment of EVSE, mostly in harder-to-reach market segments that are likely otherwise underserved by the market, with concrete goals for meeting a portion of the EV charging infrastructure necessary for the state to reach its vehicle electrification goals.

V. The number of charging stations proposed by the Companies is not likely to result in market dominance.

The number of charging stations that the Companies have proposed are proportionate to the identified need to fill in gaps in existing EV charging infrastructure as they exist in relation to the State's goals for vehicle electrification. Joint Commenters do not agree with the concerns raised by some intervenors that the Pilots would result in market dominance for the Companies. The ET Pilots instead aim to lay a foundation at the early stages of electric vehicle adoption that can help to spur further additional private development as the market matures.

It is important to consider that the total amount of EV chargers that Duke Energy would own from the Phase II pilot is a fixed number in a marketplace that should see significant growth in the coming years. In other words, as vehicle electrification continues to advance and competitive EVSE suppliers continue to bring charging infrastructure to market, the percentage of Duke Energy-owned charging stations will go down year after year. Indeed, utility investment in EVSE can be expected to *expand* the market for EVSE. This is because one of the largest barriers to greater EV uptake is "range anxiety," or the fear of running out of power before being able to charge a vehicle, coupled with fear of low

availability of charging stations.¹ Expanding charging infrastructure will help to push society past the “tipping point” for mass EV adoption,² which in turn will vastly expand the market for EVSE infrastructure.

Furthermore, utility-owned or procured EVSE hardware and software will be supplied by private companies. Utilities are a significant purchaser of this equipment at this nascent stage in the market and the programs laid out in the Phase II Pilots should also help to spur the market for electric vehicle charging infrastructure generally. Private companies that follow Open Charge Point Protocol (“OCPP”) and other interoperability standards will be able to secure contracts with the Companies as they roll out the pilot programs. The Commission should not reject the Phase II Pilots on the grounds that an EVSE supplier might make the business decision to forgo those open-access standards and protocols, thus removing the EVSE supplier from consideration for utility-operated EVSE.

Joint Commenters do not share Carolina Clean Energy Business Alliance’s (CCEBA) concern that the Phase II Pilots would represent a significant encroachment by a monopoly utility into a competitive market. CCEBA appears mostly concerned about the possibility that Duke Energy would abuse its position

¹ See Rob Stumpf, *Americans Cite Range Anxiety, Cost as Largest Barriers for New EV Purchases: Study*, The Drive (Feb. 26, 2019), <https://www.thedrive.com/news/26637/americans-cite-range-anxiety-cost-as-largest-barriers-for-new-ev-purchases-study> (discussing study by Volvo).

² See Paul Vosper, President, and CEO of Juicebar, *Mass Adoption Of Electric Vehicles Triggers Needed Infrastructure Changes*, Forbes (Jan 27, 2021, 07:30am EST), <https://www.forbes.com/sites/forbestechcouncil/2021/01/27/mass-adoption-of-electric-vehicles-triggers-needed-infrastructure-changes/>; Brian Jones, et al., MJ Bradley & Assoc., *Accelerating the Electric Vehicle Market: Potential Roles of Electric Utilities in the Northeast and Mid-Atlantic States at ii* (2017), https://www.mjbradley.com/sites/default/files/MJBA_Accelerating_the_Electric_Vehicle_Market_FINAL.pdf (noting that utilities are well-positioned to help).

and effectively “lock out” opportunities for competitors at high-value EV charging sites for years to come. But these concerns neglect the equity focus of the Phase II Pilots and the intent to locate charging infrastructure in areas of the Companies’ service territories that are currently underserved by the private market. In addition, CCEBA’s concern about market share is too focused on the next couple of years, when the market is still relatively small. As noted above, the number of Duke Energy-owned charging stations under the Phase II pilot would remain fixed while the market continues to mature, reducing the percentage of Duke Energy-owned publicly-accessible chargers as the market continues to grow.

Joint Commenters respectfully disagree with commenters that suggested that additional DCFC chargers are unnecessary. EVgo argued in its comments that a competitive market already exists for DCFC stations and noted that EVgo and other companies are able to meet the market demand for DCFC stations. EVgo Initial Comments at 5. The Public Staff argued that, in part because of Tesla’s announcement that it would open its charging network to the general public by the end of the year, there is not a demonstrated or urgent need for more public charging infrastructure. Public Staff Initial Comments at 11-14. But these comments again do not consider the Companies’ commitments to focus its deployment on underserved areas to better reach rural and low-income communities. And with regard to Tesla’s plans, there is not yet any detail about the scope or terms for making those chargers available to drivers of EVs that are not Teslas.

VI. Conclusion

As discussed above, Joint Commenters respectfully request that the Commission approve the Phase II Pilots consistent with the proposed modifications described in depth in our July 29, 2021 Joint Initial Comments.

Respectfully submitted this 13th day of September, 2021.

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CERTIFICATE OF SERVICE

I certify that all parties of record on the service list have been served with the foregoing comments either by electronic mail or by deposit in the U.S. Mail, postage prepaid.

This the 13th day of September, 2021.

s/ Nicholas Jimenez