COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC INVESTIGATION OF COMMISSION JURISDICTION OVER ELECTRIC VEHICLE CHARGING STATIONS	)))	CASE NO. 2018-00372

COMMENTS OF DUKE ENERGY KENTUCKY, INC.

I. INTRODUCTION

On November 29, 2018, the Kentucky Public Service Commission (Commission) initiated the above-styled proceeding to conduct a formal review of the Commission's jurisdiction over electric vehicle charging stations (EVCS). As provided in its Order, the need for this investigation arises from the increased ownership of plug-in hybrid electric vehicles and all-electric vehicles that use electricity as either a primary fuel or for efficiency improvements.[1] The Commission found that this proceeding should be opened to determine whether an entity that owns or operates an EVCS is subject to the Commission's statutory authority over electric utilities as defined under Kentucky Revised Statute (KRS) 278.010(3)(a), as well as, the impact on the Electric Territorial Boundary Act codified in KRS 278.016-278.018.[2]

The potential for proliferation of electric vehicles may be as transformative to the electric utility industry since the advent of home air conditioning. A strong backbone of infrastructure is necessary to support and further encourage the development of this technology. Regulated utilities are uniquely positioned to provide the necessary infrastructure, reliable and dependable access to public EVCS, pricing opportunities, and technical expertise to not only support the EVCS market

[1] Order at 1.
[2] Id. at 2.

but to facilitate its development. Kentucky law provides ample opportunity for a strong foundation of EVCS to develop through the backbone of the utility distribution system until the competitive market can fully develop.

The Commonwealth of Kentucky and the Commission should embrace the development of vehicle electrification and encourage utility participation. Duke Energy Kentucky, Inc. (Duke Energy Kentucky or the Company) recommends that the Commission remain open to both the development of a marketplace for EVCS that are both owned and maintained by the utility if it so choses as well as instances where third-party ownership is appropriate and not contrary to either relevant provisions of KRS Chapter 278 or the Commission's own regulations in 807 KAR 5. Finally, to facilitate the development of the EVCS infrastructure, it may be necessary for the Commission to evaluate its existing rules and regulations for improvement and for utility tariffs to be amended to provide clarity and opportunities for EVCS investment and support. Duke Energy Kentucky appreciates the opportunity to participate in this proceeding and is pleased to offer its initial comments in response to the Commission's directives in its Order.

II. COMMENTS

A. Duke Energy Kentucky's Position on EVCS

The future of electric vehicles and the need for an accessible network of EVCS infrastructure is something that the Commonwealth of Kentucky and its jurisdictional utilities cannot and should not ignore. Although the market is still extremely small, Duke Energy Corporation (Duke Energy) has seen proliferation of electric powered vehicles in its utility service territories doubling in each of the last two calendar years. Duke Energy expects this growth to continue. However, the electric vehicle market will have difficulty developing to its full potential until there is a solid foundation of charging infrastructure (both level 2 and fast charging) through

major highways and corridors that allow for normal long-distance auto travel. This market will not reach its full potential without direct and significant utility involvement. Utilities have the long-term presence and stability, technical and managerial expertise, and the foresight to plan and develop the infrastructure necessary to facilitate and develop a sustainable EVCS market.

Duke Energy has witnessed firsthand in its competitive markets where utilities are not directly involved in EVCS ownership and maintenance, instances where third-party owned EVCS are not working, unmaintained, and sometimes even abandoned with the companies owning and/or operating them disappearing entirely. For example, there are third-party owned EVCS in the Cincinnati area that are currently out of service with no timeframe indicated for repairs and/or maintenance. Duke Energy Kentucky believes that if reliable and accessible public charging is offered through a tariffed and regulated service, customers would have assurance, and the Commission would have jurisdiction to ensure that EVCS are maintained for the benefit and safety of all customers. Utilities, as regulated entities, have the obligation to provide reasonable service and maintain their facilities in safe, reliable working order. The stability of electric utilities provides the assurance necessary to facilitate the development of the EVCS market in the Commonwealth of Kentucky.

While wide-spread third party-owned charging stations may be possible through a change in law to incentivize their development, it is necessary to have direct utility involvement so there is adequate resource planning to ensure the distribution infrastructure is in place to sustain the EVCS market. Further, given the significant potential long-term system and customer benefits of electric vehicle adoption, utility programs should be developed to ensure cost-effective grid integration to support and encourage electric vehicle adoption.

Duke Energy Kentucky sees three opportunities for the Commission to consider for utility direct involvement: 1) marketing and education; 2) expanding infrastructure; and 3) possible partnerships to deploy EVCS. The Company hopes to facilitate and support market development using possible incentives/rebates, preparing infrastructure to enable growth, and investing in utility-owned and operated facilities that would provide stability and reliable public access to EVCS. Several major highways run through Duke Energy Kentucky's service territory which provide key opportunities to lay a foundation for EVCS market development.

The Commission, along with utilities, must be involved in the EVCS market's development to ensure long-term resource planning and distribution grid impacts are known, analyzed, and planned for. Any billing impacts or settlement of electric vehicle adoption must continue to occur via the utility's meter. However, it may be premature to propose specific and standard tariffs for public and private charging outside of limited pilots until more information is known. Indeed, the wide diversity and disparity in the social and economic demographic across the Commonwealth of Kentucky necessitates independent consideration as to what may be the appropriate levels and timing of utility involvement in facilitating the EVCS market development. Following further study of electric vehicle charging behavior, utilities will be able to propose appropriate mechanisms – if necessary – to manage grid impacts of electric vehicle adoption.

B. KRS 278.010(3) extends to certain entities owning and operating an EVCS

1. A third party-owned EVCS may not meet the definition of a utility

Nothing in KRS 278 precludes a jurisdictional electric utility from owning and operating an EVCS for the public use, provided it is done in accordance with Commission regulations and supported by Commission-approved tariffs. Whether or not a third-party entity owning and operating an EVCS becomes a utility under Kentucky law requires an examination of existing

statutory definitions and ultimately depends on whether or not the EVCS is installed behind the utility electric meter.

It is indisputable that KRS 278.040 vests the Commission with jurisdiction and authority over utilities, as well as the power to enforce chapter 278 of the Kentucky Revised Statutes.[3] As such, if the entity owning and operating an EVCS meets the definition of a utility, and is not otherwise excluded by some other relevant statute, it is subject to the regulations of the Commission and Chapter 278.

KRS 278.010(3) defines an electric utility as follows:

> "Utility" means any person except a regional wastewater commission established pursuant to KRS 65.8905 and, for purposes of paragraphs (a), (b), (c), (d), and (f) of this subsection, a city, who owns, controls, operates, or manages any facility used or to be used for or in connection with:
>
> (a) The generation, production, transmission, or distribution of electricity to or for the public, for compensation, for lights, heat, power, or other uses;

Therefore, by statutory definition an entity operating an EVCS is a utility if it meets four specific criteria. The entity must be:

1) a "person"
2) that owns, controls, operates or manages any facility used or to be used for or in connection with the generation, production, transmission or distribution of electricity to or for the public,
3) for compensation,
4) for lights, heat, power, or other uses.

KRS 278.010(2) broadly defines a "person" as including natural persons, partnerships, corporations, and two or more persons having a joint or common interest.[4] Therefore, any entity that owns or operates an EVCS is considered a "person" as the term is defined in Kentucky, meeting the first criteria. As it relates to the third and fourth criteria, to meet the definition of a

[3] KRS 278.040
[4] KRS 278.010(2).

utility, the EVCS owner/operator must charge a fee (require some form of compensation) for providing light, heat, power, or other uses. The EVCS is providing power under the fourth requirement. Thus, if the EVCS operator is offering its power/charging service for free (no compensation), even if to the public, then the entity is not a utility. Similarly, a person who owns and maintains a personal EVCS for their own use, and is not offering it for public consumption, is not a utility. Clearly, individual home or business owners who have their own private EVCS for their own use are not included in the definition of a utility. This is particularly true if the EVCS is installed behind the utility's meter and the energy consumption is included with that of the home or business.

Whether an EVCS owner/operator qualifies as a utility depends upon the interpretation of the second criteria under KRS 278.010(3). The EVCS is clearly a facility as that term is used within KRS 278.010(3)(a). Whether or not the operator of the EVCS falls within the definition of a utility will turn on whether the facility is "used" for or "in connection with" the "generation, transmission or distribution of electricity to or for the public," for "compensation." Clearly, if the third-party EVCS owner/operator makes its charging available to the public for a price, then it is for compensation. However, unless the EVCS has its own independent source of generation and is disconnected entirely from the jurisdictional utility grid, (*e.g.,* an EVCS coupled with a solar panel installation and/or storage technology) it cannot be said that an EVCS is used either in connection with generation or transmission of electricity to the public as those terms are commonly defined within the industry.[5] Similarly, as long as the EVCS is not enabling the sale of electricity or

[5] *See e.g. Electric Utilities Cost Allocation Manual,* National Association of Regulatory Utility Commissioners, (January 1992); The NARUC Cost Allocation Manual describes the terms generation, transmission and distribution as those components are considered in utility rate-making. Generation is production of electricity. Id. *at* 4. Transmission Is defined as consisting of a "highly-integrated bulk power supply facilities, high voltage power lines and substations that transport power from the point of origin to (either its own generation or delivery points from other utilities) to load centers..." Id. at 7. In the event the EVCS does source its own generation and is not connected to the jurisdictional utility's distribution grid, the EVCS could meet the definition of a utility.

distribution of electricity back to the grid, it is not engaging in either generation or transmission of electricity. Whether third-party owned EVCS are considered to be used in connection with *distribution* of electricity to the public for compensation is not as clear. Such an analysis may indeed be fact specific and may require guidance from the Commission through a rule-making proceeding.

While KRS Chapter 278 does not contain a definition of the term "distribution," it does however, define a similar term, "existing distribution line," to include "all lines from the distribution substation *to the electric consuming facility* but does not include any transmission facilities used primarily to transfer energy in bulk."[6] An electric consuming facility is defined as "everything that utilizes electric energy from a central station source."[7] Similarly, the Commission's regulations, specifically 807 KAR 5:041 Section 1(5), defines a distribution system as "electric service facilities consisting of primary and secondary conductors, transformers, *and necessary accessories and appurtenances* for furnishing electric power at utilization voltage."[8] The National Association of Regulatory Utility Commissioners (NARUC) Cost of Service Manual describes distribution as facilities that:

> "connect the customer with the transmission grid to provide the customer with access to the electric power that has been generated and transmitted. The distribution plant includes substations, primary and secondary conductors, poles and line transformers that are jointly used and in the public right of way, as well as the services, meters, and installations that are on the customer's own premises."[9]

In practice, the utility's ownership of facilities ends at the utility meter. The meter measures the customer's energy consumption and is the necessary tool to ensure the utility is appropriately

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[6] KRS 278.010(6)
[7] KRS 278.010(8).
[8] 807 KAR 5:041 Section 1(5).
[9] *See e.g. Electric Utilities Cost Allocation Manual,* National Association of Regulatory Utility Commissioners, (January 1992) at 8.

and accurately compensated for the retail electric service it provides. Everything behind that utility meter is arguably part of the electric consuming facility, as that term is used in KRS 278.010(8).[10]

Under both relevant distribution-related definitions, if an EVCS is installed behind the utility meter, the "distribution" of electricity has ended and everything behind the meter would constitute the customer's electric consuming facility. This could include an EVCS, even if it is owned by a third party. The EVCS would be consuming electricity that is part of the customer's installation that has been metered and charged to the customer by the utility. In this instance, the utility is made whole under its tariffs as the electricity consumed has been metered and billed to the customer under the applicable tariffed rate. The EVCS is providing a non-regulated service, namely charging of a battery. This is no different than a public phone charging station that requires compensation for charging as is commonly in place at airports and other public venues. Therefore, if the third-party owned EVCS is connected to the local utility's distribution grid, metered, and paying the utility the appropriate tariffed rate for the electricity consumed, they are not a utility and are not providing retail electric service.

Nonetheless, there are circumstances where the owner/operator of an EVCS could itself be considered the electric consuming facility and would require its own meter, or else it would meet the definition of a utility and be subject to the Commission's jurisdiction. For example, if the EVCS is not installed behind the utility's meter, but instead is on a customer's premises in front of the meter, then the EVCS itself would have to be separately metered and the third-party owner must become a customer of the utility. The third-party owned EVCS must be a customer of the utility and cannot purchase its generation, transmission or distribution from any other entity but

[10] KRS 278.010(8); Electric-consuming facilities means everything that utilizes electric energy from a central station source.

the local utility in whose service territory the EVCS is located, otherwise it would be in violation of Kentucky's certified utility territory act and would indeed be making a retail sale of electricity.

There is some ambiguity under Kentucky law that merits consideration whether clarification is necessary. The definition of a utility is broad enough that the Commission could determine that any entity owning an EVCS, that is available for public use, and requires compensation for the public to use its service is engaging in distribution of electricity and meets the definition of an electric utility under KRS 278.010(3). If such is the case, absent express statutory exclusion, the EVCS owner and operator would thus be subject to the Commission's jurisdiction and must therefore abide by KRS 278 and other relevant and applicable chapters. An analogous situation lies in the General Assembly's treatment of entities that own and operate natural gas vehicle fueling stations. Like electricity, as a vehicle fuel, liquefied natural gas is an alternative vehicle fuel to gasoline. Similar, to the definition of an electric utility, the definition of natural gas utility is also set forth in KRS 278.010(3). Subsection (b) provides that a natural gas utility is a "person… that "owns, controls, operates, or manages any facility used or to be used for or in connection with" the "production, manufacture, storage, distribution, sale, or furnishing of natural or manufactured gas, or a mixture of same, to or for the public, for compensation, for light, heat, power, or other uses."[11] It is arguable under that definition that any entity that engages in the sale of compressed natural gas as a vehicle fuel to the public for compensation could constitute a utility under KRS 278.010(3)(b). However, to avoid such confusion, the General Assembly saw fit to enact KRS 278.508 to explicitly exempt the retail sale of natural gas as a vehicle fuel from regulation by the Commission. Presently no such explicit exclusion exists for EVCS.

2. Jurisdictional electric utilities could provide EVCS charging as a retail electric service.

[11] KRS 278.010(3)(b).

Under current Kentucky law, it is possible for existing jurisdictional electric utilities to directly provide EVCS charging services. The electric vehicle would be the ultimate electric consuming facility and EVCS would thus constitute a necessary accessory (or appurtenance) for furnishing power at a utilization voltage to the electric consuming facility, namely the electric vehicle. In this regard, the EVCS is no different than a utility-owned electric meter. This interpretation is supported by 807 KAR 5:041 Section 9, which in relevant part, requires that "all energy sold within the State of Kentucky shall be measured by commercially acceptable measuring devices *owned and maintained by the utility*, except where it is impracticable to meter loads, such as multiple street lighting, temporary or special installations, in which case consumption may be calculated."[12]

With a regulated utility offering, the EVCS itself is not the ultimate electric consuming facility. Rather, like a utility-owned meter, it is the facility used to measure the delivery of electricity to the ultimate electric consuming facility, namely, the electric vehicle itself. KRS 278.010(7) defines retail electric service as "electric service furnished to a consumer for ultimate consumption, but does not include wholesale electric energy furnished by an electric supplier to another electric supplier for resale."[13] Accordingly, an electric utility owning an EVCS for public consumption is a retail electric service supplier.[14] All electric utilities are retail electric suppliers, unless they are a municipal corporation.[15] Therefore, the utility could provide vehicle charging service directly to the public within its service territory provided it meets relevant requirements under Chapter 278 for providing reasonable and adequate service under KRS 278.030 and in

[12] 807 KAR 5:041 Section 9. *Emphasis added.*
[13] KRS 278.010(7)
[14] *See* KRS 278.010(4); Retail electric supplier means any person, firm, corporation, association, or cooperative corporation, excluding municipal corporations, engaged in the furnishing of retail electric service;
[15] KRS 278.010(4) expressly excluded municipal corporations from the definition of a retail electric supplier.

accordance with schedules and rates approved by the Commission as is allowed under KRS 278.160 and other relevant regulations.[16]

C. The Electric Territorial Boundary Act codified in KRS 278.016 through 278.018 limits the provision of retail electric service to existing electric utilities.

Irrespective of whether or not the owner and operator of an EVCS meets the definition of an electric utility, the Electric Territorial Boundary Act, and specifically, KRS 278.018 would serve to protect the established certified territories of Kentucky jurisdictional electric utilities and prohibit a third-party owned and operated EVCS from selling retail electric service in the defined service territory of another retail electric service supplier. KRS 278.018(1) provides in relevant part as follows:

> Except as otherwise provided herein, each retail electric supplier shall have the exclusive right to furnish retail electric service to all electric-consuming facilities located within its certified territory, and shall not furnish, make available, render or extend its retail electric service to a consumer for use in electric-consuming facilities located within the certified territory of another retail electric supplier; provided that any retail electric supplier may extend its facilities through the certified territory of another retail electric supplier, if such extension is necessary for such supplier to connect any of its facilities or to serve its consumers within its own certified territory. In the event that a new electric-consuming facility should locate in two (2) or more adjacent certified territories, the commission shall determine which retail electric supplier shall serve said facility based on criteria in KRS 278.017(3).

As previously described, retail electric service is defined under Kentucky law to include "electric service furnished to a consumer for ultimate consumption."[17] As a retail electric supplier, Duke Energy Kentucky, has the exclusive right to furnish retail electric service within its service territory. Moreover, just as no other retail electric service supplier may enter Duke Energy Kentucky's exclusive territory, so too is Duke Energy Kentucky precluded from entering into the

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[16] *See e.g.* KRS 278.030 which generally requires rates and classifications of services to be reasonable and service to be adequate, efficient and reasonable; and KRS 278.160, which requires utilities to file and maintain general schedules of rates and conditions of service that are approved by the Commission.

[17] KRS 278.010(7).

service territory of another retail electric service supplier except in certain defined situations.[18] The justification for the creation of geographic service areas is embodied in KRS 278.016 and is just as relevant today as it was when originally enacted in the early 1970s. Such geography boundaries are necessary to: 1) encourage orderly development of retail electric service; 2) avoid wasteful duplication of distribution facilities; 3) avoid unnecessary encumbering of Kentucky's landscape; 4) prevent waste of materials and natural resources; 5) provide for public convenience and necessity; and 6) minimize disputes between retail electric suppliers that could result in inefficiency and higher costs to consumers.[19] Therefore, under the plain reading of KRS 278.018, only Duke Energy Kentucky may offer EVCS as a retail electric service to the public in its own certified electric service territory. For a third party-owned EVCS to install facilities, the EVCS must either be installed behind the meter of a customer of the local utility whose certified territory the EVCS is located, or itself be a customer of that utility and must be providing a non-regulated charging service. The third-party owned EVCS cannot be a retail electric service provider and it cannot provide a retail electric service. Only the jurisdictional utility may do that.

III. CONCLUSION

The Commonwealth of Kentucky and the Commission should encourage the development of the EVCS market and consider opportunities for jurisdictional utilities to help facilitate such development. However, this development must be done in a manner that does not risk the reliability and adequacy of electric service to all customers. Regulated utilities must work with the Commission to ensure that there is an infrastructure to accommodate public EVCS and indeed direct utility involvement may be the path to ensuring the longevity and reliable infrastructure is

[18] KRS 278.018 permits a retail electric supplier to extend its facilities into the service territory of another if necessary to connect its own facilities or to serve customers in its own service territory.
[19] *See e.g.* KRS 278.016.

in place to support widespread electric vehicle adoption. While third-party owned EVCS, if installed in a traditional behind the utility meter manner and taking service from the jurisdictional utility whose service territory the EVCS sits may not rise to the definition of a utility under Kentucky law, there may be instances where, depending upon the type of installation and service provided that the utility threshold may be crossed. Clear rules should be developed for the protection of all stakeholders, including customers and utilities.

Respectfully submitted,

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