

November 1, 2022

Chair Charlotte Mitchell
North Carolina Utilities Commission
430 North Salisbury Street
Dobbs Building, 5th Floor
Raleigh, NC 27603-5918

Re: Request to Initiate a Proceeding to Implement Amendments to PURPA Sec. 111(d)

Dear Chair Mitchell,

ChargePoint recognizes the North Carolina Utilities Commission's ("Commission") unique and important role regulating North Carolina's electric utilities as the global transition to electric vehicles (EVs) accelerates. Enactment of the Infrastructure Investment and Jobs Act (IIJA) provides the Commission with a tremendous opportunity to implement regulatory and policy measures to advance EV growth in North Carolina and to help realize the benefits that EV adoption can bring. ChargePoint respectfully requests the Commission initiate a proceeding to implement IIJA PURPA Sec. 111(d) rate reforms as soon as practicable.

About ChargePoint

Since 2007, ChargePoint has been creating the new fueling network to move all people and goods on electricity. ChargePoint is committed to making it easy for businesses and drivers to go electric, with a world leading EV charging network and the most complete set of charging solutions available today. ChargePoint's cloud subscription platform and software-defined charging hardware is designed internally and includes options for every charging scenario from home and multifamily to workplace, parking, hospitality, retail and fleets of all kinds. Currently there are more than 200,000 ports on the ChargePoint network across North America and Europe and an additional 355,000 ports accessible via roaming agreements.

Justification for the Commission to open a proceeding focused on EV rate design

In November 2021, President Biden signed the IIJA into law. The IIJA included amendments to the Public Utility Regulatory Policies Act (PURPA) which establish a specific directive to utility regulators across the country to consider rates that "promote greater electrification of the transportation sector."¹ These amendments direct utility regulators in every state to begin proceedings before November 2022 to consider measures including the establishment of new, EV-specific rates that:

1. Promote affordable and equitable EV charging options for residential, commercial, and public EV charging infrastructure;
2. Improve the customer experience associated with EV charging, including by reducing charging times;
3. Accelerate third-party investment in EV charging; and

¹ H.R. 3684 became Pub. L. No: 117-58 on November 15, 2021, available at: <https://www.congress.gov/bill/117th-congress/house-bill/3684/text>.

4. Appropriately recover the marginal costs of delivering electricity to EVs and EV charging infrastructure.

The Federal Highway Administration approved North Carolina's EV Infrastructure Deployment Plan in September 2022, and funds authorized by the IIJA will soon be released from the National Electric Vehicle Infrastructure Formula Program (NEVI) through state formula grants. Based on current estimates, North Carolina is expected to receive \$109 million over 5 years to support the expansion of EV charging; North Carolina will also have the opportunity to apply for \$2.5 billion in grant funding dedicated to EV charging.²

Rate design alternatives to traditional demand charges are needed to fully leverage NEVI Program funds into a sustainable charging network. Federal guidelines indicate that NEVI-supported sites require at least four ports with a capacity of 150 kW each, indicating that each site could contribute as much as 600 kW of demand if ports are utilized simultaneously. Though peak power demand is expected to be high, overall load factors at NEVI sites will likely be low. Sporadic and power-intensive usage of DC fast chargers will incur high demand charges, making it costly to own and operate stations funded by the NEVI Program. Conventional commercial rate designs with demand charges often make otherwise viable and desirable EV charging projects uneconomic. In some markets, demand charges account for as much as 90% of a site host's electricity costs.³ Under traditional demand-based rates, site hosts will effectively be penalized for providing charging services not only in the early-stage EV market, but also as charging power levels increase in the future. Additionally, demand charges can permanently penalize site hosts that provide charging services in locations that will continuously have low, sporadic, or seasonal utilization, such as rural and remote sites.

ChargePoint urges the Commission to initiate a proceeding to investigate sustainable rates to support high-power, low-load factor customers in each utility service area.

There is no "one-size-fits-all" alternative to traditional demand-based rates, and utilities should have flexibility in developing appropriate solutions for their customers. The Commission should ensure the development of sustainable tariff-based solutions that reflect actual costs and benefits to the grid of EV load, which is necessary to attract private investment in all use cases of EV charging infrastructure—but especially at the DCFC level.

ChargePoint appreciates that the Commission has already acknowledged the significant barrier posed by demand charges in the form of Duke Energy's Flex Savings Option for Businesses, which does not charge customers for the first 30 kW of billing demand.⁴ While this represents a step in the right direction in the development of alternative rate designs, most DCFC charging sites will far exceed 30 kW of demand and therefore would receive negligible relief from high demand charges. It is imperative that additional rates are developed to provide long-term demand-charge alternative rate options for EV charging stations in North Carolina.

There are numerous examples of alternatives to traditional demand-based rate structures that are currently in effect, such as the Low Load Factor Rate offered by Dominion in Virginia. Dominion's GS-2 rate

² Federal Highway Administration, National Electric Vehicle Infrastructure (NEVI) Formula Program Guidance (Feb. 2022), available at:

https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/nominations/90d_nevi_formula_program_guidance.pdf

³ Rocky Mountain Institute, "EVgo Fleet and Tariff Analysis" (2017), available at: https://rmi.org/wp-content/uploads/2017/04/eLab_EVgo_Fleet_and_Tariff_Analysis_2017.pdf

⁴ More information about Duke Energy's Flex Savings Option for Businesses is available at: <https://www.duke-energy.com/Info/unindexed/Rates/Flex-Savings-Option-Business?jur=NC01>

provides an all-volumetric, technology-neutral, low-load factor rate applicable to non-residential customers with a load factor below 200 kWh per kW.⁴ This rate provides relief from prohibitive demand charges for low-load factor customers through an all-volumetric rate that has been designed to recover the utility's cost to serve and capacity costs. Importantly, GS-2 is technology-neutral, enabling any low load factor customer to take service on the rate. ChargePoint recommends the Commission consider alternative rate designs for low-load factor customers such as the GS-2 rate – though there are many possible alternatives for the Commission to investigate in a full proceeding.

The directive established in the IJJA presents a unique opportunity to advance transportation electrification. Under the law, utility regulators are directed to consider rates that promote electrification, and also have the opportunity to enhance the impact of federal funds recently made available by the IJJA. Specifically, by complying with the IJJA's directive to evaluate EV-specific rates, the Commission can help ensure that the state Department of Transportation's charging infrastructure investments will be economically sustainable for the long term while advancing social equity goals and attracting private sector investment. ChargePoint respectfully requests that the Commission initiate a proceeding to adopt EV-specific rates and other methods of support for transportation electrification as expeditiously as possible. We would be happy to discuss this matter further and answer any questions the Commission may have.

Respectfully,

/s/ Matthew Deal

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