

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

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

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of
Application by Duke Energy Carolinas, LLC) ORDER APPROVING MAKE
and Duke Energy Progress, LLC for Approval) READY CREDIT PROGRAMS
of Proposed Electric Transportation Pilot) 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 above-captioned dockets. In summary, the ET Pilot Order approved in part the joint application of Duke Energy Carolinas, LLC (DEC), and Duke Energy Progress, LLC (DEP, collectively, Duke or the Companies), to establish seven pilot programs to obtain additional information about electric transportation (ET) and electric vehicles (EVs). The Commission approved several modified ET pilot programs, declined to approve several others, and directed Duke and the parties to engage in stakeholder collaborative discussions about the structure and implementation of the approved programs. In addition, the Commission stated several attributes for Duke to consider and incorporate in the pilot programs, including the following:

Make-ready Approach: Duke should leverage familiarity with permitting requirements, the interconnection process, and the design, operations, and maintenance of the distribution system to efficiently identify and develop appropriate preparations for EV infrastructure.

ET Pilot Order, at 21.

On April 30, 2021, Duke filed a request for approval of proposed Make Ready Credit (MRC) programs for DEC and DEP.¹

On May 28, 2021, the Commission issued an Order requesting comments on and reply comments on Duke's MRC programs.

Petitions to intervene were filed by and granted for North Carolina Sustainable Energy Association (NCSEA), Sierra Club, ChargePoint, Inc. (ChargePoint), Environmental Defense Fund (EDF), North Carolina Clean Energy Business Alliance

¹ On May 24, 2021, Duke filed a Request for Approval of Phase II Electric Transportation Pilot Programs (Phase II Pilots). The Commission has received comments and reply comments on the Phase II Pilots and will issue a separate order on that matter.

(n/k/a Carolinas Clean Energy Business Alliance, CCEBA), Zeco Systems, Inc. d/b/a Greenlots (Greenlots), EVgo Services, LLC, (EVgo), and jointly Southern Alliance for Clean Energy and the North Carolina Justice Center (NCJC/SACE). The intervention and participation by the Public Staff is recognized pursuant to N.C. Gen. Stat. § 62-15(d) and Commission Rule R1-19(e).

On July 8, 2021, the Public Staff, ChargePoint, NCJC/SACE, Greenlots, NCSEA and CCEBA filed initial comments.

On August 2, 2021 the Public Staff and ChargePoint filed reply comments. On August 3, 2021, NCSEA, Greenlots, and Duke filed reply comments.

In addition, the Commission received numerous statements of consumer position, many of which expressed support for Duke's proposed MRC programs.

SUMMARY OF DUKE'S APPLICATION

Duke's proposed MRC programs would apply solely to the cost of wiring and other electrical infrastructure added by a customer to support the customer's EV charging station(s). According to Duke, the MRC programs would defray the cost of make ready infrastructure installed by customers to create the foundation necessary for EV programs and pilots, and would support the Commission's ET Pilot Order, the Governor's Executive Order 80 (EO 80), and North Carolina's Clean Energy Plan. Duke further contended that the MRC programs will ensure that new electric infrastructure on a customer's premises is installed in a safe and reliable manner to protect both the customer's investment, protect the grid from impacts resulting from significant new EV load, make EV adoption more available for low- to moderate-income customers, and provide a framework to enable DEC and DEP to proactively manage their grids so that they can address system upgrades that are necessary for wide scale ET adoption. Moreover, Duke stated that it developed and shared the MRC proposal with the Electric Transportation Stakeholder Group (ETSG) during meetings held on March 22 and April 15, 2021. Duke explained that the MRC programs would not be pilot programs but offerings prepared for full commercialization, as they will lay the necessary foundation for transitioning to the increased EV adoption and infrastructure envisioned by the Commission in the ET Order, and will complement the Companies' Phase II Pilots. Additionally, Duke explained that, unlike the Companies' currently approved EV pilots and future EV pilots, the MRC will be available to all customers regardless of their desired EV ownership and operation model.

Duke stated that the MRC has been designed to leverage the Companies' experience with distribution system expansion and that it works in a similar way to the revenue credit offerings in the Companies' Line Extension Plans (LEPs). Duke noted that its LEPs have been in place for decades and provide three to five years' worth of credits to customers to defray the infrastructure cost of adding new load, and benefit customers by reducing the per unit cost of electricity for all. Duke explained that its MRC programs will provide credits based on increased revenue from EV charging for the first three to five years after an installation, just as the LEPs provide a revenue-based credit over the same

time frame where infrastructure enables a customer to join the DEC or DEP system. Duke explained that the MRC will encourage residential and non-residential customers to invest in working upgrades to existing structures while also delivering a benefit to all utility customers by lowering the per unit cost of electricity.

Duke defined make-ready activities as installing electric infrastructure needed to make a location ready for the installation of Electric Vehicle Supply Equipment (EVSE), including the cost of investments in the safe and reliable installation of wiring and other upgrades that support EV charging (Make Ready Infrastructure or MRI), but excluding the cost of the charging station. According to Duke, the MRC program is designed to defray installation costs associated with EV chargers and to encourage mutually beneficial EV adoption by all interested customers.

Further, Duke stated that like the LEPs the MRC will allow for investments to be made in customer-sited enabling infrastructure, excluding the EV charger, to serve load from EVs. Duke noted that this will align cost allocation of investments with future revenue and that the customer may obtain installation through a licensed and approved contractor.

Duke stated that the MRC would be made available to residential and non-residential customers for use at their premises/places of business that require Level 2 or higher EVSE and related wiring and circuitry. Duke noted that a residential customer may receive revenue credits for MRI through a reduction in the price charged by a contractor that has been approved by the Company (Contractor Credit Option), or through a direct application submitted to the Company by the customer (Customer Credit Option). Duke stated it will maintain a list of licensed and approved contractors on its website.

Duke stated that the Customer Credit Option will require a residential customer to file an application on the Company's website providing, among other information: (1) detailed invoices from the contractor for MRI, (2) a copy of the approved permit from the municipal or local permitting authority; (3) a summary of any grant funding received as part of the project, and (4) evidence of EV registration. The sum of the costs for the MRI are "Demonstrated Costs" subject to revenue crediting, provided, however, that "Demonstrated Costs" shall not include any amounts for which the customer expects coverage or reimbursement from a third-party funding source.

According to Duke, for a residential customer to be eligible for the MRC the application must be filed within 120 days following the later of: (1) the date on the most recent invoice included with the application; or (2) the date of EV registration. Duke noted that, with either credit option, a customer must acknowledge that Duke may access the customer's EVSE installation, with reasonable notice, to verify compliance with the terms of the program.

Duke explained that after it reviews an application for completeness, it will provide a MRI revenue credit through the contractor, under the Contractor Credit Option, or to the residential customer, through the Customer Credit Option, in the amount of the Demonstrated Costs or the Company's expected increase in revenue in the first five years

following the customer's EVSE installation, whichever is less. For a customer who is simultaneously participating in the Company's LEP and eligible for revenue credits under such Plan that account for the anticipated EV charging load, the MRI revenue credits will be Demonstrated Costs or the Company's expected increase in revenue in the first year following the customer's EVSE installation, whichever is less.

The Companies noted that for non-residential customers the program terms are similar, but with some variations. Specifically, the non-residential customer must provide: (1) a Customer Usage Profile form, using a template provided by the Company on the Company's website, indicating the estimated uses of each EVSE, including hours of usage per day and per week and the proposed timing of EVSE installation; (2) for all installations involving more than one EVSE of Level 3 or higher EVSE, a schematic diagram of the installation; (3) detailed invoices from the contractor; and (4) a copy of the approved permit from the municipal or local permitting authority. A non-residential MRC application must be filed within 120 days following the later of: (1) the date on the most recent invoice included with the application; or (2) the date listed on the approved permit. Finally, all revenue credits are directed to the customer (as there is no Contractor Credit Option), and there is no EV registration requirement for non-residential customers because such installations may be facilitating the charging of EVs owned by others.

Duke further explained that in an effort to provide an additional incentive to promote EV adoption in high density areas and/or low-income areas with fewer single family homes, and to ensure equitable opportunities, the tariffs include a proposal that for EV charging installations by owners or managers of Multi-Family Dwellings or by Housing Authorities, the revenue crediting will reflect five years of revenue – the same period as the revenue credit for a single family homeowner.

Additionally, at the Companies' sole discretion they may pay a MRI incentive of \$150.00 to a homebuilder approved by the Company for participation in the MRC, if the homebuilder is constructing a home served by the Company's distribution system where the homebuilder demonstrates, through an application and documentation satisfactory to the Company, that it has installed MRI in a convenient location for residential EV charging.

Further, Duke stated that as EVSE is installed on the customer's side of the meter, electric usage will be billed under the customer's selection of rate schedule and other riders, if applicable. Duke stated that to continue learning more about customers' energy usage with EVs so that the Companies can continue to facilitate the goals of EO 80 and better serve their customers, the Companies will retain the right to install, at the Company's expense, metering and load research devices it deems appropriate to collect customer data about the usage characteristics of the EVSE.

Finally, Duke agreed that in order to ensure continued transparency about the MRC with the ETSG, the Public Staff, and the Commission, that the Companies will commit to reporting on the progress of the MRC programs, including how many customers are served on an annual basis.

SUMMARY OF THE PARTIES' COMMENTS

The parties in the ETSG have provided comments and reply comments that are extensive and very helpful. The Commission has read and given due consideration to all comments and reply comments, and without attempting to summarize all points raised by the parties, the Commission provides a high level overview below.

Initial Comments

Public Staff

The Public Staff noted its general support for the MRC programs proposed by Duke. It stated that the Companies had provided projected EVSE costs and revenue credits for typical installation scenarios at a stakeholder meeting in April, and that they had relied on similar calculations and inputs from Duke's affiliate company, Duke Energy Florida, for the initial determination of credits. Based on the Companies' projections, the Public Staff calculated that residential customers would receive revenue credits ranging between 18% of the cost for new or upgrade service and 67% of the cost for existing service, and Non-residential Level 2 and DCFC EVSE customers would receive revenue credits ranging from 11-14% of the cost for new or upgraded service to 14-23% of the cost for existing service.

The Public Staff stated that it believes that the MRC programs are a beneficial way to enable the build out of the infrastructure necessary to promote EV adoption in North Carolina without sanctioning Duke's general participation in the EV charging market and that the MRC will provide useful information for possible future program development. The Public Staff noted its opinion that Duke has done a good job in tailoring the MRC programs for all customers and developing added incentives for multifamily dwellings and Housing Authorities in an attempt to help low and moderate income areas to develop the infrastructure needed to promote EV adoption.

However, the Public Staff stated it does not agree with Duke that the MRC programs align with the ET Pilot Order. According to the Public Staff, that Order required make-ready solutions to be part of potential pilot programs. The Public Staff opined that the filing of the MRC program request should not relieve Duke from the make-ready requirement for all future pilot programs as stated in the ET Pilot Order. Nevertheless, the Public Staff stated that Duke's MRC request is appropriate as fully commercial tariffs.

Additionally, the Public Staff voiced concern about the level of information Duke intends to include in its report to the Commission and the stakeholders. The Public Staff noted Duke's "commit[ment] to reporting on the progress of the Make Ready Credit programs, including how many customers are served, on an annual basis." (Duke MRC Application, at 13). However, the Public Staff stated that in response to a Public Staff data request Duke stated that it "has not designated conditions that would trigger use of metering equipment" that would allow the Companies to install metering and load research devices at the premises of the participating customers to collect data about the

usage characteristics of the charging stations. (Initial Comments of Public Staff, at 6). The Public Staff requested that any MRC program approved by the Commission include sufficient reporting and data analytics by which the program's success can be determined.

Finally, the Public Staff recommended that the Companies should be required to file reports semiannually rather than annually as proposed by Duke. The Public Staff further recommended that the reports be distributed to stakeholders and should include: (1) the amounts of the credits and the estimates of costs, which are tentative in nature and may need to be adjusted to maintain the balance between EVSE costs and EV loads; (2) the adoption rates for each type of EVSE; (3) the EV loads; (4) the costs observed per installation; (5) the revenue credits paid; and (6) any other distribution system cost impacts associated with EVSE deployment.

ChargePoint

ChargePoint stated that it generally supports Duke's MRC programs but had several recommendations to offer to achieve the goals of advancing transportation electrification while ensuring a healthy and competitive market for EV charging services. Modifications suggested by ChargePoint included the Commission's directing Duke to require eligible EV chargers installed through the MRC programs to: (1) be smart and capable of connecting to a charging network; (2) have capabilities of managed charging; (3) be ENERGY STAR certified (Level 2); and (4) be Certified for safety by a nationally recognized testing laboratory. ChargePoint additionally commented that the Commission should require the Companies to clarify that site hosts receiving incentives under the MRC programs have the ability to establish the prices and pricing policies for EV charging services located on their property. ChargePoint opined that site hosts should be free to set prices as they see fit to support their goals, that some site hosts might prefer a flat fee or a per-minute fee, while others may prefer a per-kWh price, and that this freedom will encourage site hosts to maximize station utilization through signage, parking enforcement, maintenance, and pricing.

NCJC/SACE

NCJC/SACE noted its general support of Duke's MRC program proposal and stated that the MRC program has the potential to accelerate EV adoption in North Carolina and offset upfront costs of customers. NCJC/SACE also noted that the MRC program could leverage and expand the availability of Volkswagen Settlement funds and other public funding sources as demand for EV charging infrastructure continues to increase.

Further, NCJC/SACE stated that the MRC programs provide a logical framework for achieving the goals of supporting the development of a competitive market for EV charging services, but that they are not yet structured in a way to help manage future EV charging loads. NCJC/SACE stated that because the MRC programs are being proposed as permanent programs, and not as pilot programs, it is important to consider potential grid impacts when the programs are accessed by customers at scale. They

recommended that as Duke develops EV-specific rate designs and options for managed charging across the various EV charging use cases such as residential, workplace, public and fleet charging, the Commission consider (1) tying the MRC to participating in one of those options, or (2) providing an additional incentive in the MRC programs for customers who commit to participating in one of those options, as this would help incentivize load growth that is carefully managed.

Further recommendations by NCJC/SACE included: (1) requiring Evaluation, Measurement and Verification (EM&V) of the MRC programs, including mechanisms for data collection and sharing of lessons learned with stakeholders, (2) providing the billing credits within one billing cycle of installation, (3) requiring Duke to make special efforts in its marketing and outreach to make the MRC programs accessible to lower-income communities, rural residents, and communities of color, (4) requiring Duke to make a special effort to ensure that its contractor network extends into rural areas, (5) making sure that school systems participating in the Electric School Bus Pilot Programs have access to the MRC programs to help further reduce the upfront costs of adopting electric buses and attendant charging infrastructure, (6) directing Duke to evaluate the appropriate sizing of customer-sited infrastructure (panel capacity, transformer, and conduit) for non-residential customers so that additional EV chargers could be added at minimal expense as EV penetration increases, (7) directing Duke to remove the uncertainty around the amount of reimbursement available for different types of commercial customers, and (8) directing Duke to make availability of the homebuilder credit subject to objective criteria, rather than being at the utility's sole discretion.

Finally, NCJC/SACE requested that the Commission direct the Companies to clarify: (1) what assumptions were used to determine reimbursement amounts across technology types and use cases, including how anticipated demand charges are accounted for by DEC and DEP; and (2) what marketing/outreach plan will be implemented to reach all customer segments, including low- and moderate-income and rural communities.

Greenlots

Greenlots commended the Commission for recognizing the need to help drive down installation costs associated with EV charging MRI and for directing the Companies to engage with stakeholders and propose such a program. Greenlots noted its agreement with Duke's position regarding enabling broad MRC eligibility regardless of whether a customer participates in one of Duke's EV Pilot offerings. Greenlots asserted that MRI investments should be an expectation of utility service, not a program model.

Greenlots further noted that ratepayer financing is an appropriate complement to the revenue credit approach of the MRC programs, and that it offers additional benefits. Greenlots asserted that this type of mechanism would support the development of a private market for charging products and services in a more rapid manner, providing assurance that basic funding will be provided and will not be subject to implementation delays or limitations due to the economics of the revenue credit. Greenlots contended that

such financing would also level the playing field between participants in utility infrastructure programs and customers not able to participate or uninterested in participating in these programs, improve certainty for independent market participants, and provide a foundation upon which other utility or state programs can unlock the build-out of ET infrastructure.

Greenlots additionally commented that make-ready alone is insufficient for sustainable market development, and that additional incentives for EVSE and operations are necessary. According to Greenlots, make-ready investments are perhaps best suited to facilitate the deployment of charging infrastructure in locations that are lower cost, higher utilization, and that have a willing and interested site host. Greenlots noted that many locations do not meet these conditions but are nonetheless critical for building a sufficient and equitable foundational network of EV charging locations. Greenlots asserted that these locations should be addressed through other carefully designed programs instead of, or as a complement to, a make-ready program.

Finally, Greenlots recommended, as an alternative and complement to Duke's customer-owned MRI, consideration of utility-installed and owned MRI. Greenlots noted that there are other state jurisdictions, such as California, who have make-ready program designs that include utility ownership.

NCSEA

NCSEA stated its general support for the MRC programs proposed by Duke, but expressed concern regarding the transparency of the MRC credit that customers would receive. NCSEA noted that Duke's application did not state what the amount of the customer's MRC credit will be but, instead, the application described the revenue requirement formula that will be used to calculate the credit. According to NCSEA, this is an opaque calculation that cannot be easily understood by customers. Additionally, NCSEA stated that in response to a data request Duke stated that it is

“utilizing a standardized kWh/make-ready credit amount for residential customers” and that customers would receive the lower of the maximum Make Ready Credit amount or their actual costs. Duke did not state what the maximum Make Ready Credit amount would be. In a different response, Duke did state it would calculate the maximum Make Ready Credit amount using an assumed increase in consumption of 225 kWh per month. Ultimately, in response to a Public Staff data request, Duke did provide the maximum Make Ready Credit amount, but provided it confidentially. However, especially for residential customers, the maximum Make Ready Credit amount cannot be confidential. Customers need to know the maximum Make Ready Credit amount so that they can make a financial decision about whether to participate in the program.

Initial Comments of NCSEA, at 2-3.

Next, NCSEA expressed concern regarding the possible anti-competitive effects of the Contractor Credit Option. NCSEA noted that Duke stated in its application that by using the Contractor Credit Option a customer can choose a pre-approved contractor from Duke's website who would incorporate the MRC amount into the price they charge the customer. NCSEA stated that it is concerned about the mingling of Duke's regulated utility programs, such as the MRC, with non-regulated programs, such as "Find It Duke" or other methods of Duke's "approving" contractors to participate in the Contractor Credit Option. As such, NCSEA asked that the Commission investigate how Duke will approve contractors for the Contractor Credit Option and exercise oversight of the Contractor Credit Option to ensure that it is implemented by Duke in a nondiscriminatory manner that does not provide a competitive advantage to contractors that participate in the option.

Finally, NCSEA opined that the MRC program should not dictate what type of charger technologies are utilized. NCSEA noted that on page nine of its application, Duke states:

To be eligible for revenue credits under this Program, each Level 2 EVSE installed at the customer's premises must feature at least one SAE J1772 charging plug and each Level 3 (DC Fast Charging) EVSE installed at the customer's premises must feature at least one SAE J1772 CCS1 charging plug.

Duke MRC Application, at 9.

NCSEA asserted that the SAE J1772 is a very common type of charger but is not the only type of charger. NCSEA further asserted that Tesla chargers do not use a SAE J1772 plug, and thus customers purchasing a Tesla charger would be excluded from participating in the MRC program. Similarly, NCSEA contended that the proposed MRC would exclude customers who adopt newer, emerging standards, such as the SAE J3068 standard being used by some heavy-duty vehicles.

CCEBA

CCEBA stated its agreement with Duke that MRC programs should not be confined to a pilot program. CCEBA further stated that it agreed with comments submitted by NCSEA regarding transparency, specifically regarding the ability of customers to know the maximum amount of the MRC. CCEBA also concurred with NCSEA regarding its recommendation that the Commission investigate and exercise oversight in the implementation of the Companies' proposed Contractor Credit Option to ensure the program is implemented in a nondiscriminatory manner that preserves competition.

Reply Comments

Public Staff

The Public Staff stated its agreement with all the intervenors that Duke's MRC proposal should be approved with modifications as it will help develop the infrastructure needed to support EV adoption while developing a competitive marketplace for EV charging stations. The Public Staff noted that the other intervenors raised some issues that it also believes should be included as modifications to Duke's MRC programs. The Public Staff further noted its agreement with NCSEA's position that any information that will aid in helping potential customers make informed decisions on whether the MRC is right for them should be publicly available.

The Public Staff pointed out that the NCJC/SACE comments align with the Public Staff's in that they contend that Duke's MRC programs should include more data collection and reporting requirements. The Public Staff stated its support for NCJC/SACE's recommendation that Duke be required to develop a data collection plan through the stakeholder group before implementing any of the MRC programs. The Public Staff further agreed with NCJC/SACE that marketing the MRC programs to lower-income and rural areas is the best way to evaluate the need for EV infrastructure in those areas, while also allowing counties and municipalities in those areas to further leverage the funding from the Volkswagen Settlement funds. Finally, the Public Staff also supported NCJC/SACE's recommendation that Duke provide the credit to customers within the first billing cycle after the infrastructure is installed so that customers taking advantage of the credit can benefit immediately.

The Public Staff noted its support for ChargePoint's recommendation that Duke should ensure that all chargers plugged into the MRI be smart chargers capable of connecting to a cloud network to help drivers find chargers, allowing charging to benefit, not hinder, the distribution grid, and collecting charging data that will be useful to the driver, customer, and Duke. The Public Staff further stated that the Commission should require Duke to allow commercial customers to set their own rates for charging, as this will enable customers to adjust charging rates to their own specific situation and provide data about what rate designs are most attractive to EV drivers in various locations.

ChargePoint

ChargePoint noted that the proposed MRC programs are generally supported by all parties, and it addressed a few issues raised by some of the other intervenors. First, addressing NCJC/SACE's comment that rate designs or load management programs could increase the effectiveness of the MRC programs and provide grid optimization benefits, ChargePoint stated that it takes no position on the matter, but if the Commission or the Companies require customers participating in the MRC program to take service under a specific rate design or participate in load management programs as a condition for receiving make ready credits, then ChargePoint recommends that the installation of a second utility meter to implement any future rate design or load management programs should not be

required. ChargePoint further noted that requiring a second utility meter unnecessarily adds costs and fails to take advantage of existing capabilities in smart EV chargers. Second, ChargePoint addressed the minimum technical requirements proposed by Duke for EVSE to qualify for the MRC program. ChargePoint supported NCSEA's recommendation that all types of EVSE should be eligible to participate in the MRC, and further recommended that Duke modify the tariff to require the installation of standard, non-proprietary plugs, rather than requiring specific plug types. According to ChargePoint, this modification would enable the MRC program to adapt to potential future market changes without requiring Duke to file a tariff modification with the Commission. Third, ChargePoint stated its support for NCJC/SACE's recommendation that the Commission direct the Companies to evaluate the appropriate sizing of customer-sited infrastructure (panel capacity, transformer, and conduit) for the Non-Residential Program so that additional EV chargers could be added at minimal expense as EV penetration increases. Fourth, ChargePoint stated its support for the recommendations by parties seeking increased MRC transparency for customers, including a requirement that Duke publish on its website a customer credit calculator for all customer segments, along with an explanation of any calculations.

NCSEA

NCSEA stated its support for NCJC/SACE's recommendations on EM&V analysis of the MRC programs, equity and access, and on non-residential MRC program changes. Further, NCSEA stated its support for the reporting and monitoring recommendations made by the Public Staff, and its agreement with ChargePoint that there should be minimum performance and safety standards for ESVE.

Greenlots

Greenlots stated that it agreed with other commenters that the credit calculation should be made more accessible and transparent to the customer in advance, to foster predictability and to increase the likelihood of customer participation. Greenlots further commented that MRC-financed public infrastructure should support interoperability and access, that it is appropriate to establish certain requirements for public charging financed by the MRC programs, and that MRC-financed stations should be open to all users.

Duke

Duke noted that no party filing comments or letters and no member of the ETSG has opposed approval of the MRC programs. Duke further stated that it agrees with the recommendations of several intervenors regarding the frequency of providing bill credits, the sizing of the installations, and the types of chargers and charging equipment to be included. Duke stated that it agrees with NCJC/SACE's recommendation that it is important to provide the MRC within one billing cycle of installation of the MRI to enhance access for customers and remove barriers to participation. Duke agreed to provide the MRC within one billing cycle of installation unless information received from the applicant is incomplete and/or inaccurate. Moreover, Duke stated that it is open to NCJC/SACE's recommendation for providing MRC that would support inexpensive, incremental

infrastructure. Duke stated that it agrees with NCSEA's recommendation to amend its filed tariffs to remove the SAE J1772 requirement to ensure Tesla plug-in equipment will not be excluded and will consider ChargePoint's recommendation that the L2 chargers be Energy Star certified and tested by a national security laboratory, to the extent that these recommendations do not limit competition.

Duke commented that it has committed to reporting on the progress of the MRC program, including how many customers are participating, on an annual basis, and stated that it does not object to reporting to the Commission and to stakeholders information that can be tracked with accuracy on the progress of the MRC Program. However, Duke cautioned that such tracking and any additional reporting requirements may result in added costs and complexity for the MRC programs. In addition, it disagreed with the Public Staff's and other parties' recommendations for more frequent reports and additional information. It contended that annual reporting, rather than six-month "snap shots" in time, will produce more robust and meaningful data. In addition, Duke stated that implementation of the Public Staff's recommendation for installation of metering and load research devices at the premises of participating customers to collect data about the usage characteristics of the charging stations would impose additional cost burdens.

With respect to SACE/NCJC's recommendation that the MRC programs be included in the EM&V that is ongoing for the EV Phase I Pilots, Duke noted that this would likely result in increased scope and cost to the already in-process EM&V work for the EV Phase I Pilots, and that it can appropriately track the relevant information for sharing with stakeholders and Commission without the added expense of the third-party EM&V for the MRC programs. Stating that it recognizes the importance of understanding the impact of the MRC program on the transition to more ET in the state, Duke proposed to collect and report data on customer participation, the estimated usage associated with the EVSE based on AMI data, the amounts of the credits and the estimates of the costs, the costs observed per installation, the revenue credits paid, and any other distribution system cost impacts associated with EVSE deployment annually, starting 18 months from the commencement of the MRC program. Further, Duke stated that it will also update the ETSG quarterly on the progress of the programs.

With regard to several parties' recommendations for more transparency, Duke agreed to provide revenue credit values to customers, but stated that to maintain flexibility the specific values are not published in the proposed tariffs. Duke stated that it would instead provide personnel and implement the systems, tools, and standardized assumptions to get maximum MRC figures to customers upon request and will also convey that information to contractors participating in the residential Contractor Credit Option, as well as to non-participating contractors who communicate with DEC and DEP on behalf of customers.

Duke provided the following responses to the concerns of NCSEA.

- (1) With regard to fair competition among contractors, Duke asserted that a contractor who is not participating in the Contractor Credit Option will still be able

to contact the trained DEC or DEP personnel and ascertain the maximum MRC value for a potential customer, and with a similar level of experience as a participating contractor, will develop the same level of knowledge about make ready credit levels.

(2) Duke stated that the Commission recently requested, in Docket No. E-7, Sub 1249, (Sub 1249, Duke's most recent DSM/EE proceeding), that DEC provide information on how it approves contractors for participation in the Find it Duke (FID) referral channel. In response, DEC noted that qualification guidelines for the approval of contractors can vary by service type, but all contractors participating in the FID referral channel must: (i) be in good standing with Better Business Bureau; (ii) have minimal negative customer reviews posted by other review services; (iii) possess a valid W-9; (iv) meet minimum general liability/workers compensation insurance requirements; (v) possess valid state certifications or business licenses; and (vi) agree to the terms and conditions of the Find it Duke referral channel.

Duke provided the following responses to the concerns of NCJC/SACE.

(1) An effort to make special outreach and training opportunities available to historically underutilized businesses is already underway. For example, DEC reported in Sub 1249 that the Trade Ally Outreach team has engaged potential FID contractors to determine those firms that met the program standards and had an interest in participating in the program. Duke noted that the FID team is currently collaborating with Duke Energy's Supplier Diversity team to build a strategy and supporting tools to better incorporate disadvantaged contractors into the FID program.

(2) Duke explained that the Companies' hosted an MRC information session for stakeholders on May 19, 2021 to explain the assumptions, use cases, and calculations related to the MRC, and that the purpose of the session was to allow stakeholders to ask questions regarding the assumptions and to give the Companies an opportunity to explain in greater detail the kilowatt hours and kilowatts used to calculate the various segments.

(3) Duke stated that it designed its MRC programs to include encouragement of EV adoption in high density areas and/or low-income areas with fewer single-family homes and to ensure equitable opportunities. To that end, the tariffs include a proposal that for EV charging installations by owners or managers of Multi-Family Dwellings or by Housing Authorities, the revenue crediting will reflect five years of revenue, which is the same period as the revenue credit for a single-family homeowner. Duke further stated that the Companies are prepared to work with NCJC/SACE and stakeholders to determine marketing best practices for reaching low-and moderate income and rural communities. Duke noted that there are currently several other collaborative efforts involving DEC and DEP going on. These include the Rate Design Collaborative and the Low- Income Collaborative, both of which are addressing issues on EV adoption that are relevant in this matter. The

Companies intend to incorporate the information and lessons learned from those Collaboratives to inform their efforts going forward on the transition to ET in North Carolina.

DISCUSSION

All parties generally agreed that the MRC programs would defray the cost of MRI installed by customers and help to create the foundation necessary for EV charging programs and pilots. No party opposed Duke's MRC programs, although several parties made recommendations for modifications to the MRC programs. The Commission has carefully considered all comments, reply comments and recommendations of the parties. In general, the Commission approves the proposed MRC programs of the Companies, subject to the requirements discussed below in detail.

Transparency of the Make Ready Credit

Both NCSEA and CCEBA recommended that the MRC credit amounts, also referred to as values, be more transparent for residential customers. In addition, NCJC/SACE recommended that Duke provide up-front calculations of the MRC values for prospective non-residential applicants. In reply comments, Duke agreed with the intervenors and, therefore, agreed to provide the credit amounts to customers. Duke noted, however, that to maintain flexibility, the specific values are not published in the proposed tariffs. Duke stated that it would instead place the systems, tools, standardized assumptions, and personnel in place to provide maximum MRC figures to customers upon request and would also convey that information to contractors who will be participating in the residential Contractor Credit Option, as well as non-participating contractors who communicate with DEC and DEP on behalf of customers.

Even though costs associated with MRC may vary over time, the Commission concludes that the current maximum amounts of the MRC credits should be stated in the tariff, in the interest of transparency. Duke has used this approach in other tariffs. For example, in Docket No. E-7, Sub 1155, DEC's Compliance Tariffs, filed on January 7, 2022, state flat-rate incentives for the New Residential Construction program of "Up to \$300" and "Up to \$650," and kWh incentives of "Up to \$0.75/kWh saved." Therefore, as a condition of its approval of the MRC, the Commission will require Duke to publish the current maximum MRC credit amounts in its tariffs.

Reports to Commission and Stakeholders

The Public Staff noted its concern that the MRC reporting and data analytics be designed to help evaluate the success of the MRC programs. In particular, the Public Staff recommended that semiannual reports be filed with the Commission and distributed to stakeholders, with the reports including: (1) the amounts of the credits and the estimates of costs, which are tentative in nature and may need to be adjusted to maintain the balance between EVSE costs and EV loads; (2) the adoption rates for each type of EVSE; (3) the EV loads; (4) the cost per installation; (5) the revenue credits paid; (6) and

any other distribution system cost impacts associated with EVSE deployment. Duke stated that it would commit to reporting on the progress of the MRC programs, including how many customers are served, on an annual basis. However, Duke stated that it does not yet have the ability to install metering and load research devices at the premises of the participating customers to collect data about the usage characteristics of the charging stations. Duke added that installing these meters would cause more costs to be incurred. With respect to the frequency of its reports, Duke stated that annual reporting, as opposed to every six months, will produce more robust and meaningful data.

The Commission is concerned about the costs that would be incurred by Duke for installing meters and load research devices on customer premises. At this time, the Commission will not require Duke to incur the additional costs to install these meters and devices. However, the Commission does expect Duke to leverage its AMI meter data and Customer Connect System to its advantage and extract any data that is available from those resources regarding customer usage for EV loads. Further, the Commission believes that providing reports more frequently, such as semiannually, as requested by the Public Staff, will better inform the Commission and the stakeholders. Therefore, the Commission concludes that, as a condition of its approval of the MRC programs, it will require Duke to provide semiannual reports to the Commission and stakeholders beginning 12 months after the effective date of this Order for a period of three years, at which point the Commission will reevaluate reporting requirements related to the MRC programs. The reports should include the information requested by the Public Staff in its initial comments, to the extent that such information is obtainable by Duke without adding meters and load research devices. In addition, in the compliance filing ordered herein Duke shall provide the details about the capabilities of AMI meters and Customer Connect to extract usage and load data and the other information requested by the Public Staff.

Further, Duke is directed to add metrics to the semiannual reports that provide insight on the regional and demographic attributes of customers that receive a MRC, as compared to its general customer base, using census and other readily available data.

In a similar vein, SACE/NCJC and NCSEA recommended that the MRC programs be included in the EM&V that is being conducted for Duke on the EV Phase I Pilots. In its reply comments, Duke noted that adoption of this recommendation would likely result in increased scope and cost to the already in-process EM&V work for the Phase I Pilots. Duke asserted that it can appropriately track the relevant information for sharing with the ETSG and Commission without the added expense of a third-party EM&V for the MRC programs. As discussed above, Duke proposed to collect and report data on customer participation, usage, costs and credits associated with the EVSE based on AMI and Customer Connect data. Duke further agreed to update the ETSG quarterly on the progress of the MRC programs.

The Commission appreciates SACE/NCJC's and NCSEA's EM&V concerns and understands that the parties want to be in a position to assess the impact that the MRC programs will have on EV adoption and MRI build-out in North Carolina. However, at this juncture the Commission is not persuaded that the possible benefits derived from a

third-party EM&V of the MRC would outweigh the costs. Therefore, the Commission will not at this time require a separate EM&V process for the MRC.

Minimum EVSE Requirements

ChargePoint recommended that the Commission adopt minimum equipment and operational requirements, including that EV chargers: (1) be smart and capable of connecting to a charging network; (2) have the capabilities of managed charging; (3) be ENERGY STAR certified (Level 2); and (4) be certified for safety by a nationally recognized testing laboratory. The Public Staff agreed with ChargePoint on these matters. In its reply comments, Duke agreed to consider ChargePoint's recommendation that the L2 chargers be Energy Star certified and tested by a national laboratory, to the extent that these recommendations do not limit competition.

The Commission agrees with ChargePoint that there should be some minimum equipment and operational requirements. However, the Commission is not convinced that such requirements are fully developed, and the Commission would like to ensure that all parties have the chance to engage in the decision process on this matter. Therefore, the Commission will direct that the parties work together, through the ETSG, to develop mutually agreed upon minimum EV equipment and operational requirements, and that Duke shall file such proposed requirements, or a statement about the progress of the ETSG on developing such agreed upon requirements, as part of the compliance filing specified in this Order.

Rates Set by Site Hosts

ChargePoint stated that Duke should clarify that site hosts are free to set EV charging rates and to change rates as they see fit to support their goals, even if they participate in the MRC. The Public Staff agreed with ChargePoint on this matter. The Commission likewise agrees, as this should serve to further the goal to promote competition as well as spur EV investments.

Equity

NCJC/SACE made several recommendations that it contended would make the MRC programs more equitable, including: (1) providing the billing credits within one billing cycle of installation; (2) making special efforts in marketing and outreach ensure that MRC programs are accessible to lower-income communities, rural residents, and communities of color; and (3) making a special effort to ensure that contractor networks extend into rural areas. In reply comments, the Public Staff supported NCJC/SACE's first recommendation, and Duke also agreed with it, unless information received from the MRC applicant is incomplete or inaccurate. The Commission concurs with this change.

With regard to NCJC/SACE's second and third recommendations, the Commission directs that Duke give these points due consideration as it develops its marketing strategy and contractor networks, as more fully discussed below.

Appropriate Sizing

NCJC/SACE and NCSEA also recommended that the Commission direct Duke to evaluate the appropriate sizing of customer-sited infrastructure (panel capacity, transformer, and conduit) for the Non-Residential program of the MRC so that additional EV chargers could be added at minimal expense as EV penetration increases. In its reply comments, Duke agreed that there will likely be customer sites where this approach could work and would be appropriate and noted its openness to providing support for incremental infrastructure.

The Commission agrees that the Non-Residential program of the MRC should be flexible and sized appropriately to accommodate additional EV chargers being added at a minimal expense, within the intent and range of the applicable credit provided to the customer. However, Duke should not be required to base the credit amount on infrastructure to support multiple chargers when the customer is simply speculating that it may add additional charging stations in the future. The Commission, therefore, concludes that Duke should, where reasonably foreseeable and feasible, provide a credit based on MRI installations that support incremental infrastructure.

Utility-Owned Make-Ready Infrastructure

In its comments, Greenlots recommended that Duke consider utility-installed and owned MRI, as has been implemented in other state jurisdictions. However, the Public Staff did not agree with Greenlots that utility-owned MRI provides better benefits than customer-owned infrastructure. Additionally, the Public Staff stated that the meter should be the dividing line of infrastructure ownership, and noted that Duke's application stated that the MRC is modeled on the Companies' LEPs, in which the Companies own the line extension infrastructure.

The Commission is not persuaded at present that it should order Duke to install utility-owned MRI. At this early stage in EV adoption in North Carolina, deciding the scope and location of MRI, especially residential MRI, would be largely a guessing game. Early adoption of EVs might occur in specific locations in some discernable pattern based on population density, income levels, or other demographics. However, it is too early at this time to determine those patterns. Instead, the Commission finds Duke's individualized, EV customer driven approach to be more appropriate than requiring utility-owned MRI. Therefore, the Commission declines to adopt the recommendation of Greenlots regarding utility-owned MRI at this time.

Contractor Credit Option

In its initial comments, NCSEA expressed a concern that Duke's Contractor Credit Option will lead to the mingling of Duke's regulated utility programs, such as the MRC, with non-regulated programs, such as FID, or other processes used by Duke to approve contractors who participate in the Contractor Credit Option. NCSEA requested that the Commission investigate how Duke will approve contractors for the Contractor Credit

Option and exercise oversight of the Contractor Credit Option to ensure that it is implemented by Duke in a nondiscriminatory manner that does not provide a competitive advantage to contractors that participate in the option.

In reply comments, Duke stated that it expects that a contractor who is not participating in the Contractor Credit Option will still be able to contact the trained DEC or DEP personnel and ascertain the maximum MRC value for a potential customer, and with a similar level of experience as a participating contractor, will develop the same level of knowledge about MRC programs. Duke also stated that the Commission recently requested DEC in the Sub 1249 docket to provide information on how it approves contractors for participation in the FID.

The Commission declines to take action on NCSEA's recommendation at this time, for two reasons. First, the Commission will give Duke sufficient time for its FID personnel to continue its collaborations with Duke Energy's Supplier Diversity team to build a strategy and supporting tools to better incorporate disadvantaged contractors into the FID and MRC. Second, the Commission will give Duke the benefit of the doubt and accept its commitment that no qualified contractor will be denied participation in the MRC programs, regardless of whether the contractor also participates in Duke's Contractor Credit Option.

While the Commission declines to make changes or add requirements to the Contractor Credit Option at this time, it directs Duke to add metrics to the semiannual reports required by this Order that shed light on the impact of having different credit options, including reporting on average residential installation cost, adoption rates and aggregate credit expenditures for the different credit options.

Charger Technology

NCSEA expressed a concern about whether the MRC programs should dictate what type of charger technologies are utilized. NCSEA recommended that Duke's MRC not exclude charger technologies. In its reply comments, ChargePoint supported NCSEA's recommendation, and it further recommended that Duke modify the MRC tariff to require the installation of standard, non-proprietary plugs, rather than requiring specific plug types.

In its reply comments, Duke agreed with NCSEA's and ChargePoint's recommendations and agreed to amend its MRC tariffs to remove the SAE J1772 charging plug requirement in order to ensure that Tesla plug-in equipment is not excluded. The Commission agrees, as well, and directs Duke to amend its tariffs to remove the SAE J1772 requirement and to allow for use of all EVSE chargers, unless there are reasonable reliability, safety, or other grounds on which to exclude the use of a particular type or model of charger.

Marketing/Outreach

In its reply comments, Duke addressed comments by NCJC/SACE requesting that the Commission direct the Companies to clarify their marketing/outreach plan for reaching all customer segments, including low- and moderate-income and rural communities. Duke stated that it designed its MRC programs to include encouragement of EV adoption in high density areas and/or low-income areas with fewer single-family homes and to ensure equitable opportunities. Duke noted that the tariffs include a proposal that for EV charging installations by owners or managers of Multi-Family Dwellings or by Housing Authorities, the revenue crediting will reflect five years of revenue--the same period as the revenue credit for a single-family homeowner. Duke further stated that with the MRC tariff it will market the programs to all customers, and that it would like to work with NCJC/SACE as a stakeholder to determine marketing best practices for reaching low- and moderate-income and rural communities.

The Commission appreciates Duke's willingness to work with NCJC/SACE and the ETSG to meet its marketing goals and objectives in the most efficient and least cost manner. The Commission encourages the parties to continue to develop marketing strategies and program designs that will promote EV adoption in all customer markets and by all customer classes. Therefore, the Commission concludes that Duke shall work with NCJC/SACE and the ETSG to determine and develop marketing best practices for reaching all customers, including low- and moderate-income customers and those in rural communities.

CONCLUSION

Based on the foregoing and the record, the Commission finds and concludes that the MRC programs, with the modifications specified in this Order, will serve to expand EV adoption and increase EV infrastructure in North Carolina, are in the public interest, and should be approved.

In addition, the Commission reserves the right to exercise its discretion to fully review and modify the MRC programs, if any such modifications are deemed necessary by the Commission, after the programs have been in operation for at least two years. In particular, but without limitation, the Commission may decide to review the sufficiency of Duke's data collection techniques and the data collected and reported by Duke, and the amounts of the MRC credits provided to Duke customers in relation to the increased electricity sales resulting from the customers' EV usage.

Finally, the Commission is not persuaded that the MRC programs, alone, represent a complete "Make Ready Approach," and encourages Duke to continue to work with stakeholders to identify additional ways to support MRI.

IT IS, THEREFORE, ORDERED as follows:

1. That the Duke MRC programs, subject to the modifications discussed herein, are approved, effective on a date to be later specified by the Commission;
2. That Duke shall make a compliance filing no later than 90 days after the date of this Order to satisfy the modifications and conditions stated herein;
3. That Duke shall file semiannual reports with the Commission and stakeholders group containing the information to be specified by the Commission after the Commission's receipt of Duke's compliance filing. The first such report shall be filed 12 months after the effective date of this Order. The reports shall continue to be filed for a period of three years, at which point the Commission will reevaluate reporting requirements and determine any reporting requirements after that date; and
4. That the Commission may, in its discretion, initiate a full review of the MRC programs on or after two years of their effective date, and may, in its discretion, make modifications to the programs that it deems to be necessary.

ISSUED BY ORDER OF THE COMMISSION.

This the 18th day of February, 2022.

NORTH CAROLINA UTILITIES COMMISSION



Erica N. Green, Deputy Clerk