

**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 Progress, LLC, and) **COMMENTS OF**
Duke Energy Carolinas, LLC, for Approval of) **THE PUBLIC STAFF**
Electric Vehicle Supply Equipment Program)

NOW COMES THE PUBLIC STAFF – North Carolina Utilities Commission (Public Staff), by and through its Executive Director, Christopher J. Ayers, pursuant to N.C. Gen. Stat. § 62-140 and other applicable Commission rules, and provides the following comments on the joint petition filed on August 15, 2022, by Duke Energy Progress, LLC (DEP), and Duke Energy Carolinas, LLC (DEC) (together, the Companies or Duke), for approval of each company’s respective Electric Vehicle Supply Equipment (EVSE) Program.

BACKGROUND

On November 24, 2020, the Commission issued its Order Approving Electric Transportation Pilot Programs, In Part (ET Pilot Order) in the above-captioned dockets. In summary, the ET Pilot Order approved, at least in part, four electric vehicle (EV) pilot programs jointly proposed by the Companies and required Duke to file, within six months, a second phase of these programs via a collaborative stakeholder process convened by Duke and the Public Staff, in which Duke was to explore, in the second round of these pilot programs and any other

proposed programs, additional ownership and partnership models for EV infrastructure. Although the Commission declined to approve the remaining three program proposals in its ET Pilot Order, it noted that it was receptive to further pilot programs and provided the following list of specific attributes that it advised pilot program applications filed by Duke and other public utilities should include: (1) proper scale and scope; (2) rate design; (3) cost-benefit analysis; (4) leveraging of other funding; (5) make-ready approach; (6) objectives, metrics, and verification; and (7) reporting and stakeholder engagement.¹

On May 24, 2021, the Companies jointly 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. Duke explained that under the EVSE Pilot, Duke would install EV chargers and charging infrastructure at locations on DEP's and DEC's distribution systems. The chargers and infrastructure would be owned and maintained by Duke but operated by the customer participating in the EVSE Pilot. According to Duke, the rate structure for the program would be similar to Duke's outdoor lighting programs, which have a separate rate class and unique costs to serve that are adjusted during rate cases. Duke also stated that the Companies would be able to provide programs and services to help customers manage charging during off-peak hours.

¹ For a more detailed description of each of these attributes, see pages 20-21 of the ET Pilot Order.

On July 29, 2021, the Public Staff filed comments on Duke's proposed Phase II Pilots, in which it recommended that the Commission deny Duke's request for approval of its Phase II Pilots on the basis that the request failed to meet the requirements set forth in the Commission's ET Pilot Order. More specifically, the Public Staff asserted that: (1) Duke had failed to properly size the Phase II Request to the scale and scope envisioned for pilot programs, noting, for instance, that the proposed EVSE Pilot was uncapped and could therefore allow Duke to increase its market share; (2) the request was premature as the first phase of the pilots had yet to be implemented; (3) the Phase II Pilots may ultimately prove to be unnecessary considering current EV adoption trends, Tesla's announcement to open its fast chargers to other types of vehicles in 2021, and the amount of capital likely to be invested in the market from other sources; and (4) the Make-Ready Credit (MRC) Programs then pending before the Commission in the above-captioned dockets were a better option to grow a competitive marketplace.²

On February 21, 2022, the Commission issued its Order Requiring Further Collaboration and Report on Proposed Phase II Pilots (Collaboration Order). Based on changed circumstances discussed in the Collaboration 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

² Pursuant to the Commission's ET Pilot Order, the Companies' filed their Request for Approval of Make Ready Credit Programs on April 30, 2021. Duke's MRC Programs have since been approved. See Order Approving Make Ready Programs with Conditions, Docket Nos. E-2, Sub 1197 and E-7, Sub 1195 (N.C.U.C. Feb. 18, 2022).

Investment and Jobs Act (IIJA), H.R. 3684, 117th Cong. (2021-2022), enacted on November 15, 2021, and 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, the Companies 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 Pilot for approval as a standalone commercial program. Duke contended that this would be appropriate because the EVSE differs from the Phase II Pilots in a number of significant ways, including: (1) it would be fully funded by participating customers that have voluntarily chosen to participate in the programs and, thus, the potential for IIJA funding does not impact the EVSE; (2) the EVSE complements the Companies' approved MRC Programs and will complement the Companies' Electric Vehicle Managed Charging pilot programs if they are approved by the Commission; (3) working together, the MRC Programs and EVSE standalone programs could broaden the customer base that participates in future, innovative demand response pilots involving EV battery storage; and (4) the EVSE tariffs did not evolve or extend from Phase I Pilots and, therefore, the Phase I Pilots will not be as informative to the EVSE as to the other Phase II Pilots. 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. The Joint Motion stated that the Public Staff agreed with Duke's decision to withdraw the EVSE Program from the Phase II Pilot Request and file it as a standalone program. During the discussion on the withdrawal of the EVSE program from the Phase II Pilots, the Public Staff told Duke that this agreement did not signify that the Public Staff would support the standalone EVSE Program.

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. This 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, the Companies filed a Joint Petition for Approval of Electric Vehicle Supply Equipment Programs (EVSE Programs) in the above-captioned dockets as standalone tariffs. In addition to the information previously provided about EVSE, Duke stated that the EVSE Programs would be voluntary, fully funded by participants, allow for multiple vendor options, and allow participants to choose any applicable rate schedule for electricity service. In addition, the Companies explained several changes that have been made in this Petition since the original application for approval of EVSE, including updates to the tariffs which reflect changes to costs for the Companies, clarifications of equipment descriptions, updates to contracts, and the intent that these programs not be considered as pilots. Finally, the Companies attached their respective proposed tariffs, including the monthly rates.

On August 23, 2022, the Commission issued its Order Requesting Comments on Proposed Customer Operated Electric Vehicle Supply Equipment Tariffs, in which the Commission established a deadline of September 21, 2022, by which intervenors may file initial comments on the EVSE tariffs and a deadline of October 5, 2022, by which all parties may file reply comments. On September 13, 2022, the Public Staff filed a motion requesting that the Commission extend the time for filing initial comments and reply comments on the EVSE tariffs to November 21, 2022, and December 5, 2022, respectively, for all parties. On September 14, 2022, the Commission granted the Public Staff's extension motion.

PROGRAM DESCRIPTION

The proposed EVSE Programs provide customers the ability to select and rent EVSE and enroll in a fixed monthly rate. Customers could choose between multiple tiers of pricing for different EVSE options which include networked and non-networked EVSE. The monthly rates proposed by Duke include the equipment, maintenance, and annual software networking fees, as applicable. The Companies would own and install the infrastructure, and the customer would operate the EV charging equipment. The proposed programs would include both Level 2 (L2) EVSE for residential and non-residential customers as well as DC fast charging options (DCFCs) for non-residential customers.

The monthly rental rates proposed by Duke do not include the monthly charges for extra facilities associated with the respective company's Service Regulations and Line Extension Plans, electrical panel and wiring make-ready

costs, costs for work on the utility side of the meter, non-standard equipment, or any contribution required under a customer's rate schedule. In addition to the applicable EVSE Monthly Rate, customers would pay an Extra Facilities charge when electric distribution facilities are requested that exceed distribution facilities normally supplied to render charging service.

Contract terms vary from three to eight years. Like the Companies' outdoor lighting programs, Duke proposes to track associated costs in separate tariffs. The Companies state that election to participate in the EVSE Programs would not preclude customers from receiving electricity service under any applicable rate schedule, but that the Companies may provide additional programs and services to help customers manage charging during off-peak hours.

The proposed tariff includes five L2 options and five DCFC options. The L2 options are comprised of two residential offerings and three non-residential. All L2 options include supply equipment with the following specifications: (1) 32-amp (A); (2) 240-volt (V) EVSE with a 25-foot cord; and (3) an industry standard J1772 connector. The residential EVSE options are limited to those specifications and include both a networked and a non-networked option. The non-residential offerings include a version of the non-networked residential offering that is also designed to be installed outdoors, as well as two networked options. In addition, a customer could choose multiple types of utility-owned mounting pedestals and poles to be used in absence of a suitable location owned by the customer to mount the EVSE.

DISCUSSION

The Public Staff has reviewed the filings made in this docket, workpapers provided by the Companies, and responses to discovery requests. As a result of its review, the Public Staff offers the following comments.

a. Nature of EVSE

As an initial matter, in evaluating this program, it is important to understand exactly what the equipment is and what it does. The Companies have correctly characterized the equipment as EV "supply equipment," even though the equipment is commonly referred to as a "charger." It is the EVs themselves which contain more sophisticated equipment, such as onboard chargers, that is responsible for several functions (including charging) when using Level 1 and L2 EVSE, as well as equipment that monitors the battery's status and charging behavior.

L1 EVSE connects to a standard outlet at 120V. It delivers around 1.2 kW to the vehicle. L2 EVSE connects to the electrical system at 220V using either a hard-wired connection or a NEMA 6-50 plug (a three-pronged plug that appliances such as ovens and dryers used prior to the 4-pronged plug that is the current standard). L2 EVSE delivers between 6.2 kW and 19.2 kW. In general, L2 EVSE is not very sophisticated, especially for residential use. The simplest L2 EVSE contains a contactor that closes to allow electricity to flow to the vehicle. The supply equipment informs the vehicle of the maximum amperage that can be supplied,

while the vehicle tells the supply equipment to close the contactor and allow the electricity to flow. Most residential L2 EVSE has a timer that allows the consumer to take advantage of time-of-use rates, as well as a simple device that measures the flow of electricity in a manner similar to a residential electric meter. When the timer is active, the EVSE will not notify the vehicle that there is electricity available. Once the timer is finished the EVSE operates normally. Finally, most manufacturers make the L2 EVSE available with network capabilities. The network capabilities change depending on the manufacturer but generally allow for greater control over when the EVSE informs the vehicle that electricity is available.

The vehicle, itself, is responsible for many of the functions required for the batteries to be charged. Many electric vehicles and plug-in hybrids can perform all the functions that the EVSE does, except for closing the contactor to allow the electricity to flow. Additionally, the vehicle will have an onboard inverter to convert the electricity from AC power (the form of power that homes are supplied with) to DC power (the form of power necessary to charge batteries). In other words, L2 EVSE is analogous to a smarter light switch which connects the vehicle to the electric grid.

b. *Program Structure and Rates*

The Public Staff finds the structure of the program and the requested rates to be reasonable. The Companies have requested and received bids from contractors to determine the appropriate rates to be charged. To account for maintenance and the potential for early replacements, the Companies have

applied the weighted cost of capital over a seven-year period, which corresponds with the expected life of the equipment. The structure of the program is also similar to the structure of the Companies' outdoor lighting tariffs, which provides customers with a familiar set up appropriate for an equipment rental program.

c. Regulatory Concerns

The Public Staff's concerns center around its view that the nature of this program is an unnecessary extension of the regulated utility franchise and offerings. As EVs play an important role in the transition to cleaner energy and decarbonization, questions concerning who supplies and owns the infrastructure to support those EVs are arising across the country. While utility ownership of this infrastructure could enhance EV adoption given the utility's expertise, capital resources, and its willingness to take on upfront costs, the utility could also obstruct the private unregulated market from expansion and innovation.

i. Other Jurisdictions' Approaches to Utility-Owned EVSE

As the issue of utility ownership of EVSE is materializing in program and pilot applications across the country, it has generated extensive discussion by utilities, advocates, and commissions. Ultimately, the Public Staff's review of these utility initiatives and regulatory decisions demonstrates that, by and large, public utility commissions have been cautious of utilities' involvement in the EVSE market and reluctant to allow ownership thereof.

In Virginia, for instance, Virginia Electric and Power Company (Dominion) applied to the State Corporation Commission (SCC) in Case No. PUR-2019-00154 for approval of a number of pilot programs, including a Smart Charging Infrastructure Pilot Program in which Dominion would, in relevant part, offer rebates for non-utility-owned EVSE with managed charging capabilities to multiple customer segments (with residential only including multi-family residences), as well as own up to four charging stations to study and support electrification in the rideshare market. See SCC Case No. PUR-2019-00154, Dominion’s Petition for Approval of a Plan for Electric Grid Transformation Projects³ (September 30, 2019), p. 3-4. In support of its request to offer utility-owned EVSE at certain locations, Dominion noted that many rideshare rides start or end in low-income areas, which are often less likely to have fast charging located nearby. See SCC Case No. PUR-2019-00154, Dominion’s Rebuttal Testimony of Nathan J. Frost,⁴ p. 24. Dominion also contended that the pilot would enable the utility to design customer offerings specific to the charging behavior of its customers and would also inform future options for alternative rates and programs for electric transportation. *Id.* at 26.

In its Final Order, although the SCC allowed Dominion’s request to allow utility ownership of EVSE at up to four charging stations, it explicitly did so “for the purposes of collecting relevant data during the term of the Pilot,” but cautioned that such approval “d[id] not . . . represent any guarantee that additional utility

³ Available at <https://scc.virginia.gov/docketsearch/DOCS/4j4b01!.PDF>.

⁴ Available at <https://scc.virginia.gov/docketsearch/DOCS/4ld%2401!.PDF>.

ownership of charging stations will be approved by the Commission.” See SCC Case No. PUR-2019-00154, Final Order⁵ (March 26, 2020), p. 14-15. Moreover, the SCC recognized that “the continued deployment of charging stations in the Commonwealth represents a significant, ongoing issue that impacts the public interest.” *Id.* at 15. Accordingly, the SCC issued an order in a separate docket, Case No. PUR-2020-00051, establishing a proceeding for the investigation and consideration of electric vehicle-related issues. *Id.*

In New York, the Public Service Commission (NYPSC) commenced a proceeding in 2018, Case 18-E-0138, to identify cost-effective approaches for electric utilities to support the infrastructure and equipment necessary to accommodate increased electricity demands associated with the deployment of EVs. See NYPSC Case 18-E-0138, Order Instituting Proceeding (April 28, 2018). Since then, the state enacted climate change legislation which, in relevant part, called for a newly formed council to make recommendations to promote the beneficial electrification of the transportation sector in order to reduce greenhouse gas emissions. See NYPSC Case 18-E-0138, Order Establishing Electric Vehicle Infrastructure Make-Ready Program and Other Programs (July 16, 2020), p. 2. In an effort to meet near-term objectives that it stated were “appropriate and necessary to advance the State’s clean energy and infrastructure requirements,” the NYPSC directed the Department of Public Service Staff (DPS Staff) to collaborate with stakeholders to identify and address immediate and long-term

⁵ Available at <https://scc.virginia.gov/docketsearch/DOCS/4m1j01!.PDF>.

actions to best support ZEV market growth, and to issue a whitepaper that addresses these topics. *Id.* at 4.

In January 2020, the DPS Staff filed its *Whitepaper Regarding Electric Vehicle Supply Equipment and Infrastructure Deployment* (Whitepaper), in which it likened EVSE ownership to DER ownership and cited the NYPSC's previously articulated policy that DER development should occur through competitive markets and not through ratepayer funding. See NYPSC Case 18-E-0138, *EVSE Whitepaper*, p. 54. The Whitepaper advised that the private market should be expected to build, own, and operate the EV charging stations in order to foster a competitive environment and drive down EV customer costs. *Id.* at 55. In addition, the DPS Staff recommended that there may be a role for utility ownership in areas where the market is not satisfying demand, although it did not see evidence of market failure warranting such a utility role in the broader EV charging industry landscape. *Id.*

Ultimately, the NYPSC found that its policy on utility ownership of DER was clear and that it was appropriate to analogize EVSE as the concerns over discouraging potential competitive investment through utility ownership are very similar. See NYPSC Case 18-E-0138, *Order Establishing Electric Vehicle Infrastructure Make-Ready Program and Other Programs* (July 16, 2020), p. 33. As such, the NYPSC held that the DPS Staff's proposal regarding ownership of the equipment, which excludes utility ownership of the charging station hardware and offers a rebate but not utility ownership of the make-ready infrastructure on

the customer side of the meter, was consistent with long-standing Commission policy, and adopted the Whitepaper recommendation that utility ownership of EV supply equipment only be allowed in limited circumstances, such as existing utility-owned EV supply equipment that exclusively serves utility-owned vehicles or employee vehicles. *Id.* at 32-33. It further agreed with the DPS Staff that the nascent nature of the EV industry and the EV charging business did not amount to market failure. *Id.* at 33.

Similarly, in New Jersey, the Board of Public Utilities (BPU) Staff drafted comments in Docket No. QO20050357 on how to spur EV growth across the state and recommended that utility ownership of publicly accessible EVSE be allowed only in very limited circumstances, which it referred to as “Last Resort” areas. See BPU Docket No. QO20050357, Order Adopting the Minimum Filing Requirements for Light-Duty, Publicly-Accessible Electric Vehicle Charging (September 23, 2020), p. 12. The BPU Staff suggested that the BPU undertake a case-by-case analysis of whether a utility may own EVSE in an area of Last Resort based upon a specific set of criteria, including: (1) whether the proposed charging site is more than 25 miles from another charging station; (2) for overburdened communities, whether the utility has had a minimum of 12 months of no expressions of interest from private owners of EVSE; (3) for non-overburdened communities, whether the utility has had a minimum of 18 months of no expressions of interest from private owners of EVSE; (4) density of the area; and (5) other factors that the utility may determine are relevant to why utility ownership is appropriate. *Id.* The BPU Staff stated that, while no one factor is determinative, the BPU should weigh these

considerations to ensure that private investment is preferred over ratepayer investment, where possible, but also keep in mind the fierce urgency of meeting our climate goals. *Id.* Additionally, the BPU Staff recommended that, once a utility triggers the Last Resort process and begins constructing a make-ready, it must publicly advertise the location and offer private EVSE owners the opportunity to own the charger, with an incentive of up to 50% of the utility's capital costs for installing the charger. *Id.*

The BPU ultimately found that ownership and operation of EV charging stations should be driven by the market, and, therefore, EVSE infrastructure companies, site owners, and property management companies are the preferred owners and operators of EVSE, while noting that there are "occasional and narrow instances" where it is appropriate for the utility to own and operate EV charging stations. *Id.* At 20. The BPU adopted the BPU Staff's Last Resort approach and required that all future utility EV proposals incorporate the following requirements, at a minimum: (1) a shared responsibility model with respect to Publicly-Accessible EV Charging Infrastructure with utilities funding the make-ready investments for EV chargers, private ownership and operation of EV chargers, and Last Resort options for utility ownership based on BPU approval; (2) proposed rate structure to address demand charges, residential EV charging, and multi-family dwellings rates; (3) proposed rate structures that encourage networked, managed charging; (4) proposals that provide equitable access to the EV ecosystem in overburdened communities; (5) mapping that details areas which are best suited for EV infrastructure build-out on a regular basis; (6) outreach and education plans; and

(7) a list of make-ready investments made to date and all pending applications. *Id.* at 26.

Regarding an EV infrastructure program proposal before the Public Service Commission of Wisconsin (PSCW) in Docket No. 4220-TE-104, the Commission Staff expressed general concerns with utilities owning EV infrastructure behind a customer's meter. See PSCW Docket No. 4220-TE-104, Final Decision (July 16, 2020), p. 11. Its recommendation was that, should the PSCW approve the program proposals, costs should be tracked to prevent cross-subsidization and the utility should work with the Commission Staff on accounting procedures and reporting requirements to ensure that non-participating customers are held harmless. *Id.* at 11-12. The Commission ultimately approved the program proposal with certain conditions which encompassed the principle of holding non-participating ratepayers harmless with new utility programs that create optional products in which customers can voluntarily participate and agree to pay all costs associated with revenue requirements. *Id.* at 12.

The Public Utility Commission of Texas (PUCT) is facing the issue of EV charging station ownership as a result of Entergy's recent rate case filing, in which Entergy is seeking approval of a rider designed to allow the utility to partner with interested nonresidential customers to plan, construct, own, operate, and maintain transportation electrification related infrastructure and equipment on customer-owned property, with costs incurred by Entergy to be added to the interested customers' monthly electric bill as a fixed payment. See PUCT Docket No. 53719,

Entergy's Statement of Intent and Application (July 1, 2022), p. 7. The Office of Public Utility Counsel (OPUC) has expressed concern with the proposed EV charging equipment rider, stating that the rider "could limit the competitive offering of similar equipment and services in the competitive market," particularly in light of the fact that the utility "has contacts with most, if not all, of the potential customers and proposes to use personnel and equipment that are included in [the utility's] base rates to market the [rider]." See PUCT Docket No. 53719, Direct Testimony and Workpapers of Evan D. Evans on behalf of the Office of Public Utility Counsel (October 26, 2022), p. 33. As such, OPUC states, the utility will have "a regulated rate-subsidized competitive advantage over other potential participants" and, "[I]n addition, if [the utility] is permitted to have the fallback protection of recovery any costs of facilities from its electric service customers, [the utility] would have an additional advantage that is subsidized by its non-participating customers." *Id.*

OPUC therefore recommended that the rider customers be required to reimburse the utility for the cost of construction and installation of new facilities necessary to extend electric service to the charging infrastructure in excess of one year's anticipated annual base revenues, stating that such approach will strike a balance between the utility's proposal and the amount that is cost-justified. *Id.* at 33-34. In addition, OPUC recommended that Entergy be required to maintain separate accounting for all investment, depreciation expense and other costs associated with the rider and promotion of that program for consideration in the utility's next base rate case, and that all rate case expenses relative to the rider be

separated and not allocated to customer classes for which the rider is not applicable. *Id.* at 34.

Finally, Duke currently has pending before the South Carolina Public Service Commission (SCPSC) a similar EVSE proposal (Docket No. 2022-158-E) to the proposal in the above-captioned dockets,⁶ which has generated extensive and insightful discussion amongst the parties. The Public Staff respectfully directs the Commission's attention to the comments filed by the South Carolina Office of Regulatory Staff (ORS),⁷ which has opposed the proposal for five main reasons: (1) the proposal is an expansion of the utility business model which may negatively impact competitive markets and economic development; (2) the proposal to own EVSE increases the rate base, raising rates and shifting risks to non-EV customers; (3) the proposal to own EVSE contains a misalignment of incentives which will increase inefficiencies and costs for customers; (4) the proposal focuses on EVSE deployment without developing the necessary rate design and load management programs to manage EV load and associated increased costs; and (5) the proposed pricing for the EVSE programs does not incent network charging. See SCPSC Docket No. 2022-158-E, South Carolina Office of Regulatory Staff's Responsive Comments to Joint Applications (August 11, 2022), p.10-22.

⁶ Available at <https://dms.psc.sc.gov/Attachments/Matter/52515faf-553d-47ff-90c2-75ce6fea6b06>.

⁷ Available at <https://dms.psc.sc.gov/Attachments/Matter/dd1fbd97-4f02-4c48-816d-38ba5f7f7f3>.

In discussing these concerns, the ORS made several compelling points, including that investor-owned utilities like Duke are distinct from an energy service company whose purpose is to provide a range of solutions to energy issues, including infrastructure like EVSE; that a monopoly's entrance into competitive markets constitutes a dramatic change in utility business models and would set significant precedent that could lead to significant changes in what electric utility assets are recovered through rate base; that a role of a utility is to facilitate market competition and minimize ratepayer risks and costs; that utility ownership of EVSE may grant companies like Duke "gatekeeper" status and create barriers to third-party investment and competition that maximizes system inefficiencies; and that, without appropriate load management plans, Duke's proposal will fail to maximize benefits for all customers. *Id.*

In response to the ORS comments,⁸ the Companies contended that EVs are "vehicle-specific transformer[s]" and that the proposed South Carolina EVSE Programs offer a tariff option which allows customers complete decision-making authority on what electric charging transformer is best for them. See SCPSC Docket No. 2022-158-E, Joint Responsive Comments of Duke Energy Carolinas, LLC, and Duke Energy Progress, LLC (September 23, 2022), p. 6-7. As utility-owned transformers are "staples of the utility business model and allow energy to be safely delivered to customers and 'run' a home," Duke asserted that the proposed South Carolina EVSE Programs fall squarely within the traditional utility

⁸ Available at <https://dms.psc.sc.gov/Attachments/Matter/d23f6ce6-180d-4a19-b5f8-a7faceb71f40>.

business model. Duke pointed to three states that it stated have implemented programs similar to its proposed EVSE Program: Minnesota, Indiana, and Colorado. *Id.* at 6-8. A closer look at each of these state's respective approved programs, however, demonstrates that the approved programs are not straightforward utility-owned EVSE programs, either.

First, in 2018, the Minnesota Public Utilities Commission (MPUC) approved a pilot program proposed in Docket No. E-002/M-17-817 by Xcel Energy to help reduce the up-front costs of EV ownership by installing an EV charger with an embedded submeter at the customer's home that measures EV-specific electricity consumption, thereby eliminating the need for a second meter. See MPUC Docket No. E-002/M-17-817, Order Approving Pilot Program, Granting Variance, and Requiring Annual Reports⁹ (May 9, 2018)¹⁰ The pilot offered participants the ability to purchase the charger at the end of the contract term. *Id.* The pilot was widely considered a success and, consistent with the MPUC's 2018 order approving the pilot, the utility filed a petition the following year in Docket No. E-022/M-19-559¹¹ proposing a permanent program to give all eligible ratepayers access to the benefits of the pilot and to add a three-tier rate structure that more effectively incentivized off-peak charging. Although the proposed permanent program did not

⁹ Available at

<https://www.edockets.state.mn.us/edockets/searchDocuments.do?method=showPoup&documentId=%7b20E1FE74-0000-C715-9765-D3D7DC10DE0A%7d&documentTitle=202010-167089-01>.

¹⁰ Available at

<https://www.edockets.state.mn.us/edockets/searchDocuments.do?method=showPoup&documentId=%7b20E1FE74-0000-C715-9765-D3D7DC10DE0A%7d&documentTitle=202010-167089-01>.

¹¹ Available at

<https://www.edockets.state.mn.us/edockets/searchDocuments.do?method=showPoup&documentId={E067E46C-0000-C51B-9F3A-CE1803EC2609}&documentTitle=20198-155611-01>.

include an option for customers to own the chargers, the utility noted that it already offered two rate options allowing customers to purchase their own charger and use a time-of-use rate. The utility stated that it could not offer a customer-owned charger option in the permanent program offering due to the difficulty and complexity of integrating charging equipment with the company's billing system, noting that even chargers of the same model can have varying generations of software and firmware that make integration infeasible. The utility further emphasized that company-provided chargers are crucial for a positive customer experience with the program, that the customer would bear the burden of addressing all firmware and software issues with their vendor directly, that there was potential hassle for customers in terms of installation and set-up, and that there could be customer errors in communicating the correct charger information to the utility.

The MPUC was not persuaded that such challenges should preclude customers who own their charger from realizing the benefits of the permanent program's three-tier rate structure, stating that customers can decide for themselves whether the benefits of joining the program with their own charger outweigh the additional responsibilities and possible inconveniences that come with this option. See MPUC Docket No. E-022/M-19-559, Order Approving Electric Vehicle Home Service and Voluntary Electric Vehicle Charger Service Programs as Modified (October 6, 2022), p. 6. As such, the MPUC required Xcel to offer an installation-only option for customers who own an EV charger model that is already deployed in the program, although this provision was limited to customers who

have purchased an Xcel-compatible EV charger on or before the date of the launch of the permanent program. *Id.* at 6-7. In addition, the Commission expressed its interest in opening the permanent program offering to customers who install and maintain their own chargers, noting that “[d]oing so will help optimize customer choice and foster competition with Xcel.” *Id.* at 7. In doing so, the Commission required Xcel to propose an option for participation in the Program, or a similar offering, that would allow customers to buy, install, and maintain their own chargers, including models not currently deployed in the Program, or to explain why it is not feasible or prudent to do so and to provide cost information to support this position. *Id.* The Commission also required the utility to provide an option to customers who leave the program to purchase the charger. *Id.*

While Duke is correct that Xcel’s program was allowed, in part, it is important to note factors relevant to the Commission’s consideration. To begin with, the program began as a pilot with an energy-related component that was widely regarded as a success. In addition, despite the utility’s efforts to shift from the pilot that included non-utility-owned EVSE to utilizing only utility-owned EVSE in its program, the MPUC flatly rejected this attempt, explicitly stated its interest in fostering competition with Xcel, and required the company to propose an option for participation in the program that would allow non-utility-owned EVSE or, alternatively, to explain and demonstrate with evidence why it is not feasible or prudent to do so. Finally, although Duke attempted to remove a path toward ownership from customers who leave the program, the MPUC was ultimately unconvinced that there was a justified reason to do so. Each of these limitations

demonstrates the limited extent to which the MPUC found it appropriate that Xcel operate in the EVSE market.

The program approved by the Public Utilities Commission of the State of Colorado (PUCSC) in Proceeding No. 20A-0204E required that customers have the option to take ownership of the installed EVSE after ten years or buy out the charger at a fair price before ten years.¹² See PUCSC Proceeding No. 20A-0204E, Commission Decision Granting Application with Modifications (December 23, 2020), p. 7. The PUCSC observed that customer choice is important and stated that it is “critical” that the program enables a robust competitive market for EVSE. *Id.* at 50. More pointedly, the PUCSC observed that the “regulated monopoly and the competitive market sit in a critical balance, and . . . in a rapidly evolving market like [EVSE], this balance is particularly vulnerable.” *Id.* at 50-51. Accordingly, the PUCSC stated its expectation that it will “re-visit this issue” and that it expects to see a “reduced role for utility ownership in a more mature market and will expect to address how utility ownership changes as competition develops.” *Id.* at 51.

As to Indiana, although the Utility Regulatory Commission (URC) approved ownership of EVSE by Duke Energy Indiana in Cause No. 45616, such decision appears to be an anomaly and there was limited discussion on factors such as Duke Energy Indiana’s monopoly status, state EV adoption trends, the existing EVSE market in Indiana (if any), or risks of unfair competition. The Office of Utility

¹² Available at

https://www.dora.state.co.us/pls/efi/efi_p2_v2_demo.show_document?p_dms_document_id=938521.

Consumer Counselor did not oppose the program proposal and, although the utility indicated that it had no issue with offering non-utility-owned EVSE so long as such structures could be operated in a manner compatible with Duke Energy Indiana's regulations, as proposed by ChargePoint, the URC did not ultimately require that. See URC Cause No. 45616, Order of the Commission (June 1, 2022), p. 12-16. Instead, it found that the utility's proposal to update the tariff pricing to reflect market pricing of non-utility-owned charging infrastructure within the state was a reasonable approach to encourage the emerging EVSE market and required the utility to file monthly reviews of its rate compared to pricing of non-utility-owned charging infrastructure. *Id.* at 16.

ii. Duke's North Carolina EVSE Petition

In North Carolina, our General Assembly has long declared that, with regard to the provision of "adequate and reliable supply of electric power," it is the policy of the state to "promote the inherent advantage of regulated public utilities" (quoting N.C.G.S. §§ 62-2(a)) and 62-2(a)(2)), with our courts having recognized that "[s]uch monopolistic regulation allows for reliability and sufficiency of electric power to the people of North Carolina and best serves the public," (quoting *State ex rel. Utils. Comm'n v. N.C. Waste Awareness & Reduction Network*, 255 N.C. App. at 615, 618 (2017)). While monopoly status regarding the provision of electric power is widely understood in North Carolina and elsewhere to be in accordance with statutory principles of reliable service, least cost, and just and reasonable

rates, it is the Commission's role to ensure that a monopoly utility is not permitted to venture beyond its intended purpose.

Currently, Duke enjoys monopoly status over the provision of power to most of North Carolina's electric ratepayers. In this instance, the scope of such services – “the availability of an adequate and reliable supply of electric power” – is clearly set forth by statute. N.C.G.S. § 62-2(a)(4). To the extent that the scope of an electric provider's monopoly services is subject to change, it is for the Legislature, and not for a court or the Commission, to determine whether a proposed change is in the public interest. See *State ex rel. Utils. Comm'n v. Lumbee River Elec. Membership Corp.*, 275 N.C. 250, 257 (1967).

The supply of EVSE falls squarely outside the monopoly over which the Companies have been granted and, as such, the Public Staff is not satisfied that an extension of Duke's utility franchise into the EVSE market is a necessary or appropriate regulated activity. In addition to supplying reliable electric service, the Companies are seeking to use their status as a regulated utility simply to offer a new service, beyond the scope provided by statute, when such service is more appropriately provided by a third-party energy service company whose purpose is to provide a range of solutions to energy-related issues, like infrastructure. Using the utility franchise in the manner proposed by Duke in this Petition creates an unfair competitive advantage which, as described at length above, interferes with market competition and economic development and which is not ultimately in the best interests of ratepayers. As ORS opined in its comments, allowing Duke's

entrance into a competitive market like EVSE represents a “dramatic change in utility business models” as well as “significant precedent that could lead to dramatic changes to what electric utility assets are recovered through rate base.”

Moreover, EVSE can and already is being provided by other parties in North Carolina such that Duke’s involvement in the provision of EVSE is unnecessary and counterproductive to ensuring a competitive EVSE market that better serves ratepayer interests. New programs funded by ratepayers should serve a specific need that has arisen or will arise soon. Certainly, state and federal policies can generate and impact the urgency of such a need.

In its Petition, Duke refers to two pertinent Executive Orders (EO) signed by Governor Roy Cooper: (1) EO 80, which directed that the State of North Carolina will “strive to accomplish” increasing the number of registered, zero-emission vehicles (ZEVs, which include EVs and plug-in hybrid vehicles) to at least 80,000 by 2025; and (2) EO 246, which called for both the increase in the total number of registered ZEVs to at least 1,250,000 by 2030 and the increase in the sale of ZEVs so that 50 percent of in-state sales of new vehicles are zero-emission by 2030. In addition, Duke asserts that:

"Since the Companies filed their request for approval of the Phase II Pilots, the regional ET market has, unsurprisingly, continued to grow. As of May 31, 2022, the Companies’ North Carolina and South Carolina service territories had approximately 5,800 new EVs registered in 2022. This total outpaces registrations for the same period in 2021, which was approximately 4,000 registered EVs. As of March 31, 2022, there were more than 36,000 EVs operating in the Companies’ North Carolina service territories

compared to approximately 25,000 EVs at the time of the Companies' Phase II Pilots Application."

Since these stated values are split between North and South Carolina, and only the portion of the states that are served by the Companies, it is difficult to know exactly how fast this market is growing in North Carolina. Nevertheless, the trends indicate that not only are additional EVs being added to the market, but they are being added at an increasing rate.

However, the fact that there will be more EVs sold in the future and the fact that North Carolina has specific goals relating to plug-in hybrid and electric vehicles do not, on their own, constitute a sufficient need to justify program approval, particularly where the private market has been operating sufficiently to date to provide the EVSE necessary to meet state goals. In its comments filed in the above-captioned dockets on July 29, 2021, the Public Staff presented a graph which showed the number of EVs, plug-in hybrids, and total ZEVs. An updated version of this graph is shown below as Figure 1.

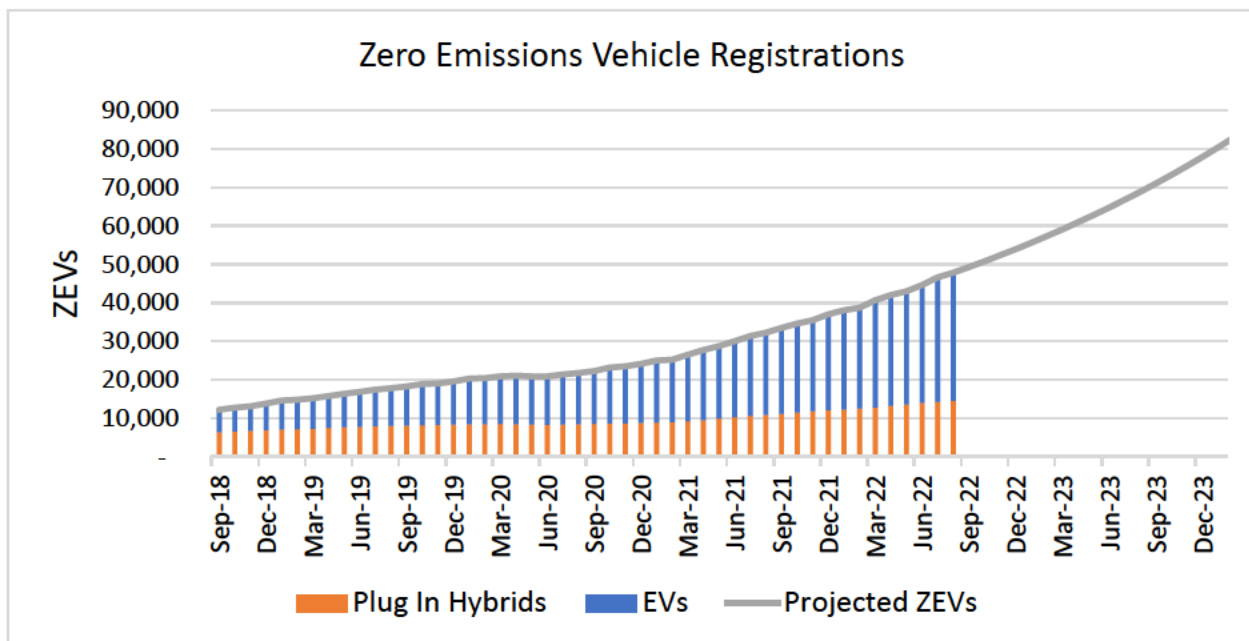


Figure 1: ZEV registrations in North Carolina by month

At this time, continuing at the rate that EVs have been being adopted would allow the EO80 goal of 80,000 ZEVs to be reached in July of 2024 without additional incentivization. Using the information from the same source, the latest projection is that EO 80 will be met by the end of 2023. Additionally, the EO248 goal of 1.25 million ZEVs is projected to be met by December of 2030.

Through the IIJA and through the Inflation Reduction Act, H.R. 5376, 117th Cong. (2021-2022), enacted on August 16, 2022, numerous incentives have been provided to encourage the growth and development of electric vehicles in the United States. These acts, along with the efforts of the Companies through other programs in this docket, will certainly help spur further EV adoption and infrastructure options. But Duke has not attempted to demonstrate that the EVSE

market as it currently exists is insufficient to meet state or federal policy objectives, nor has it demonstrated that there is any need for EVSE to be regulated in order to protect ratepayer interests. In this sense, there is no justification as to why it is in the public interest that the Companies use ratepayer funds to own and rent out EVSE in the provision of a service outside of the utility's normal course of business where state policy objectives are being met absent such unconventional utility intervention.

The Public Staff continues to support its position as previously set forth in these dockets that the approved MRC Programs are a better path forward in further developing the state's EV charging infrastructure while building a competitive marketplace that will invite new innovative companies that can uniquely tailor the chargers and fees to individual customer needs. To the extent that Duke wishes to venture into the ownership of EVSE, it can do so with investor funds through an unregulated affiliate, without including such costs in its rate base, thereby bearing the same risks that other third-party market participants are subject to in the open market.

Furthermore, by putting program costs into rate base, the Companies' proposal allows Duke to earn a return indefinitely on the program costs, both while operating in a space that is not currently regulated and while offering participants no path toward ownership of the equipment. As ORS pointed out, monopoly provision of services already provided in competitive markets can lead to cross-subsidization of costs by all ratepayers, thereby limiting the level of protection from

cost shifts that the creation of a new rate class for EVSE participants, as proposed by Duke in its Petition, is intended to provide. The Companies have also proposed no load management plan to manage EV load and associated increased costs.

Finally, the proposed EVSE Programs are not supported by the Public's Staff's positions or the Commission's decisions on previous filings in the above-captioned dockets. The Commission approved the Phase I Pilots, in part, to determine the need, cost effectiveness, and scalability of utility-owned charging infrastructure. These proposed EVSE Programs have been filed prior to the Companies filing any information or analysis on its Phase I Pilot programs. Moreover, the Public Staff supported the MRC Programs partially because the MRC Programs' infrastructure would be customer owned and the meter has traditionally been the delineation point between utility- and customer-owned equipment. These EVSE Programs step over the dividing line and encroach onto the customer side of the meter and into unregulated territory. Duke owning EVSE would be no different than it owning the outlet and plug that supplies power to any other customer appliance.

CONCLUSION AND RECOMMENDATION

Based on the foregoing, the Public Staff concludes that it is neither appropriate nor necessary for the Companies to utilize their monopoly franchise to offer utility-owned EVSE programs. Accordingly, the Public Staff recommends that the Commission deny the Companies' Joint Petition for Approval of EVSE Programs in the above-captioned dockets.

Respectfully submitted, this the 21st day of November, 2022.

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CERTIFICATE OF SERVICE

I certify that I have served a copy of the foregoing comments on all parties of record in accordance with Commission Rule R1-39, by United States mail, postage prepaid, first class; by hand delivery; or by means of facsimile or electronic delivery upon agreement of the receiving party.

Respectfully submitted, this the 21st day of November, 2022.

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