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February 26, 2019

RECEIVED

Gwen R. Pinson
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, KY 40602-0615

FEB 26 2019

PUBLIC SERVICE
COMMISSION

**RE: Public Comments from the Kentucky Office of Energy Policy on Commission
Jurisdiction over Electric Vehicle Charging Stations
Case No. 2018-00372**

Dear Ms. Pinson:

Enclosed please find and accept for filing the Kentucky Office of Energy Policy's public comments for Case No. 2018-00372 concerning the Commission's Jurisdiction over Electric Vehicle Charging Stations.

Should you have any questions regarding the enclosed, please contact me at your convenience.

Sincerely,

A handwritten signature in blue ink that reads "Rick Bender".

Rick Bender
Executive Director
Kentucky Office of Energy Policy

cc: Secretary Charles Snavely, Kentucky Energy and Environment Cabinet (via electronic mail)
John Horne, Kentucky Energy and Environment Cabinet (via electronic mail)

RECEIVED

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

FEB 26 2019

PUBLIC SERVICE
COMMISSION

In the Matter of:

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

COMMENTS FROM THE KENTUCKY OFFICE OF ENERGY POLICY

The Kentucky Office of Energy Policy ("Office" or "OEP") provides the following initial public comments in response to the November 29, 2018 order of the Kentucky Public Service Commission ("Commission") in this docket. In the order, the Commission solicited input from interested parties in order to conduct a formal review of the Commission's jurisdiction and regulatory oversight of electric vehicle charging stations (EVCS), including the fundamental question of whether the operation of EVCS could render the operator of an EVCS an electric utility under Kentucky Revised Statute 278.010(3)(a). Based upon the express language of KRS 278.010(3)(a), an EVCS would have to meet the following criteria to be a utility subject to the Commission's jurisdiction:

1. An EVCS must be a "facility used or to be used for or in connection with" the "generation, production, transmission, or distribution of electricity";
2. An EVCS must be a "facility" that provides electricity "for lights, heat, power, or other uses"; and
3. An EVCS must be a "facility" that provides electricity "to or for the public, for compensation."

As explained in more detail, the operation of an EVCS does not transform such an entity into an electric utility under KRS 278.

I. Introduction

The Kentucky Office of Energy Policy is housed within the Kentucky Energy and Environment Cabinet. The Office's mission is to support the utilization of all of Kentucky's energy resources for the betterment of the Commonwealth while protecting and improving our environment. The Office works to address energy policy with a common sense approach that ensures the Commonwealth thrives amid rapid changes occurring in the production, delivery, and use of energy.

The OEP applauds the Commission and the leadership it has exhibited in commencing this docket. Indeed, the regulatory debate began in California in 2009 around the utility role in mitigating grid impacts. By 2017, forty three (43) states plus the District of Columbia engaged in a total of 227 legislative and regulatory actions related to electric vehicles.¹ However, regulatory commissions have been split on the issues as evidenced by Missouri's recent ruling that Ameren had not demonstrated that EV charging stations needed to be regulated to protect the public and that they did not have the jurisdiction to regulate utility owned EV charging stations versus a Massachusetts ruling whereby the electric vehicle infrastructure proposal by Eversource Energy met the litmus test of being in the public interest, that is, meeting a need that was not likely to be met by the competitive EV charging market.² As explained in these comments, the OEP will

¹ https://nccleantech.ncsu.edu/wp-content/uploads/2018/06/2017_EV_execsummary_Final2-1-1.pdf

² Utilities and Electric Vehicles: Evolving to Unlock Grid Value Report, SEPA March 2018

navigate the regulatory debate as it relates to Kentucky's regulated utilities, customers across the Commonwealth, and the transportation industry as a whole.

The automotive industry has been and will continue to be a key contributor to Kentucky's economic growth. According to the Kentucky Cabinet for Economic Development, Kentucky's automotive sector encompasses over five hundred (500) businesses employing nearly ninety-five thousand (95,000) people. In addition, Kentucky ranks number one in terms of the production of cars, light trucks, and SUVs per capita. Automotive related exports last year totaled 5.5 billion dollars.³ Automotive assembly plants located in Kentucky include Toyota Motor Manufacturing, General Motors, and Ford Motor Company.

In January of this year, GM announced a collaboration with EVgo, ChargePoint, and Greenlots, three of the nation's leading electric vehicle (EV) charging networks, to enable access to the largest collective electric vehicle charging network in the United States, including more than 31,000 charging ports.

"GM believes in an all-electric future, and this is a significant step to make charging easier for our customers," said Doug Parks, General Motors vice president of Autonomous and Electric Vehicle Programs. "By collaborating with these three companies, we expect to reduce barriers to create a stronger EV infrastructure for the future. This is an important step toward achieving GM's vision of a world with zero emissions."⁴

³ https://www.thinkkentucky.com/Existing_Industries/Automotive.aspx

⁴ <https://media.gm.com/media/us/en/gm/news.detail.html/content/Pages/news/us/en/2019/jan/0109-charging.html>

Similarly, according to Bloomberg, Ford Motor Co. will more than double spending on electrified vehicles, amplifying its investment in a segment that the auto industry sees growing from what's now just a fraction of the market. The carmaker will invest \$11 billion bringing 40 electrified vehicles to market by 2022, Jim Farley, president of global markets, said during a presentation at the Detroit auto show.⁵

Toyota; however, has been slower to move to an all-electric car future instead signaling continued investment in traditional hybrid (electrified) vehicles and zero-emission hydrogen fueled vehicles. Yet, the automaker has positioned itself for electrified vehicles future as evident via a recent announcement where Toyota and Panasonic confirmed a wide-ranging new battery joint-venture to manufacture and sell battery cells for electric vehicles.⁶

Aside from the automotive sector, Kentucky's transportation landscape provides further insights into potential impacts of vehicle electrification. Logistics and distribution are yet another key economic development area in the state. Kentucky's borders are within a one-day's truck drive or 600 miles of over 65 percent of the nation's population, personal income and manufacturing establishments. Kentucky is located at the center of a 34-state distribution area in the eastern United States, which facilitates the distribution of goods and materials to a massive industrial and consumer market. Kentucky is served by an exceptional highway system of 20 interstates and major highways, including

⁵ <https://www.bloomberg.com/news/articles/2018-01-14/ford-doubling-electric-vehicle-spending-to-11-billion-by-2022>

⁶ <https://electrek.co/2019/01/22/toyota-panasonic-wide-ranging-new-battery-partnership-electric-vehicles/>

Interstates 24, 65, 75, 64, 71 and 69, four interstate bypass loops, and a network of limited-access state parkways.⁷

This is particular interest given the initiative by the Federal Highway Administration (FHWA) to establish alternative fuel corridors through the United States. With the designation of alternative fuel corridors, FHWA is establishing a national network of alternative fueling and charging infrastructure along national highway system corridors. In 2016, Kentucky had no listed electric vehicle ready or pending corridors. By 2017, Kentucky corridors that were designated as “ready” and “pending” included Interstates in whole or parts of 65, 71, 75, 265, and 275.⁸

In terms of market movements in the logistics and distribution sectors, in July of 2018, UPS announced that it was working with Thor Trucks, an L.A. startup, to develop and test a fully electric delivery truck. The company also announced a partnership with Workhorse, based in Ohio and Indiana, to design and deploy new electric trucks that will be no more expensive than conventional trucks. Late in 2017, UPS preordered 125 electric semis from Tesla, the largest publicly-announced reservation of the vehicles.⁹ FedEx has followed UPS' lead in ordering 20 Tesla semi electric trucks to add to its freight fleet along with the expansion of its fleet to add 1,000 Chanje V8100 electric delivery vehicles and leasing 900 from Ryder System, Inc. Walmart and PepsiCo Inc. are also among customers who have placed orders for Tesla semi electric trucks.

⁷ <https://thinkkentucky.com/kyedc/pdfs/LogisticsQuickFacts.pdf?07112017>

⁸ https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/all_corridors/

⁹ <https://www.fastcompany.com/90229460/your-ups-deliveries-may-soon-arrive-in-electric-trucks>

However, the success of these vehicles in delivery in urban areas versus long-haul transport remains uncertain. In urban areas, electric vehicles offer high benefits due to the combination of short range, lower maintenance and lower social cost due to pollution. Long haul trucking, by contrast, requires a 300- to 500-mile electric battery range, as well as a much higher price tag.¹⁰ Tesla has already stated it is planning a high-speed truck Megacharger that, in about 30 minutes, would give a battery enough charge to travel 400 miles.¹¹

Other than logistics, the Kentucky Center for Statistics estimates that there are nearly 2 million commuters across the Commonwealth. As seen from the map below in Figure 1, there are radial hubs throughout the Commonwealth as citizens commute to work and from home. This highlights the importance of both residential charging capabilities as well as workplace charging capabilities. In fact, the Electric Vehicle Infrastructure Projection Tool (EVI-Pro) Lite¹² estimates that the two largest needs for electric vehicle charging would be workplace charging followed by public charging facilities in order to support normal commuting and driving behaviors.

¹⁰ <https://www.supplychaindive.com/news/fedex-fleet-expansion-change-electric-vehicle/542697/>

¹¹ <https://www.bloomberg.com/news/articles/2018-08-22/electric-trucks-facing-long-road-to-unseat-diesel-engines>

¹² <https://afdc.energy.gov/evi-pro-lite>

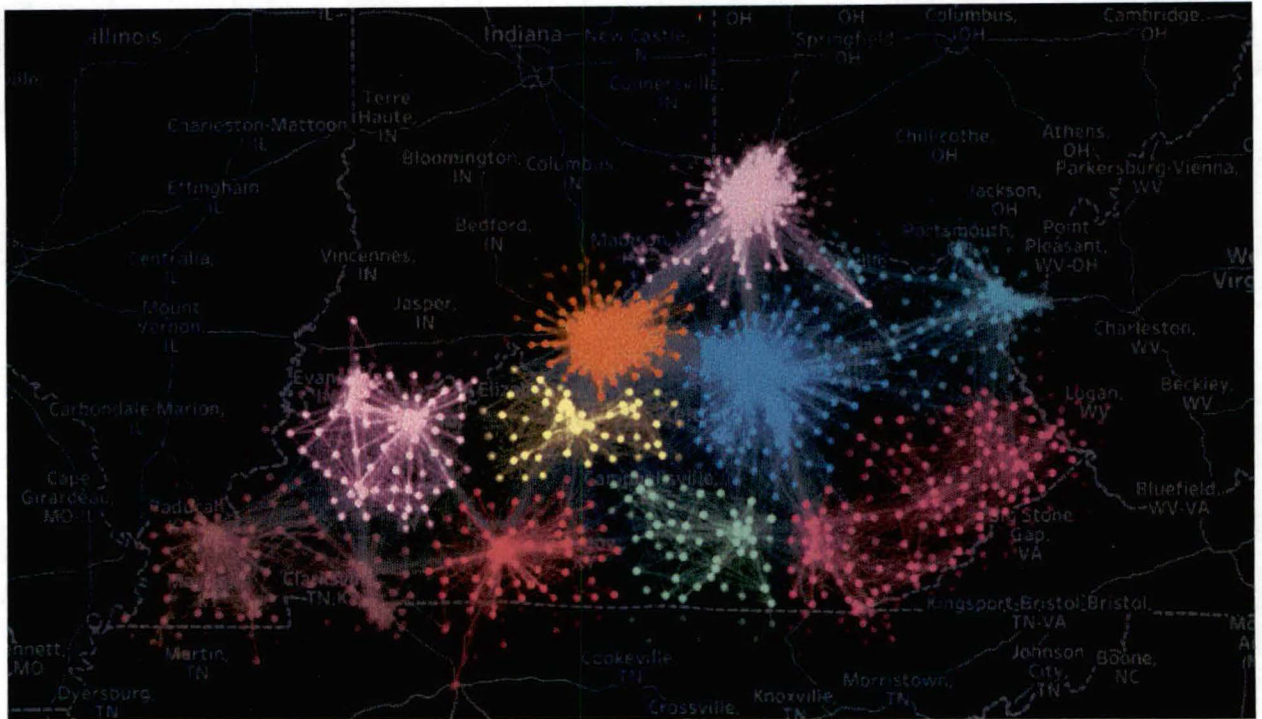


Figure 1: Kentucky Commuting Patterns by Workforce Area

It is apparent that electrification is a significant force shaping the transportation sector today. As export markets have enacted policies to promote electric vehicle adoption, Kentucky, as a center of automotive excellence, is positioned to see the benefits of vehicle electrification even before the demand is fully developed in the United States. For consumers, electrification benefits are highlighted by the fact that electricity remains the lowest cost fuel available as seen in Figure 2 from the Alternative Fuels Data Center¹³. However, for vehicle electrification to reach its true potential, the charging infrastructure must be enhanced.

¹³ <https://afdc.energy.gov/data/10326>

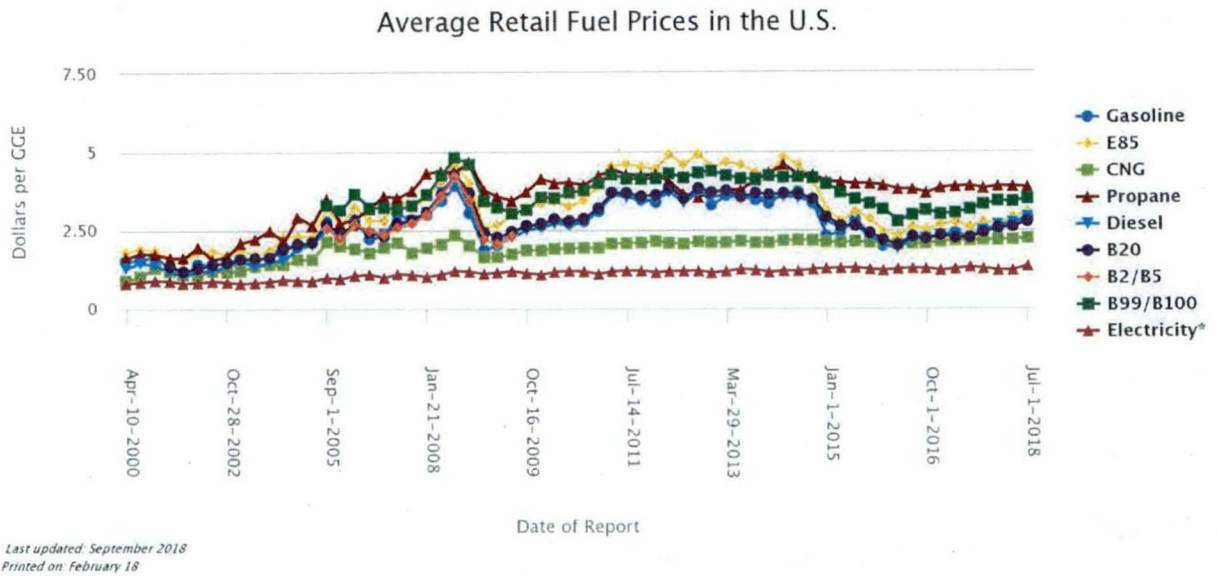


Figure 2: Average Retail Fuel Prices in the U.S.

The business case for EVCS remains challenging and introduces risk into this business case, as market entrants face the proverbial chicken-and-egg situation. The rapid pace of technology advances both within the automotive and charging space provides additional risk and uncertainty to market entrants. EVCS operators want more electric vehicles on the road to support their investment, while users of electric vehicle technology (or those considering it) want more visible infrastructure to relieve any concern they might hold that a battery will become depleted before they reach their intended destination or a place to charge—what is frequently referred to as "range anxiety."

Through its action in this proceeding, the Commission plays a pivotal role in providing clarity to existing and new automakers in Kentucky as well as potential investors in Kentucky's economy on the transition path to a future electrified transportation sector. While recognizing the critical role Kentucky's regulated utilities play in this transition, in the end, the development of infrastructure needs to be pursued by all entities capable of and interested in doing so.

II. An EVCS must be a "facility used or to be used for or in connection with" the "generation, production, transmission, or distribution of electricity"

A cursory look at the emphasized words might elicit a reaction that an owner/operator of *any* device that transmits or distributes electricity is a utility. However, in practice, electricity suppliers deemed within its scope, and thus regulated by the Commission, have been full retail service providers who were and are engaged in the business of generating, transmitting and distributing electricity to satisfy all of the retail electricity needs of all of their customers.

Contrary to the above, an EVCS provides a unique and limited service, a safe point at which an electric vehicle can interface with the existing electric grid. The EVCS allows for electric current (which the EVCS did not generate, transmit or distribute) to pass through the charging cable to the vehicle. One might even say that electric vehicles are to EVCS what portable appliances are to outlets. However, the dependent interface between the appliance and the outlet does not render the outlet a utility under KRS 278.

The fact that electricity is a constituent of the service is nothing extraordinary. Sectors across the economy frequently make electricity available as part of the services they offer without concern that doing so transforms them into a regulated entity. For example, airports in the Commonwealth similarly make the electricity supplied to it as a retail end-user available not only to the passengers who frequent the airport but also the airlines that operate out of the facility. Military bases such as Ft. Knox¹⁴ and the Bluegrass Army Depot¹⁵ have privatized their own electric distribution systems while taking retail

¹⁴ https://www.army.mil/article/145354/twenty_years_of_energy_investments_pay_off_for_fort_knox

¹⁵ http://www.rfpdb.com/view/document/name/Utilities-Privatization-of-the-electric-utility-systems-at-Fort-Campbell-and-Blue-Grass-Army-Depot%2C-KY_SPE600_15_R_0802

service from a regulated Kentucky utility. Similarly, colleges and universities across the Commonwealth take the electricity supplied to and paid by them as the retail end-users and make it available to students in dormitories and students and faculty across campus. Yet the Commission has never viewed such distribution systems within the scope of KRS 278.

III. An EVCS as the end use customer

While the EVCS does represent a new form of end-use electric customer activity, the EVCS nevertheless remains the end-use customer. From the perspective of the electric vehicle, the EVCS as the end-use consumer makes sense. Electric vehicles by nature are mobile. They lack a fixed point of delivery for utility service. They require intermediaries with the existing system in order to access the electrical grid.

Situations where an end-user makes utility commodities available to the public (or a subset thereof) without becoming utilities themselves occur in non-electric contexts as well. In Kentucky, for example, the provision of natural gas as a motor fuel has been exempted from PSC regulation. In KRS 278.505, “the rates, terms, and conditions of service for the sale of natural gas to a compressed natural gas fuel station, retailer, or to any end-user for use as a motor vehicle fuel, shall not be subject to regulation by the Kentucky Public Service Commission.” In section (2), it further states, “The transportation, distribution, or delivery of natural gas to any compressed natural gas fuel station, retailer, or any end-user for use as a motor vehicle fuel, shall continue to be subject to regulation by the Kentucky Public Service Commission.” It is clear that similar comparisons can be made to the electricity industry. Using the same logic, the transmission, distribution of electricity to an EVCS, would continue to be subject to regulation by the Kentucky Public

Service Commission. However, the service of electricity to an end user as motor vehicle fuel should be exempt from regulation by the PSC. The retail electric utility customer is therefore the electric meter associated with the EVCS and not the EVCS itself nor the patrons of the service provided by the EVCS.

KRS 278.018 stipulates that Kentucky's regulated retail electric suppliers are granted the exclusive right to furnish retail electric service to all "electric consuming facilities" located within its certified territory. Referring to the definition in KRS 278.010, an "Electric-consuming facilities" means everything that utilizes electric energy from a central station source. Relying on this definition, an electric vehicle taking a charging service from an EVCS is not an electric consuming facility. Rather, the electric energy generated from the central station and transmitted and distributed to the EVCS is within the rights granted to the retail electric supplier and subject to Commission oversight.

IV. Necessity and competition

In addition to EVCS not falling within the "facility used or to be used for or in connection with" the "generation, production, transmission, or distribution of electricity", EVCS do not offer charging services "to or for the public", as that phrase is commonly understood in utility regulation.

It is a general consensus among utility regulators that there are two distinguishing features of an enterprise for it to be considered a public utility and subject to regulation. One, is that the type of service supplied by the utility has special public importance or necessity of the service. The second being where the utility enterprise has possession of technical characteristics that lead to a natural monopoly or at least ineffective forms of

competition. Therefore, necessity and monopoly are almost always prerequisites to public utility status and utility regulation¹⁶.

Although potentially important to the state's economy, the EVCS are not a paramount industry—like the generation, transmission and distribution of electricity, natural gas, or water—upon which the prosperity of the entire state in large measure depends. EVCS are not essential to the general public as to justify utility status and corresponding regulation by the Commission. In fact, data from the Kentucky Transportation Cabinet (KYTC) on electric vehicle registrations illustrate that electric vehicle ownership is far from being a necessary public service. In 2016, ~0.03% of light duty vehicles in Kentucky were plug-in electric vehicles. However, the sector is exhibiting rapid growth. From 2016 to 2017, electric vehicles grew 44% according to registration data from KYTC.

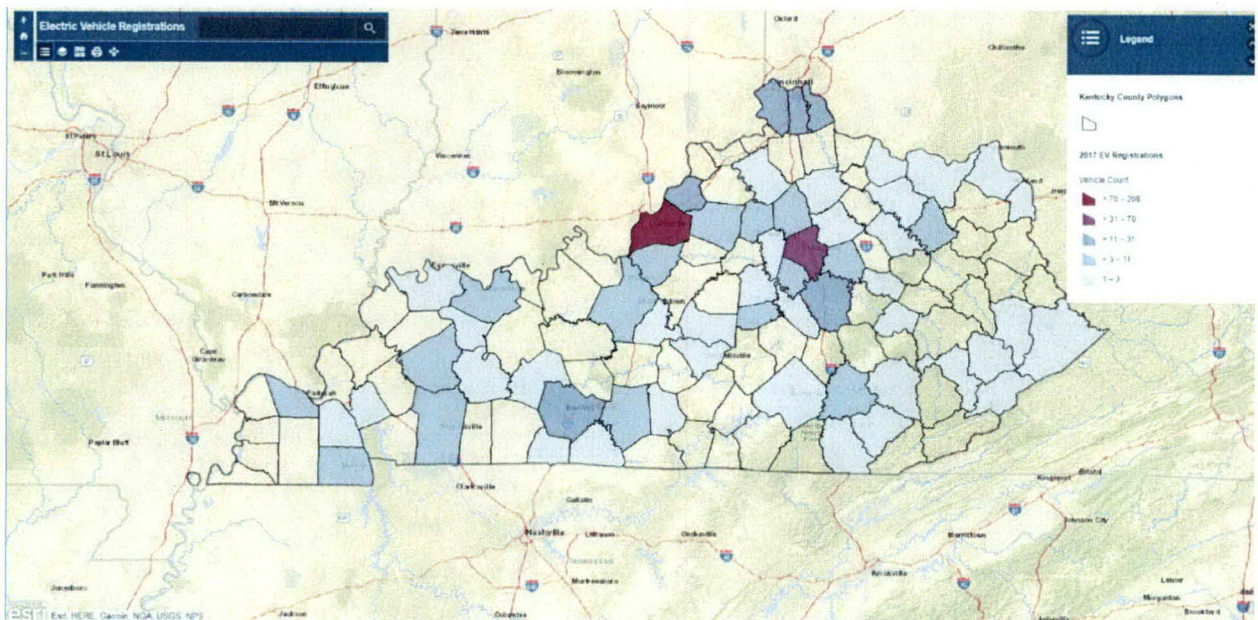


Figure 3: 2017 Electric Vehicle Registration Data from KYTC, map produced by the Kentucky Office of Energy Policy

¹⁶ Principles of Public Utility Rates by James C. Bonbright

As further evidenced, the map in Figure 3 also illustrates that electric vehicles are primarily an urban phenomenon in Kentucky thereby highlighting the divide between rural and urban customers as well as challenges to adoption by low to moderate income families.

Forecasting electric vehicle growth as well as required infrastructure induces additional uncertainty to EVCS being deemed a public necessity. This uncertainty supports the assertion that EVCS is not a public necessity and is best left to private sector development. Figure 4 is an illustrative example of the unknown as it relates to predicting the timing and adoption of electric vehicles in Kentucky. To produce the projections in Figure 4, the Office of Energy Policy utilized variations of the Bass diffusion model, a mathematical model often used to forecast the diffusion of innovative technologies. The OEP chose this model for its authoritative nature and its ability to be deployed with scarce data. One only needs a snapshot of a technology's diffusion into a given area and estimates of the model's critical parameters to produce forecasts.

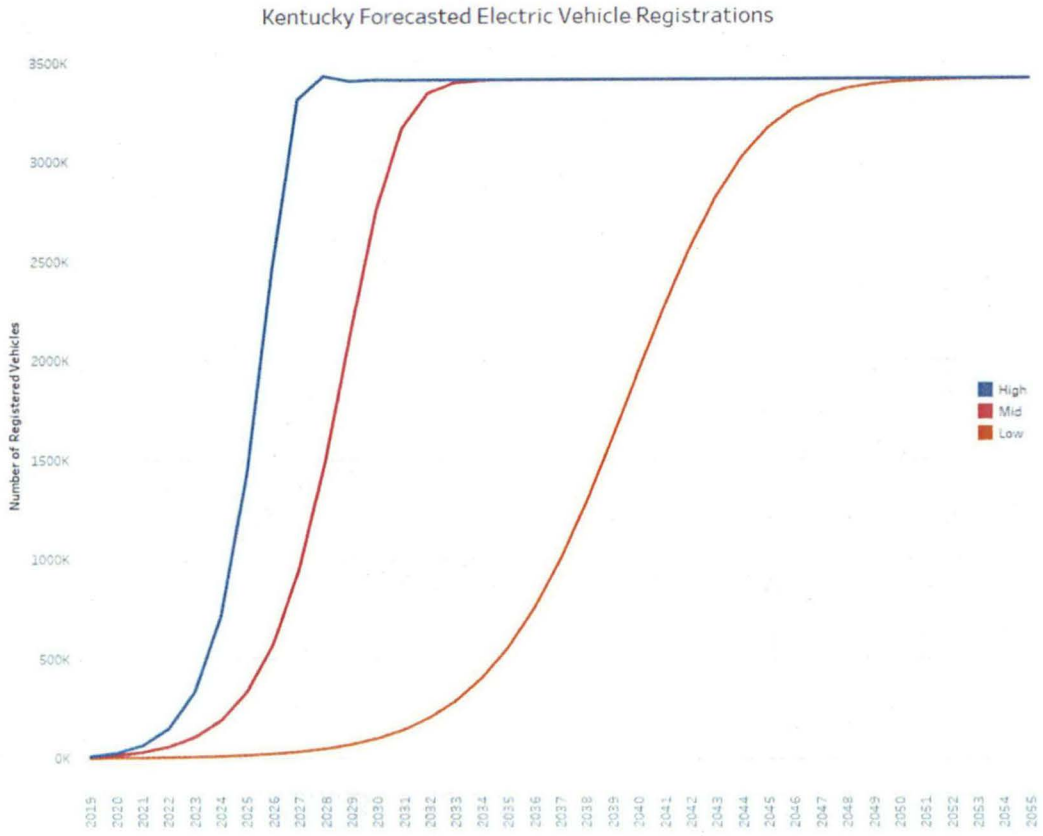


Figure 4: Bass Model Runs of EV Adoption

What can be observed from this exercise is that forecasting the adoption of electric vehicles is a complex problem and the standard Bass model may provide too much uncertainty to provide an accurate picture of the future. More granular data and more sophisticated modeling methods, ones that include other factors like fuel prices and age of vehicles, may be required to arrive at robust and accurate results; thereby, illustrating the work that needs to be done. Uncertainty remains a key issue with EVCS and recognizing that uncertainty is not an issue that is best solved by regulated utilities but rather by the market that is suited to undertake the risk associated with servicing this industry subset.

Perhaps more importantly, EVCS are not a natural monopoly or an enterprise dependent upon the granting of public utility status and regulation. The rapid pace of technology changes of EVCS, as well as the involvement of other market participants, does not support the assertion that EVCS should be regulated as a natural monopoly subject to utility regulation.

As an example, Utah-based WAVE¹⁷ offers wireless EV charging that's already being used by six transit agencies nationwide. Additionally, EVCS are not limited to being grid connected and reliant on electric utilities. Envision Solar, a California-based energy innovation company, produces the EV ARC — or autonomous renewable charger. This transportable, off-grid charger is an alternative when trenching and permitting drive up the cost (and time) of charging infrastructure.

Making the case even more so that an EVCS is not a utility, the Mobi Charger by Freewire Technologies can move to the vehicle so EVs in any spot can access charging. The Mobi Charger is the mobile energy storage unit that delivers rapid EV charging services. Unlike permanent EV charging equipment, the Mobi Charger moves between vehicles to provide flexible EV charging. With the Concierge Charging Service, all EV drivers have access to the FreeWire AMP EV Charging app, request a charge and make payments through the app.

Recently, the U.S. Department of Energy (DOE) announced, in 2018, cost-shared research projects focused on batteries and vehicle electrification technologies. DOE seeks to lower the charge times to 15 minutes or less by 2028 by increasing charging power levels up to 400 kW. The agency also wants to reduce battery pack costs to under

¹⁷ <https://waveipt.com/>

\$100/kWh and to increase range to over 300 miles.¹⁸ Couple this with projections by the Energy Policy Simulator that electric vehicles will make up to 65% of new light duty vehicle sales by 2050 and that sales could reach up to 75% in the event of high oil prices or decreasing storage technology cost.¹⁹

The market forces at work and absence of a natural monopoly are further highlighted in a recent announcement by Shell²⁰, a traditional petrochemical company, to begin offering electric vehicle charging services in Europe. While not in the United States, it is the signal, by what is commonly thought of as a traditional fuels company, that electric vehicles are expected to play an increasingly important role in transporting people and products and that a variety of fuels, automotive, and transportation industry participants will meet the changing needs of electric vehicle drivers – at home, at work or on the road.

All of these examples support the fact that technological innovation around EVCS is changing rapidly, driven by markets and competition, resulting in the conclusion that EVCS are not well suited for the traditional long term infrastructure planning and investment conducted by regulated utilities, especially where the risk of technology adoption and success is borne by customers.

V. The Importance of the Regulated Utility in Transportation Electrification

As discussed further, Kentucky's regulated utilities will serve an important role in facilitating the adoption of electric vehicles and the development of EVCS infrastructure. These efforts will necessarily involve the Commission's oversight as well as Kentucky's

¹⁸ <https://www.utilitydive.com/news/15-minute-charge-for-a-300-mile-range-doe-moves-to-boost-evs/522653/>

¹⁹ <https://www.forbes.com/sites/energyinnovation/2017/09/14/the-future-of-electric-vehicles-in-the-u-s-part-1-65-75-new-light-duty-vehicle-sales-by-2050/#71fb84cce289>

²⁰ <https://www.shell.com/energy-and-innovation/new-energies/electric-vehicle-charging.html>

regulated utilities' longstanding policy of encouraging economic development activities across the Commonwealth. Such strategic initiatives have and could take many forms, including pilot programs, incentives and rate schedules.

The Commission has already recognized the need for EVCS and is aware of existing EVCS pilots ongoing by Kentucky's regulated utilities, specifically Louisville Gas & Electric Company (LG&E) and Kentucky Utilities Company (KU).²¹ In that order, the Commission stated:

"There is a need in the Commonwealth for a developed infrastructure of electric vehicle charging stations to serve the growing number of electric vehicle owners."

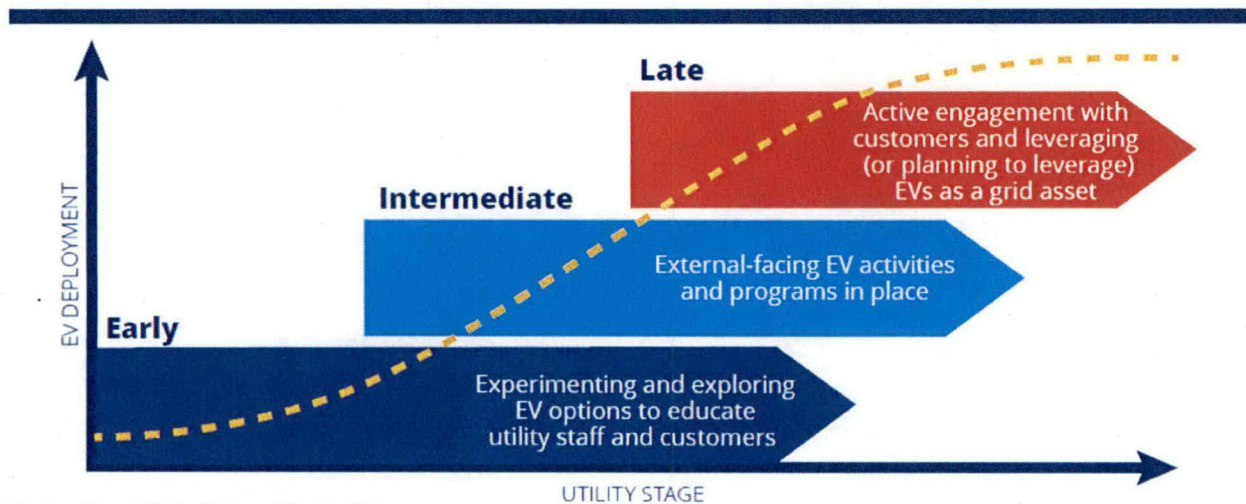
Recognizing further that the proposal, which established a self-sustaining program, was "a strong first step in achieving that goal."

The Commission was careful to emphasize that the program would have no effect on the overall rates of the two utilities. Additionally, in 2018, Duke Energy Kentucky partnered with Nissan to offer customers a special incentive of \$3,000 off MSRP toward a New LEAF. In 2019, LG&E\KU followed suit, noting that the offer and rebate is made and administered solely by Nissan but highlighted the essential partnership between manufacturer and utility.

Taking a look at regulated utility websites across the Commonwealth, there is no doubting the importance Kentucky's regulated utilities play in raising awareness, educating, and designing smart rates to support EVCS. All of Kentucky's regulated utilities in some way are providing education and outreach to customers relating to electric vehicle. East Kentucky Power Cooperative launched a new electric vehicle campaign in

²¹ https://psc.ky.gov/agencies/psc/press/042016/0411_r01.PDF

2018 touting how “co-ops are helping members who’ve expressed interest to make informed decisions.”²² Indeed, as seen in Figure 5, one could conclude that Kentucky’s regulated utilities have already engaged in activities considered to be “intermediate stage” development contrary to the current adoption rates in Kentucky which would suggest “early stage” development activities²³.



Source: Smart Electric Power Alliance, 2018.

Figure 5: Utility Stages for EV Integration

However, utility involvement in EVCS deployment remains under Commission jurisdiction under certain conditions. To the extent that the regulated utilities in Kentucky invested in EVCS or had expenses associated with EVCS and sought to recover those expenditures from customers, the appropriateness of cost recovery would be within the jurisdiction of the Commission, just as any other cost that is included in retail cost of service.

The importance of the utility in EVCS development is supported by conclusions reached by Electrify America’s National Zero Emission Vehicle (ZEV) Investment Plan.

²² <https://www.kentuckyliving.com/energy/future-of-electricity/the-future-is-electric>

²³ Smart Electric Power Alliance, “Utilities and Electric Vehicles: Evolving to Unlock Grid Value”

Most notably the largest EVCS infrastructure learning lab, Electrify America, over a 10-year period ending in 2027, will invest \$2 billion in ZEV infrastructure, access, and education programs in the United States²⁴.

The Cycle 2 Investment plan specifically speaks to lessons learned regarding state and utility environment for EVCS.

“To date, utilities across the U.S. have been crucial partners in deploying their distribution systems to bring Electrify America’s charging network to drivers.... An EV-focused utility environment, with utility infrastructure support (such as make-readies), DCFC [direct current fast charge] specific energy rates, and lower or non-existent demand charges, can have a significant impact on the economics of the station. In addition, streamlined utility processes can accelerate site construction and dramatically lower both capital and operating costs.”

In Kentucky, Electrify America has charging stations in Paducah, Bowling Green, Williamsburg, and Georgetown whereby customers can pay for charging services.²⁵ This only represents a few of the hundreds of EVCS already deployed across the Commonwealth that are providing charging services with no data on if monetary transactions are occurring.²⁶

Additionally, the utility environment referenced by Electrify America points to the importance and the challenges of rate structures that remains within the purview of the Commission. The Collaborative Study Regarding Electric Bus Infrastructure and Rates by LG&E/KU in 2017 committed “to fund a study concerning economical deployment of

²⁴ <https://www.electrifyamerica.com/our-plan>

²⁵ <https://www.electrifyamerica.com/locate-charger>

²⁶ <https://www.plugshare.com/>

electric bus infrastructure in the Louisville and Lexington areas, as well as possible cost-based rate structures related to charging stations and other infrastructure needed for electric buses.”²⁷

Moving forward, the rate structures and utility programs within the Commission’s jurisdiction relating to EVCS deployment become critical to fostering the market-driven advancements. Citing the Smart Electric Power Alliance’s *Utilities and Electric Vehicles: Evolving to Unlock Grid Value Report*:

“EV regulatory filings tend to be clustered in certain states and regions....Regulatory uncertainty also makes replicating programs between utility service territories more challenging—clearly defining and understanding the utility role in the development of EV initiatives could help reduce such constraints.”

One observation is clear—that utilities can best position themselves for the rapidly evolving EV landscape through lessons learned from the growth rate and policies around distributed generation to peer exchanges and collaboration with other utilities and the broader industry as a whole. The Commission is also positioned to learn from other state Commissions such as Minnesota around EV tariffs design and implementation and other states wrestling with demand charges and metering for EV infrastructure. In the end, utilities in Kentucky and policymakers will need to research and track a wide range of issues in the coming years relating to electric vehicle adoption, technology and infrastructure needs and impacts.

²⁷ [https://psc.ky.gov/pscecf/2016-00370/derek.rahn%40ge-ku.com/04192017104621/3-Stipulation and Recommendation.pdf](https://psc.ky.gov/pscecf/2016-00370/derek.rahn%40ge-ku.com/04192017104621/3-Stipulation%20and%20Recommendation.pdf)

VI. Conclusions

It is the belief of the Kentucky Office of Energy Policy that EVCS should not be subject to regulation as a utility as defined in KRS 278.010(3)(a), as traditional market forces will adequately guide its development and expansion across the Commonwealth. For this reason, it is important for the Commission to recognize the crucial role that Kentucky's regulated utilities, other electric suppliers and manufacturers play in bridging the gap on range anxiety and other electric vehicle issues, primarily through strategic pilots and rate design that help instill confidence in those who would readily transition to electric vehicle ownership.

In all cases, however, the goal of any initiative should be to advance programs that will benefit all customers by encouraging development of an industry central to the state's economy. The development of the EVCS market into one that is a thriving, market-driven environment will result in benefits to all customers across the Commonwealth by potentially stabilizing or lessening electricity load declines. This development; however, hinges on heightened scrutiny as it relates to rates and policies designed to support and/or spur EVCS growth.

By no means are Kentucky's regulated utilities or the Commission solely responsible for supporting transportation electrification in Kentucky. By in large, the issue of transportation electrification crosses federal, state, and local jurisdictions and remains an exercise in public policy evaluation.²⁸ Market forces and technological changes necessitate public and private sector partnerships in the transition to an electrified transportation sector. While regulated utilities in Kentucky play a pivotal role in this

²⁸ https://www.naseo.org/data/sites/1/documents/publications/PEVPolicyRubricMethodology_NASEO.PDF

transition; the success of EVCS deployment should not be bound to Commission jurisdiction. The OEP again commends the Commission for its leadership in this important area, and appreciates the opportunity to provide public comments in that regard.



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