STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

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

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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application by Duke Energy Carolinas, LLC and Duke Energy Progress, LLC for Approval of Proposed Electric Transportation Pilots

ORDER APPROVING CUSTOMER OPERATED ELECTRIC VEHICLE SUPPLY EQUIPMENT TARIFFS WITH CONDITIONS

BY THE COMMISSION: On November 24, 2020, the Commission issued an Order Approving Electric Transportation Pilot Programs, In Part (ET Pilot Order), in the abovecaptioned dockets. In summary, the ET Pilot Order approved several electric vehicle (EV) pilot programs jointly proposed by Duke Energy Carolinas, LLC (DEC), and Duke Energy Progress, LLC (DEP; collectively, Duke or Companies). In addition, the ET Pilot Order declined to approve several of Duke's proposed EV pilot programs, and required Duke to file within six months proposed Phase II ET Pilot Programs.

On May 24, 2021, Duke filed a Request for Approval of Phase II Electric Transportation Pilot Programs (Phase II Pilots). Duke proposed four Phase II Pilots, including a Customer Operated EV Supply Equipment (EVSE) Pilot.

On February 21, 2022, the Commission issued an Order Requiring Further Collaboration and Report on Proposed Phase II Pilots. Based on changed circumstances discussed in the Order, the Commission directed Duke to continue working with the Electric Transportation Stakeholder Group (ETSG), and to refine and modify its Phase II Pilots to take into consideration the possibility of receiving direct funding under the Infrastructure Investment and Jobs Act (IIJA), H.R. 3684, 117th Cong. (2021), enacted on November 15, 2021, and/or other recently available sources of federal funds. In addition, the Commission directed Duke to file a report within 90 days updating the Commission on its progress on these directives.

On May 11, 2022, DEC and DEP filed a Joint Motion to Withdraw Customer Operated Electric Vehicle Supply Equipment Pilots from Phase II Pilot Proposals and to Hold Phase II Pilot Dockets in Abeyance (Joint Motion). Duke explained that it wanted to remove the EVSE Pilot from Commission consideration as a Phase II Pilot and, instead, quickly refile the EVSE for approval as a standalone commercial program. Duke discussed several reasons it contended that this would be appropriate. In addition, Duke requested that the Commission hold in abeyance its consideration of the remaining Phase II Pilots due to changes in regulatory and economic policies and circumstances that had occurred after the May 2021 Phase II Pilots filing. On July 13, 2022, the Commission issued an Order allowing Duke to withdraw the EVSE from consideration as a Phase II Pilot and refile it as a standalone tariff. The Order also extended to October 3, 2022, the date for Duke to file a report on development of the remaining Phase II Pilots.

On August 15, 2022, DEP and DEC jointly filed an application for approval of the EVSE as a standalone tariff.

On August 23, 2022, the Commission issued an Order Requesting Comments on the proposed EVSE tariffs. Comments were filed by several parties on November 21, 2022, and reply comments were filed by Duke and several other parties on January 5, 2023.

SUMMARY OF EVSE TARIFFS

Duke explained that under the EVSE tariffs Duke would install EV chargers and charging infrastructure for Level 2 (L2) service for residential and non-residential customers, and Direct Current Fast Charging (FC), for non-residential customers at locations on DEP's and DEC's distribution systems. The proposed tariff includes five L2 options and five FC options. The chargers and related equipment would be rented and operated by the customer but owned and maintained by Duke. According to Duke, the rate structure for the program would be similar to Duke's outdoor lighting programs. Duke noted that its outdoor lighting programs are a separate rate class and have unique costs to serve, which are adjusted during rate cases. Also, Duke stated that the Companies would be able to provide programs and/or services to help customers manage charging during off-peak hours.

Duke stated that the L2 EVSE monthly rates include equipment installed on the customer's side of the meter, maintenance, and annual software networking fees, but do not include the monthly charges for extra facilities associated with the Company's Service Regulations and/or Line Extension Plan, electrical panel/wiring make-ready costs, costs for work on the Company's side of the meter, non-standard equipment, or any contribution required under the EVSE rate schedule. Customers may choose any applicable rate schedule for electricity service. A breakdown of the proposed monthly charges for DEP and DEC was included as Attachments A and B to Duke's tariff approval application.

With regard to FC equipment for non-residential customers, Duke stated that customers will be billed for installations of standard equipment installed on the customer's side of the meter. The rates will include equipment, maintenance, and annual software networking fees, but will not include the monthly charges for extra facilities associated with the Company's Service Regulations and/or Line Extension Plan, electrical panel/wiring make ready costs, costs for work on the Company's side of the meter, non-standard equipment, or any contribution required under the EVSE rate schedule. Customers may choose any applicable rate schedule for electricity service.

The length of the customer's contract period ranges from three years to seven years, depending on each customer's situation. For example, a residential customer who opts to have a wall-mounted L2 charging station, designated as standard equipment by Duke, would have a contract term of three years, and the contract term for a FC installed on a pole, designated as standard equipment by Duke, would be seven years.

In addition, Duke explained that the EVSE tariffs are intended to provide customers with a charging service on a rental basis for the life of the EVSE, rather than requiring the customer to own and maintain the equipment. Further, Duke explained that the EVSE tariff would be voluntary, fully funded by participants, allow for multiple vendor options, and allow participants to choose any applicable rate schedule for electricity service.

SUMMARY OF COMMENTS

Initial Comments

Public Staff

The Public Staff described the proposed EVSE tariffs and discussed some of the technical interaction between EVSE and EV batteries and other charging equipment. The Public Staff stated that the structure of the tariff and the proposed EVSE rates are reasonable. However, it expressed concerns that utility ownership of EV charging infrastructure could hinder the private unregulated market from expansion and innovation. The Public Staff went into some detail in discussing dockets of public service commissions in Virginia, South Carolina, New York, Texas, Wisconsin and other jurisdictions wherein advocates objected to utility applications to build EV charging infrastructure due to their concerns about the anti-competitive effect of utility ownership of such infrastructure. The Public Staff summarized the decisions of several of these commissions that agreed with the advocates' concerns about utility ownership of EVSE and, therefore, denied or limited the utility's proposed EVSE involvement.

Further, the Public Staff discussed the role of regulated utilities under the North Carolina Public Utilities Act (Act), and concluded that the provision of EVSE would be outside the scope of the monopoly franchise held by Duke under the Act, and would result in an unfair competitive advantage for Duke that would interfere with market competition and economic development. The Public Staff concluded that such involvement by Duke would not ultimately be in the best interests of ratepayers. In addition, the Public Staff included a graph on zero-emission vehicle (ZEV) registrations in North Carolina and contended that the demonstrated trend in ZEV registrations shows that the EV goals of Executive Order 80 (EO 80) will be reached by 2024 without Duke's EVSE tariff. Moreover, the Public Staff maintained that the infrastructure funding provided in the IIJA and the Inflation Reduction Act (IRA), are sufficient to spur investments in EV charging without Duke's involvement. Finally, the Public Staff stated that by rate basing the EVSE costs Duke would be allowed to earn a return indefinitely on the program costs, without offering customers an option for ownership of the equipment.

NCSEA

NCSEA stated that rather than allowing utility-owned charging infrastructure the Commission should direct utility investment towards programs that enable the marketplace for EV supply equipment to flourish, such as robust make-ready programs that enable a competitive marketplace. In addition, NCSEA stated that utility-owned EV charging infrastructure should be targeted to underserved low and moderate income communities where installation of chargers has not yet materialized, or data-driven strategic placement of utility-owned charging infrastructure to bridge gaps in existing third party owned networks without allowing overlap. NCSEA also stressed the importance of tariff designs that provide customer incentives for charging at lower prices during off-peak times. NCSEA recommended that if the Commission approves the EVSE tariffs it should condition its approval by requiring quarterly or otherwise regular reporting by Duke on data gathered through the EVSE tariffs, particularly data related to filling market gaps in rural and low-income communities.

ChargePoint

ChargePoint contended that the EVSE tariffs should not be approved because the competitive market currently provides alternatives to utility ownership of EVSE for ratepayers that do not desire to own EVSE, in contrast to the Companies' EVSE proposal that relies exclusively on utility-owned EV charging equipment. Further, ChargePoint maintained that the private sector offers many different business models and products to provide turnkey solutions for charging site hosts, coordinating all aspects of the charging experience from installation to operation and maintenance.

While ChargePoint can only speculate as to the Companies' rational[e] for designing these Phase II Pilot programs in this manner, we acknowledge that there may be instances where a site host would like to have charging options on their property but cannot or does not want to own or operate the charging infrastructure. In these cases, utility ownership is not the only solution. The private sector offers many different business models and products to provide turnkey solutions for site hosts, coordinating all aspects of the charging experience from installation to operation and maintenance, including solutions for site hosts that are not seeking to own or operate their own charging equipment. For example, ChargePoint offers customers a subscription solution for EV charging, "ChargePoint as a Service" ("CPaaS") that is similar to "Software as a Service" ("SaaS") models, which offer access to smart solutions at a reduced cost through subscription pricing.

Initial Comments of ChargePoint, at 9.

Further, ChargePoint submitted four recommendations for improvements to the EVSE tariffs: (1) explicitly provide site hosts a choice in vendors of EVSE hardware and network software; (2) explicitly empower site hosts to establish pricing and pricing policies for EV charging services; (3) require all EV chargers installed through the EVSE tariff to

be networked; and (4) require the Companies to submit alternatives to traditional demandbased tariffs for Commission approval within six months from the date of the Commission's order.

EVgo

EVgo stated that utility programs and private investment are important in creating a robust competitive market for EV charging that will lead to increased EV adoption, but that it is also important to ensure that there is a balance between utility and private market activities. EVgo noted that during the past several years substantial efforts to develop public FC infrastructure have been underway in North Carolina through programs administered by the North Carolina Department of Environmental Quality (DEQ), which has resulted in over \$10 million in FC investments. According to EVgo, the success of these programs demonstrates that there is currently robust private sector interest in FC deployment in the State, particularly when leveraged through public-private partnerships. EVgo further cited North Carolina's share of the National Electric Vehicle Infrastructure (NEVI) program funds, made available through the IIJA, which totals approximately \$109 million, as a resource in support of private investment in EV charging infrastructure.

Moreover, EVgo disagreed with Duke's position that the EVSE tariffs were needed to enable Duke to encourage customers to adopt grid beneficial rates or managed charging offerings. Instead, EVgo maintained that properly designed utility rates, such as volumetric time of use rates, can encourage charging at times that limit grid impacts while also addressing the barrier that demand charges create to the deployment of public FC infrastructure. Additionally, EVgo recommended that the Commission require Duke to focus on providing a complete make-ready infrastructure approach that will bolster market deployment of charging stations. In conclusion, EVgo contended that it is not appropriate for the Commission to grant Duke additional FC ownership at this juncture, and it recommended that the Commission reject Duke's EVSE tariffs.

Reply Comments

Duke

Duke contended that N. C. Gen. Stat. §§ 62-3(23)(n) and 62-133.16(c)(2) encourage public utility participation in owning EV chargers for their customers to use. According to Duke, G.S. § 62- 2(23)(n) expressly allows electric power suppliers to use EV charging stations to furnish electricity for charging electric vehicles:

Nothing in this sub-subdivision shall be construed to limit the ability of an electric power supplier to use electric vehicle charging stations to furnish electricity for charging electric vehicles. Any increases in customer demand or energy consumption associated with transportation electrification shall not constitute found revenues for an electric public utility.

In addition, Duke noted that G.S. § 62-133.16(c)(2), which authorizes decoupling mechanisms as part of performance-based regulation, states that an electric public utility may

exclude rate schedules or riders for electric vehicle charging, including EV charging during off-peak periods on time-of-use rates, from the decoupling mechanism to preserve the electric public utility's incentive to encourage electric vehicle adoption.

Duke contended that these statutes authorize and encourage, subject to the Commission's oversight, robust public utility participation in the state's EV adoption efforts, without the limitations that the Public Staff would impose. Moreover, Duke maintained that the EVSE tariffs are aligned with North Carolina state policy, particularly the policies underlying EO 80 and Executive Order 246 (EO 246).

Further, Duke stated that the Public Staff appears to mistakenly believe that the costs or the EVSE tariffs will be paid by all ratepayers. Instead, Duke maintained that the tariffs are designed so that voluntary participants pay for the costs of the EVSE program, not all ratepayers.

In addition, Duke contended that the EVSE tariffs are intentionally designed to foster competition in the EV infrastructure market by providing that the charging hardware and networks to be deployed will originate from existing and future market participants, thus removing barriers to EV adoption while allowing customers to choose from multiple vendor options and a wide product selection.

The Companies also questioned the applicability of the state commission proceedings discussed by the Public Staff in its comments. They stated that some of these proceedings are unresolved, and that some, such as the Wisconsin proceeding, resulted in approval to implement programs that are very similar to the EVSE program. Further, they stated that the Commission in its ET Pilot Order expressly authorized the Companies to offer pilot programs involving utility owned EV charging.

In response to the Public Staff's comments criticizing the placement of utility owned equipment behind the customer's meter, Duke discussed several existing programs that utilize a similar structure, including: (1) load control devices in approximately 385,000 customer homes in North Carolina under DEC's and DEP's DSM/EE programs; (2) the On-Site Generation Service programs wherein the Companies own, install, operate, and maintain a generator for eligible customers; and (3) Extra Facilities programs in which the Companies install certain distribution facilities between the customer's meter and the customer's facility.

With regard to cross-subsidization, Duke stated that the EVSE tariffs are structured to recover all program costs from participants by placing EVSE participants in a separate rate class, and that, practically, this means that all direct costs associated with the EVSE

tariffs will be tracked and maintained separately in the Companies' cost of service records to avoid the shifting of costs to non-participants.

In response to the concerns of NCSEA, Duke stated that: (1) the Companies agree with a reporting requirement, but reporting on a quarterly basis is overly burdensome; (2) requiring networked EV charging equipment would ignore the fact that some customers may prefer a nonnetworked EV charger because they are easier to operate; (3) the EVSE tariffs do not allocate make-ready costs, as the customer is responsible for securing the necessary make-ready work, and may elect to participate in the Companies' Make Ready Credit program; (4) system upgrades necessary to support EV chargers are treated the same as upgrades for other technologies and, thus, customers installing EV chargers are treated the same as other customers; and (5) Duke agrees that there are additional elements pertaining to serving EV loads that should be discussed with the ETSG.

Duke stated that it agrees with ChargePoint that site hosts should be able to choose vendors and EVSE hardware and establish pricing and pricing policies for EV charging. With respect to ChargePoint's recommendation that all EV chargers be networked, Duke stated that it is willing to consider this recommendation. In response to ChargePoint's recommendation that the Companies be required to submit alternatives to traditional demand based tariffs within six months, Duke stated that it is open to exploring alternative rate designs as directed by the Commission.

In response to EVgo's comments Duke contended that the EVSE tariffs are consistent with the recent PURPA amendments in Section 40431 of the IIJA that require states to consider measures that will promote ET. According to Duke, the EVSE tariffs do so by removing financial barriers to EV charging, providing L2 or higher EV charging that save customers time, and remove the burdens and uncertainties of charger maintenance. Finally, Duke contended that it has in place an approved portfolio of programs that encompass make-ready solutions for EV charging infrastructure and will continue working with the ETSG to explore further options.

ChargePoint

ChargePoint stated that it agrees with EVgo that EV rate design is a critical component of a holistic approach and should be addressed in this docket. ChargePoint recommended that the Commission reject the utility-owned EVSE tariffs proposed by Duke and, instead, require Duke to offer a rebate program for L2 and FC EVSE within six months of the Commission's order in this proceeding.

EVgo

EVgo stated that it agrees with the other commenters that Duke's involvement in the EV charging marketplace should ensure robust competition for charging services, and that utility ownership of EVSE is not the appropriate route to reach that goal. Therefore, EVgo reiterated its recommendation that Duke's application be denied, and that Duke be

required to propose make-ready infrastructure and rate design programs that will bolster private market deployment of EV charging stations.

NCJC, et al.

Joint reply comments were filed by North Carolina Justice Center, Southern Alliance for Clean Energy, and Sierra Club (NCJC, *et al.*). In support of the EVSE tariffs, NCJC, *et al.* contended that neither private sector nor government efforts are meeting North Carolina's EV infrastructure needs in an expedient and organized manner. According to NCJC, *et al.*, a 2022 report developed by Synapse Energy Economics for NCJC, *et al.* and other conservation organizations shows the current EV charging infrastructure in North Carolina, the amount of public L2 and FC charging needed to meet EO 246's goal of 1.25 million North Carolina ZEVs by 2030, and the federal funding opportunities to meet this need. According to NCJC, *et al.* the report concludes that the goal will not be met without a combination of private sector, government and utility investment.

In September 2022, Sierra Club, SACE, and North Carolina Justice Center, along with other conservation organizations, partnered with Synapse Energy Economics to release a report analyzing current EV charging infrastructure in North Carolina, the amount of public Level 2 and DCFC charging needed to meet EO 246's EV adoption goals, and federal funding opportunities to meet this need [footnote with link to Synapse report "Transforming Transportation in North Carolina"]. In this report, utilizing the U.S. Department of Energy's EVI-Pro Lite modeling tool, Synapse concludes that North Carolina will need approximately 35,000 additional Level 2 chargers and 4,100 additional DC fast chargers located at workplaces or along highways by 2030 in order to meet EO 246 adoption targets. Given an average 10-year lifespan for EVSE, many of the existing charging stations in the state will need to be replaced by 2030 or soon after. As detailed in the report, as of 2022, there were only 1,978 public Level 2 chargers and 568 DC fast chargers in the state. See Table 1 below.

NCJC, et al. Reply Comments, at 4.

Moreover, NCJC, *et al.* maintained that the EVSE tariffs should include dynamic time-of-use rates as opt-out (or default) rates for EVSE tariff participants, to help ensure that additional load from EVs does not exacerbate peak demand challenges. NCJC, *et al.* also stated that the Commission should direct the Companies to educate EVSE participants about the availability and benefits of dynamic rate designs, and that the EVSE tariffs should only be available for networked EVSE because the data provided by a networked EVSE has value. Finally, NCJC, *et al.* recommended that the Companies be required to study the implications of demand charges and rate structures on FC participants in the EVSE tariff and submit a study of same, along with tariffs that will encourage EV adoption while reducing demand charges, within one year of the date of the Commission's Order.

DISCUSSION

The Commission appreciates the time and effort that the parties have given to the issues in this docket. The Commission has carefully considered and weighed all comments and recommendations in reaching its decision herein.

Scope of Public Utility Involvement

The Public Staff contends that the provision of EVSE would be outside the scope of the monopoly franchise held by Duke under the Act. On the other hand, Duke contends that N. C. Gen. Stat. §§ 62-3(23)(n) and 62-133.16(c)(2) expressly allow public utilities to use EV charging stations to provide electricity for charging their customers' electric vehicles. The Commission is not persuaded that either of these views are directly on point.

The Act's utility franchise provision, N. C. Gen. Stat. § 62-110, sets the franchise standard as utility service that is consistent with the public convenience and necessity. Contrary to the Public Staff's position, the Commission has previously recognized that there is a place within the public utility franchise structure for involvement in ET development. One example of such is the Commission's ET Pilot Order.

In approving these three components of the ET Pilot the Commission is not sanctioning an open-ended or broad, general participation by Duke in the EV charging infrastructure market. Rather, because the goals of the programs are to test public response to wider availability of public charging infrastructure and to acquire data and information on alternative implementation approaches for further analysis, the Commission supports the programs. Once those goals are met, any further participation by Duke in the market for charging infrastructure will be determined at the appropriate time and after full consideration of all pertinent factors.

The Commission supports the goal of 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. Further, the Commission supports the involvement of public utilities in helping to attain such goals.

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ET Pilot Order, at 19 and 20.

Another example is the Commission's approval of Duke's Make Ready Credit Program (MRC). The MRC helps customers defray the cost of wiring and other improvements needed to prepare for installation of EV charging equipment. Under the MRC, Duke provides customers with bill credits based on Duke's increased revenue from the customer's EV charging for three to five years. Order Approving Make Ready Credit Program with Conditions (MRC Order), Docket Nos. E-2, Sub 1197 and E-7, Sub 1195 (February 18, 2022).

On the other hand, Duke's interpretation of N. C. Gen. Stat. §§ 62-3(23)(n) and 62-133.16(c)(2) as expressly authorizing public utilities to engage in providing EV charging infrastructure goes beyond the plain meaning of the words used in the statutes. Rather than authorizing specific action by electric power suppliers, the plain wording of the statutes shows that they are not intended to limit such activities. Thus, the Commission views these statutes as clarifying statements intended to keep open the possibility of public utilities having a role in the development of EV adoption if such a role is deemed to be consistent with the public convenience and necessity.

Consistent with the Act and aforesaid public policies, the Commission concludes that it has the discretion to authorize public utilities to engage in EV charging activities. The Commission concludes that there is a proper role in serving the public convenience and necessity for Duke's involvement in offering a voluntary tariff for ratepayers who want the option of leasing EV equipment and leaving the maintenance of such equipment to Duke. In particular, the Commission is persuaded that a limited involvement by DEP and DEC in providing EV charging station options will be beneficial in gauging the public response to increased availability of individual and public charging options and in obtaining data on EV charging practices and alternative rate structures. The Commission's challenge is to allow the availability of such options for ratepayers while balancing the need to avoid dampening the competitive market.

The ET Pilot programs approved by the Commission in these dockets and cited by Duke as precedent supporting the EVSE tariffs are pilot programs initially approved for a duration of three years,¹ not permanent tariffs like the EVSE. The Commission concludes that there is good cause to conduct a review of the EVSE data collected by Duke, gauge the impact of the EVSE on development of the private market for EV charging, and consider other aspects of the EVSE tariffs in three years. Therefore, three years after the effective date of the EVSE tariffs the Commission will conduct a review of the tariffs to determine if they should be continued, amended or discontinued.

Cost Allocation

Duke stated that EVSE participation would be totally voluntary, that EVSE customers would be a separate rate class, and that all "direct" costs associated with the EVSE tariffs would be tracked and maintained separately in the Companies' cost of service records to avoid the shifting of costs to non-participants. However, Duke did not define what it means by "direct" costs. In particular, Duke did not state that non-participants will be shielded from paying any portion of the Companies' return on rate

¹ At Duke's request, by Order issued on January 27, 2023, the Commission extended the Electric Vehicle School Bus pilot for an additional 18 months.

base that is attributable to EVSE. The Commission concludes that it is appropriate and fair to require DEC and DEP to hold harmless from all EVSE costs, including return on rate base, those ratepayers not participating in the EVSE tariffs. To this end, in any docket in which DEC or DEP are seeking to recover any EVSE costs they shall file testimony verifying that no costs of EVSE are included in any other ratepayer class's rates, and such testimony will be accompanied by exhibits demonstrating the EVSE revenues, costs and allocations of such revenues and costs. If all costs paid by EVSE ratepayers fall short of covering the authorized rate of return on EVSE assets, the Company will be required to forego any claim to recover that deficit from ratepayers.

Reporting Requirement

In response to the concerns of NCSEA, Duke stated that the Companies agree with a reporting requirement, but opined that reporting on a quarterly basis is overly burdensome. The MRC Order included a semi-annual reporting requirement, beginning on Feb. 18, 2023. The Commission finds good cause to require DEC and DEP to file a semi-annual report on the number of EVSE participants, the EVSE suppliers being offered to and selected by participants, cost of the EVSE tariffs, and information obtained about the charging needs and habits of EVSE participants. The semi-annual EVSE reports can be included with the Companies' MRC reports, with the first combined MRC/EVSE report to be filed on March 1, 2024.

Topics for Discussion

Intervenors made recommendations for several other changes to the EVSE tariffs, such as requiring networked EVSE, alternatives to traditional demand-based tariffs, and mandatory time-of-use rates. Duke opposed such requirements but stated its willingness to discuss these points and others in the ETSG. The Commission concludes that Duke's approach is reasonable and that the parties should engage together in robust discussions on these and other topics related to ET development in North Carolina.

CONCLUSION

Based on the foregoing and the record, the Commission finds that the EVSE tariffs proposed by Duke are in the public interest and should be approved, subject to the conditions, as more fully discussed in the body of this Order, that: (1) three years after the effective date of the EVSE tariffs the Commission will conduct a review of the tariffs to determine if they should be continued, amended or discontinued, (2) ratepayers who are not participating in the EVSE tariffs shall be held harmless from all EVSE costs, and (3) DEC and DEP shall file a semi-annual report on the number of EVSE participants, cost of the EVSE tariffs, and information obtained about the charging needs and habits of EVSE participants.

IT IS, THEREFORE, ORDERED as follows:

1. That DEC's and DEP's proposed EVSE tariffs shall be, and are hereby, approved;

2. That EVSE customers will be a separate rate class, and no costs of the EVSE tariffs, including authorized return on rate base, shall be paid by ratepayers other than EVSE tariff participants;

3. That DEC and DEP shall separately track and maintain the Companies' EVSE cost of service to avoid the shifting of costs to non-participants, and shall hold non-participants harmless from the recovery of any EVSE costs;

4. That in any docket in which DEC or DEP are seeking to recover any EVSE costs they shall file testimony verifying that no costs of EVSE are included in any other ratepayer class's rates, and such testimony will be accompanied by exhibits demonstrating the EVSE revenues, costs and allocations of such revenues and costs. If all costs paid by EVSE ratepayers fall short of covering the authorized rate of return on EVSE assets, the Company will be required to forego any claim to recover that deficit from ratepayers;

5. That the EVSE tariffs shall be reviewed by the Commission three years after their effective date to determine whether the tariffs should be continued, amended or discontinued; and

6. That DEC and DEP shall file a semi-annual report on the EVSE tariffs, with the first report due to be filed on March 1, 2024.

ISSUED BY ORDER OF THE COMMISSION.

This the 8th day of August, 2023.

NORTH CAROLINA UTILITIES COMMISSION

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A. Shonta Dunston, Chief Clerk

Commissioner ToNola D. Brown-Bland concurs.

Commissioners Daniel G. Clodfelter, Floyd B. McKissick, Jr., and Jeffrey A. Hughes dissent.

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

Commissioner ToNola D. Brown-Bland concurring:

I concur in the result approving the EVSE tariffs with conditions. I write this concurring opinion to highlight two important ways Duke could have improved its application and thus the ultimate result herein. First, as stated by several parties in their comments, encouraging EV owners to charge their vehicles during off peak hours is an important key to achieving the state's EV policy goals. Accordingly, I would have liked to have seen Duke go further in its application than merely offering EVSE participants their choice of any non-specific currently existing electric service rate. In order to incentivize EVSE participants to charge their vehicles in off peak hours, Duke should not delay or miss the opportunity to bring forward EV rates specifically designed to yield the desired off peak charging. In my view, if EVSE tariffs with specific EV rates were put in place now, they could be tested along with the adoption of the EVSE rental model approved in this Order.

In addition, parties commented on the need for Duke to focus on providing a complete make-ready infrastructure approach that will bolster market deployment of charging stations. With Duke's full deployment of AMI meters, implementation of the Phase I EV Pilots, and implementation of the Make-Ready Credit (MRC) Program, DEC and DEP have the data or the data-gathering capacity to know or determine locations that are most likely to have the earliest and largest adoption of EVs. Such information in map format (sometimes called a heatmap), could be very useful for identifying specific residential and commercial developments that are most appropriate and best suited for successfully locating and installing EV charging stations. For example, it should be more cost effective for Duke to build into its distribution system all the EV infrastructure needed to serve a new residential subdivision than it is to add make-ready infrastructure on a house-by-house basis. It would therefore be helpful to both the Commission and the Public Staff if Duke were to compile EV charging time, duration, and location data and periodically provide it as part of the MRC Report. It is information that will be essential to the Commission's, as well as the parties', understanding and maximization of the benefits of EVs.

Deciding to approve the EVSE tariffs was a close call for me. The tariffs gained my support in the end due to the voluntary nature of the program, the imposed requirement of a three year review to look at actual experience and possible changes in conditions, and the requirement resulting from this Order that Duke must separate the costs of the program and hold non-EVSE participants harmless, which, in my view, is especially important given that many of the non-EVSE participants will likely be ratepayers who cannot afford the additional costs that come with EV ownership. In the final analysis, I was persuaded there is some worthwhile value in the program in the interest of facilitating the transition of our state from the use of gasoline powered engines to the emissions friendlier EVs. Indeed, facilitating EV adoption rates above the goals of EOs 80 and 246 is a good thing for stewardship of our environment, as well as the creation of further learning opportunities.

It is my own advice and expectation that Duke and the Public Staff strictly scrutinize all costs and causes of costs as they relate to the EVSE tariffs to ensure that the costs of this endeavor, not one that is typically considered necessary to the provision of electric public utility service, are not borne by non-EVSE participants. I am confident in the ability of Duke and the Public Staff to do so.

Finally, I am of the opinion that the Commission's ultimate EVSE goal should be to ensure that the provision of EVSE services moves to full commercial mode once the EV economy is sufficiently on its way, rather than being provided by Duke as part of its regulated business. At that point, Duke may determine it wishes to remain in the EV charging business but it should do as part of a commercial business competing on a level playing field in the free market.

> /s/ ToNola D. Brown-Bland Commissioner ToNola D. Brown-Bland

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

Commissioner Daniel G. Clodfelter, joined by Commissioner Floyd B. McKissick, Jr., dissenting:

This docket has turned out a bit odd. What the Commission approves is not what the two Duke electric utilities (collectively, Duke) requested. Instead, the Commission approves, in substance, a pilot program that Duke initially proposed on May 24, 2021, in these dockets but later withdrew on May 11, 2022. Duke withdrew the proposed pilot reciting that it had decided it wanted to make its rental EV charging equipment program a permanent, full-scale commercial offering. As I say, a bit odd.

It is tempting just to shrug one's shoulders and say, "oh well, it's just a pilot program," and I have indeed been tempted to do so. In the end, however, I am just not persuaded on this record that Duke's foray into the equipment rental business is really a proper or useful activity for regulated monopoly electric public utility companies.

There is certainly precedent for Duke to supply customers goods or services other than or in addition to electricity, e.g., smart thermostats or LED light bulbs, but in virtually all such instances the additional hardware, equipment, facilities or services have been linked in some way to Duke's demand side management or energy efficiency programs, and I have no problem with this.² If there is any such linkage for this equipment rental program. Duke has failed to articulate it. In the motion to withdraw the equipment rental program from the group of Phase II proposed pilots Duke explicitly stated that the proposed EV charger rental offering was not an outgrowth of, a follow up to, or an extension of its Phase I EV pilots: "...[U]nlike the other Phase II Pilots, the Companies' proposed EVSE Tariff Programs do not evolve nor extend from Phase I Pilots." (Motion to Withdraw, ¶18) The fact that Duke withdrew the equipment rental program from its package of proposed Phase II EV pilot programs and is now offering it on a standalone basis confirms that Duke sees no connection to the other components of its Phase II proposals. Nor have I been able to discern any connection to Duke's other important EV initiatives - its revisions, following the comprehensive rate design study, to its time-of-use pricing periods (Docket Nos. E-2, Sub 1219 and E-7, Sub 1214) and its development of new dynamic time-of-use rate structures (Docket Nos. E-2, Sub 1280 and E-7, Sub 1253), both of which are foundational for subsequent (and long-awaited) EV-specific electricity rates and tariffs, or its approved EV managed charging program (Docket Nos. E-2, Sub 1291 and E-7, Sub 1266). Under the equipment rental program customers are free to select any rate structure they prefer and are not required to take service under time-of-use or dynamic pricing rates. As well,

² Duke explains that its charging equipment rental program will be similar to its outdoor lighting program. With respect to the issue of cost allocation and cost recovery, this will be true, but I do not consider the outdoor lighting tariff to be precedent for this program. Outdoor lighting on private properties has been a long-standing ancillary service provided by Duke as a supplier of electricity service. Historically, there have been very few, if any, non-utility providers whose business has been installing and maintaining utility service poles and light fixtures for private property owners and ensuring that they are properly interconnected to the utility company's power lines. I see no material similarities to the case at hand.

customers may or may not choose to rent charging equipment that is networked and capable of participating in Duke's managed charging program. (If networked charging equipment is selected, rental charges will be higher.)

Even for large, well-capitalized, and well-run utilities such as Duke there is an opportunity cost for every course of action. Energy, attention, focus, and creativity are not unlimited even for such entities. With respect to the promotion of transportation electrification, the regulated Duke utilities have critical roles to play. I believe the utilities must be a partner in the deployment and effective operation and maintenance of public charging infrastructure, especially along major roadway corridors. Even more fundamentally, only the regulated utilities can design and implement rate and tariff structures that encourage widespread adoption of EVs and ensure that EV charging load is managed so that it supports optimal grid operations and maximizes use of existing generating resources. Along these same lines, the utilities are a necessary player in the exploration and development of vehicle-to-grid technologies that will be an important part of the virtual power plant concept. Duke has made promising forays into exploring the vehicle-to-grid concept with its Phase I school bus pilot and in its partnership with Ford Motor Company (Docket No. E-7, Sub 1275). Its EV managed charging program will provide important insights into how to encourage charging behavior that takes best advantage of the existing generating and grid resources. It has made some, albeit less, progress in supporting and advancing the growth of public charging infrastructure. These programs, in my view, fit within Duke's core responsibilities and capabilities. The charging equipment rental program, on the other hand, I believe to be simply a distraction from these core endeavors.

A distraction might perhaps be tolerated if there were some pressing unmet need for vehicle charging equipment that was impeding Duke's ability to carry forward its primary initiatives. Such is not the case here. As the comments from several of the intervenors indicate, there is - given the current stage of EV adoption by consumers - a fairly robust market for the supply of vehicle charging equipment and related support services, including installation and maintenance. Commenters point to the rapid development of "charging as a service" as a business model, in which the supplier, for a periodic fee or charge, handles make-ready, installation, sale or rental, ongoing maintenance, and software support for EV chargers, both in residential, fleet, and other non-residential settings. A very quick internet search on the term "EV charging as a service" turned up several companies, in addition to those offering comments in this docket, who advertise this as their market niche. E.g., www.tridenstechnology.com/whatis-ev-charging-as-a-service; www.forbes.com/sites/steventengler/2022/"Charging-as-a-Service-for-EVs-Soaring-as-a-Market-Offering." I note also that the first semi-annual report filed by Duke on the results of its make-ready credit program, which is showing promising initial results, indicates that for the residential segment forty-five different types of vehicle chargers had been identified as being installed and used by consumers.³ This

³ Duke reports that nine hundred and twenty residential applications had been processed. The nonresidential program was showing more modest results. Only eight non-residential make-ready credits had been processed, of which four were for public charging stations.

hardly indicates a scarcity of choices for EV charging equipment. Moreover, it is worth noting that according to Duke's semi-annual report on the make-ready credit program, over 90% of the residential customers who have taken advantage of that credit have installed EV chargers rated at 40 amps or greater.⁴ By contrast, Duke plans to offer in this program only one charger option, rated at 32 amps.

It is said that this program is entirely voluntary, and that is a fact. How could it be otherwise? But the fact the program is voluntary is not an argument for approving it. If it were, then "voluntariness" could just as well be a reason to approve a program whereby Duke leases electric vehicles to customers. It is further pointed out that Duke has designed the program such that none of its costs will be borne by non-participating Duke ratepayers.⁵ This is certainly a positive feature, but it also illustrates just how disconnected this program is from Duke's core business and the important activities associated with EVs that Duke is currently engaged in and those it could be engaged in to ensure that transportation electrification benefits all of its customers, whether they drive EVs or not.

In her concurring opinion Commissioner Brown-Bland points out several features that could have made Duke's charging equipment program much more useful as a pilot or learning opportunity. I support her suggestions, and if some or all of them had been incorporated in the design of this program, I might have been persuaded to join her at least insofar as the program is approved as a pilot. That is not the case, however, and I must decide on the program as it is presented. I therefore dissent. To be clear, if Duke Energy Corporation believes that rental of electric vehicle charging equipment is a worthwhile business enterprise, it is certainly free to pursue that opportunity through its non-regulated, non-monopoly subsidiaries. I do not, however, believe this is the proper business of the regulated utility subsidiaries.

/s/ Daniel G. Clodfelter Commissioner Daniel G. Clodfelter

⁴ Charger amperage affects the speed at which the EV battery can be recharged.

⁵ The Commission's Order requires that Duke operate the equipment rental program in a manner that ensures non-participating ratepayers are held harmless with respect to the costs of the program. I note that Duke as purchaser and owner of the EV chargers that will be rented to customers may well be eligible for federal tax credits as purchaser and owner. It would be consistent with the principle of the Commission's Order that the *benefits* of any available tax credits flow to the credit of the customers who do participate in the rental program, since it is their participation that generates such tax credits.

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

Commissioner Jeffrey A. Hughes, dissenting:

While I support Duke's effort to support, better understand, and prepare for the increased adoption of Electric Vehicles, I did not see sufficient evidence put forth in this case that having its regulated utilities get into the charger rental business in an already active, diverse, and quickly expanding unregulated commercial charger market is necessary or advisable. I may not have been opposed to a small scale, time limited, and well-designed research oriented pilot project or a targeted demand shifting program, but I did not see that in the program design put forward.

Given the capacity of the company's current metering infrastructure and analytics, I believe most of the information and insight related to customer charging that a program like this would provide is more appropriately mined and analyzed from existing metering records without creating an additional program in a highly competitive space.

> /s/ Jeffrey A. Hughes Commissioner Jeffrey A. Hughes