1	COMMONWEALTH OF KENTUCKY
2	BEFORE THE PUBLIC SERVICE COMMISSION
3	
4	In the Matter of:
5	
6	ELECTRONIC INVESTIGATION OF THE)AMENDMENTS TO THE PUBLIC UTILITY)REGULATORY POLICIES ACT OF 1978)Case No.AND ELECTRIFICATION OF)2022-00369TRANSPORTATION)
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$\overline{7}$	JOINT COMMENTS AND RESPONSES OF BIG RIVERS ELECTRIC
8	CORPORATION, JACKSON PURCHASE ENERGY CORPORATION,
9	<u>KENERGY CORP., AND MEADE COUNTY RURAL ELECTRIC</u>
10	COOPERATIVE CORPORATION
11	
12	Big Rivers Electric Corporation ("Big Rivers"), by counsel, and on behalf of
13	itself and its three member distribution cooperatives, Jackson Purchase Energy
14	Corporation ("Jackson Purchase"), Kenergy Corp. ("Kenergy"), and Meade County
15	Rural Electric Cooperative Corporation ("Meade County RECC") (collectively, the
16	"Members") respectfully submits these joint comments in response to the Public
17	Service Commission's (the "Commission") Order dated November 7, 2022
18	("November 7 th Order"), which directs each jurisdictional electric utility to file
19	responsive written comments. ¹
20	I. <u>INTRODUCTION</u>
21	In the November 7 th Order, the Commission directs each jurisdictional
22	electric utility to file written comments providing the following:

 $^{^1}$ November 7th Order at p. 3.

$\frac{1}{2}$	1. A report of existing measures used to promote electrification of the transportation sector by the electric utility.
3	2. Existing rate mechanisms that:
$\frac{4}{5}$	a. promote affordable and equitable electric charging options, if any;
$\frac{6}{7}$	b. improve customer experience with charging, if any; accelerate third-party investment, if any;
8	c. accelerate third-party investment, if any; and
9 10 11	d. appropriately recover the marginal costs of delivering electricity to electric vehicles and electric vehicle infrastructure, if any.
12 13	3. Appropriate measures to promote greater the electrification of the transportation sector. ²
$\begin{array}{c} 14 \\ 15 \end{array}$	II. <u>EXISTING MEASURES TO PROMOTE ELECTRIFICATION OF THE</u> <u>TRANSPORTATION SECTOR</u>
16	Simply stated, electric vehicles ("EVs") will increase customers' electric
17	usage. Recognizing this source of future increased revenue and load growth, Big
18	Rivers and its Members have taken steps to educate themselves regarding the
19	availability of charging options in their service areas, potential costs and rate
20	structures, and the needs of their members.
21	Data regarding EV use in rural Kentucky is limited, but Big Rivers estimates
22	that the current penetration of EV use in its service area is under one percent,
23	based on its own survey with self-reporting participants. Also, Electrify America
24	operates the only public (pay to charge) DC fast charger station in Big Rivers'
25	service area, with three DC fast-chargers located at a Walmart in Paducah. The

 $^{^2}$ November 7th Order at pp. 2-3.

lack of public charging stations is both evidence of the limited adoption of EVs in
 western Kentucky and an obstacle to more widespread adoption.

3 Because the adoption of EVs in western Kentucky has been slower than in other states, the resources that Big Rivers and its Members have contributed to EVs 4 $\mathbf{5}$ have likewise been constrained. However, Big Rivers and its Members expect the 6 demand for EVs and EV charging stations to increase, and we are taking steps to be 7a part of this expansion. Big Rivers and its Members are working with the 8 Kentucky Transportation Cabinet on its Electric Vehicle Infrastructure Deployment 9 Plan and have identified sites for charging stations, and have been part of several 10 industry working groups attempting to identify funding for measures to promote the 11 electrification of the transportation sector. Additionally, Big Rivers has installed 12EV charging stations for employees at its new headquarters in Owensboro, and Big 13Rivers is working with the City of Owensboro to potentially install public charging 14stations around the new building.

15

III. EXISTING RATE MECHANISMS

16 Neither Big Rivers nor its Members currently have rate mechanisms specific
17 to electric vehicles. Electrify America purchases power for its charging station
18 under Jackson Purchase's Schedule-D tariff, which is applicable to commercial and
19 industrial customers with a maximum load of between 25 kW and 3,000 kW.

3

 $\frac{1}{2}$

IV. <u>PROMOTING GREATER ELECTRIFICATION OF THE</u> TRANSPORTATION SECTOR

3 Big Rivers and its Members are strong proponents of EV adoption in our service areas. However, EV loads are significant and have the potential to 4 overwhelm the distribution and transmission grids if not managed over time. $\mathbf{5}$ 6 Providing safe and affordable vehicle charging options that align with cost 7 causation principles will require that education and engagement for consumers and 8 technologies to improve grid capability and reliability match the pace of increasing EV ownership in western Kentucky. As EV charging at home and at public 9 10 stations increases, distribution and transmission planning, load forecasting, and 11 load management become more challenging. In addition to the increased usage of 12the distribution and transmission systems, off-peak home EV charging is expected 13 to change demand curves and could shift the time of peak demands. Efforts to 14promote electrification should also consider ways to mitigate these challenges. 15Additionally, promotion of the electrification of the transportation sector 16must be controlled and must consider the unique concerns of each utility's service 17area and its electric customers. Brian Sloboda, NRCEA's³ director of consumer

18 solutions, has explained, "Addressing the needs of electric transportation is not a

19 one size fits-all approach. Some communities will benefit from public charging at

20 parks, others need DC fast chargers on highways, and others won't have either need

³ NRECA = National Rural Electric Cooperative Association.

1	but could benefit from electric school buses." ⁴ In fact, there are significant
2	differences in community resources and member needs between Big Rivers'
3	Members' three service territories. Thus, the appropriate measures to promote EVs
4	for one Member may not fit the others' needs.
5	V. <u>CONCLUSION</u>
6	Big Rivers and its Members encourage the Commission to take a measured
7	approach to the electrification of the transportation sector, balancing the desire to
8	increase EV adoption with the need to maintain reliable, low cost systems.
9 10	Filed this 16 th day of December, 2022.
11	Respectfully submitted,
12	DIG DIVEDG ELECTRIC CODDODATION
$\frac{13}{14}$	BIG RIVERS ELECTRIC CORPORATION
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⁴ Derrill Holly, *Co-ops Are Working to Solve the EV Infrastructure Puzzle* (Feb. 28, 2022), *appearing on* Cooperative.com. A copy is attached hereto.

Co-ops Are Working to Solve the EV Infrastructure Puzzle (cooperative.com)

NEWS

Co-ops Are Working to Solve the EV Infrastructure Puzzle

Published February 28, 2022 **Author** Derrill Holly **Share**



Co-ops are working with state and federal agencies on incentives to address EV infrastructure needs such as wider availability of charging stations. (Photo By: Alexis Matsui/NRECA)

As carmakers roll out waves of new electric vehicle models and improved battery technologies begin to vanquish "range anxiety" among prospective EV drivers, one critical challenge remains: a significant lack of public charging infrastructure, especially in rural communities.

As of December 2021, there were just 113,000 charging ports available at 46,090 public charging stations nationwide. Analysts say that's far short of the number needed to keep pace with the projected expansion of the EV market.

"You're going to see the need to really invest in infrastructure over the next five to 10 years," said Brett Smith, director of technology for the Ann Arbor, Michigan-based Center for Automotive Research, noting that even current EV owners with home chargers are often not comfortable using the vehicles for longer trips. "They don't see the infrastructure out there. You're probably at some point going to need to make it seem like overinvestment, because you have to make the consumer comfortable."

That's where electric cooperatives are stepping in, working together and with state and federal agencies on several incentives to address infrastructure needs.

One such initiative, the <u>Community Approach to Vehicle Electrification</u>, was created this year by NRECA and several member co-ops to leverage the detailed knowledge of co-op staff about local needs to plan for vehicle electrification and charging infrastructure.

"This network of co-ops is interested in working with federal, state and local officials to ensure that their communities' needs are met," said Brian Sloboda, NRECA's director of consumer solutions. "The group currently represents over half of the states and 13 million co-op consumers."

The CAVE is a network of co-ops that has implemented or is planning to implement a variety of electric transportation programs. It provides an operational framework for co-ops seeking to partner with federal agencies, foundations and vendors on electric transportation solutions for rural America.

The co-ops are sharing lessons learned, working across state lines with each other and working with their state departments of transportation to identify solutions that are tailored for their unique communities.

"Addressing the needs of electric transportation is not a one-size-fits-all approach. Some communities will benefit from public charging at parks, others need DC fast chargers on highways, and others won't have either need but could benefit from electric school buses," said Sloboda. "The CAVE group is focused on ways to improve their quality of life in their local communities."

The federal government estimates that, eventually, some 500,000 public chargers will be needed nationwide, and \$7.5 billion from the <u>new infrastructure law</u> has been earmarked to help build a charging network along major highways and in rural areas. A new joint office operated by the Department of Energy and Department of Transportation is developing a grant program to help states and <u>local partners, including electric cooperatives</u>, develop public charging facilities.

"We see this as an opportunity to support tourism along the Chesapeake Corridor," said Leo Radkowski, special projects manager at Tasley, Virginia-based <u>A&N Electric Cooperative</u>. "We are currently going through the DOT toolkit to identify effective strategies for approaching our partner communities on the Eastern Shore."

A&N Electric Cooperative was among 17 NRECA member co-ops that sought funding under an EV infrastructure grant program in 2021, and Radkowski is hoping to use elements of his proposals to pursue funding included in the infrastructure bill.

"We're trying to offer solutions for addressing range anxiety in the areas between the Bay Bridge at Annapolis, Maryland, and the Harbor Tunnel at Norfolk, Virginia," Radkowski said. "Additional funding could allow us to develop a robust and comprehensive charging network."