BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

DIRECT TESTIMONY
OF
KIMBERLY H. WINSLOW

ON BEHALF OF
EVERGY METRO, INC., EVERGY KANSAS CENTRAL, INC.
AND EVERGY KANSAS SOUTH, INC.

IN THE MATTER OF THE APPLICATION OF EVERGY METRO, INC., EVERGY KANSAS CENTRAL, INC., AND EVERGY KANSAS SOUTH, INC. FOR APPROVAL OF ITS PHASE 2 TRANSPORTATION ELECTRIFICATION PORTFOLIO.

DOCKET NO. 25-EKCE-_____-TAR

I. INTRODUCTION AND OVERVIEW

Q. Please state your name and business address.

A. My name is Kimberly H. Winslow. My business address is 1200 Main Street, Kansas City, Missouri 64105.

Q. By whom and in what capacity are you employed?

A. I am employed by Evergy Metro, Inc., and serve as Senior Director, Energy Solutions for Evergy Metro, Inc. d/b/a Evergy Kansas Metro ("EKM"), and Evergy Kansas Central, Inc. and Evergy South, Inc., collectively d/b/a as Evergy Kansas Central ("EKC"), Evergy Metro, Inc. d/b/a as Evergy Missouri Metro ("Evergy Missouri Metro"), and Evergy

Missouri West, Inc. d/b/a Evergy Missouri West ("Evergy Missouri West") the operating utilities of Evergy, Inc. ("Evergy").

Q. On whose behalf are you testifying?

A. I am testifying on behalf of EKM and EKC (collectively the "Company").

Q. What are your responsibilities?

A. I lead Evergy's Energy Solutions team within the Community and Customer Solutions Division. I am responsible for developing and executing on Evergy's customer products and services strategy for demand-side management programs, distributed energy resources, customer renewables programs, beneficial electrification, home protection services, and retail solar programs. My team also supports planning and analytics pertaining to product development. In addition, my team is responsible for working cross-collaboratively with our Regulatory team on rates. I have a team of about 30 persons who are focused on product delivery to drive increased customer satisfaction, collaborate with customers on sustainable solutions, and develop programs to mitigate the customers' grid impact.

Q. **Please describe your education, experience and employment history.**

A. I graduated from Missouri University of Science and Technology with a Bachelor of Science degree in Mechanical Engineering in 1990. In 1994, I graduated from Rockhurst University with a Master of Business Administration degree. I began my career at Black & Veatch in 1990 as an equipment engineer in its Gas, Oil and Chemicals Division and then transferred to Black & Veatch's Management Consulting Division. As a project manager and consultant, I worked on various projects for electric, gas, water, and wastewater municipal and investor-owned utilities, ranging in scope from long-term

electric and natural gas demand and energy forecasts to regulatory matters such as cost of service, rate design, depreciation studies, and valuation studies.

In December 2007, I began my employment with Kansas City Power & Light ("KCP&L") as a Senior Energy Consultant working with KCP&L's large industrial customers. In 2009, I assumed the position of Manager of Energy Efficiency. In 2011, I transferred to our Generation Division as a Senior Quantitative Analyst. In September 2013, I began leading the Energy Solutions team, which at that time, included economic development, products and services, key accounts, and the business center teams. Since the merging in 2018 of Great Plains Energy, Inc. and Westar Energy, Inc. that created Evergy, Inc., my role has been focused solely on leading products and services. My current title is Senior Director of Energy Solutions. I am also a Professional Engineer in the state of Missouri.

Q. Have you previously testified in a proceeding at the Kansas Corporation Commission ("Commission" or "KCC") or before any other utility regulatory agency?

A. Yes. I have testified before both the KCC and the Missouri Public Service Commission.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to sponsor the September 2024 Evergy Transportation Electrification Portfolio Filing Report ("2024 Report") that is being filed concurrently with this testimony as **Attachment 1** to the Application.

Q. Please provide a summary of your testimony and explain how it is organized.

A. The following is a summary of my testimony and its organization:

- Section I is the Introduction and Overview.

- Section II provides an update on transportation electrification in EKC and EKM jurisdictions and related industry trends.
- Section III describes Evergy's role in the ongoing electrification of the transportation sector and provides an overview of how Evergy is evolving to meet the emerging requirements of this role.
- Section IV describes and explains the 2024 Report filed in this docket as **Attachment 1** to the Application.
- Section V sets out Evergy's request of the Commission in this docket.

Q. Do you have any exhibits with your testimony?

A. No.

II. TRANSPORTATION ELECTRIFICATION – STATUS AND TRENDS

Q. Please provide a status update of passenger and fleet EV adoption in EKC and EKM territories.

A. The number of EVs in Evergy's Kansas service territories is growing rapidly. For nearly a decade, the Electric Power Research Institute ("EPRI") has provided Evergy with periodic estimates of the EV population. According to EPRI, the passenger EV population was just under 15,000 at the end of 2023, with a compound annual growth rate ("CAGR") of 35% over the five-year period ending 2023.

Relative to passenger vehicles, adoption of larger EVs commonly used by fleets is considerably more nascent. At present, Evergy estimates these vehicles to number in the few hundreds (i.e. 200-300).

Q. What are Evergy's future expectations for EV adoption?

A. Based upon EPRI's forward-looking projections of EV adoption through the year 2050, the population of passenger EVs in Evergy's Kansas service territories is expected to grow 38% annually during the period 2025-2029. If realized, the passenger EV population would be nearly 100,000 at the beginning of 2030.

While the population of larger EVs will grow at a faster *rate* than passenger EVs during this period (68% CAGR vs 38% CAGR), the *number* of fleet EVs will remain relatively modest due to the very low starting point. Evergy currently expects about 2,700 fleet EVs within its Kansas service area by the beginning of 2030.

Q. As reported in media outlets, how do you respond to the recent slowdown in EV sales growth?

A. EV sales during the first half of 2024 increased about 7% over sales during the first six months of 2023. While this growth rate is certainly modest compared to historical rates, EPRI's medium projection for EV population growth in Evergy's Kansas service area remains quite strong, with an anticipated annual growth rate of 38% from 2025 to 2029. This projection reflects industry expectations that the current slowdown in sales growth is primarily due to short-term factors, such as relatively high interest rates and the current dearth of new EVs priced below $35,000[1]. The slowdown in sales is important to understand and consider, but it does not alter the need for Evergy's filing.

Q. What is the status of current Federal support for EVs?

A. The Biden Administration views EV manufacturing as a critical component of its strategy to enhance global competitiveness[2]. Furthering this strategy, the Infrastructure Investment

[1] https://insideevs.com/features/727272/cheap-evs-tesla-ford-kia/.
[2] https://www.energy.gov/articles/biden-harris-administration-announces-155-billion-support-strong-and-just-transition.

and Jobs Act ("IIJA") and Inflation Reduction Act ("IRA") include significant support for both EV adoption and the establishment of a robust domestic EV manufacturing supply chain "from mine to driveway".

As the EV-related programs pick up pace, there is growing evidence that the IRA and IIJA are achieving the strategic goals of expanding EV adoption and positioning the United States as a prime destination for EV-related investment[3]. For example:

- Manufacturers, spurred by over $23 billion in loans and grants from the IRA and IIJA, have announced plans for over $300 billion of domestic investment in EV and battery production.
- States including Kansas are utilizing funds from the National EV Infrastructure ("NEVI") program to establish statewide EV charging networks along major highway corridors[4].
- Consumers have benefited from over $1 billion in tax credits for purchasing new and used EVs.

Evergy's proposed filing is complementary to these efforts and not duplicative of Federal funding.

III. TRANSPORTATION ELECTRIFICATION – EVERGY'S ROLE

Q. How does Evergy view its role in the transition to an electrified transportation sector?

A. Put simply, Evergy's role is to manage this transition in its service areas such that transportation electrification benefits *all* Evergy customers.

From a cost perspective, there is increasing evidence that EV adoption:

[3] https://www.atlasevhub.com/data_story/u-s-expected-to-see-312-billion-invested-in-electric-vehicle-manufacturing/.
[4] KDOT awarded NEVI funding for six charging sites last January and is expected to announce a second round of awards by the end of this year (see https://ike.ksdot.gov/charge-up-kansas).

- has put downward pressure on electric rates throughout the country[5];
- will continue to apply downward pressure provided that future adoption is well managed via off-peak charging, targeted distribution upgrades, etc.[6]

The two program proposals included with this filing are vital elements of Evergy's broader efforts to ensure the incremental revenue from EVs exceeds the incremental cost to serve this load.

Over the longer term, Evergy and the electric utility industry in general expect EVs to contribute to grid reliability as a distributed energy resource with flexible charging and discharging capabilities.

Q. Can you speak more about Evergy's "broader efforts" to realize transportation electrification benefits to all customers?

A. Yes. Several coordinated efforts are underway across Evergy to ensure transportation electrification will benefit Evergy and our customers. While certainly not exhaustive, the following provides a high-level overview of key activities:

Resource Planning. Evergy incorporates EV load in its Integrated Resource Plan ("IRP") and beginning with the 2025 IRP update, Evergy's load forecasts will also incorporate more dynamic, granular projections for fleet electrification compared to years prior.

Grid Planning. Evergy has developed a propensity model that provides location-specific forecasts of future EV adoption across our service area. Going forward,

[5] See https://www.synapse-energy.com/sites/default/files/Electric%20Vehicles%20Are%20Driving%20Rates%20Down%20for%20All%20Customer%20Update%20Jan%202024%2021-032.pdf.
[6] https://www.publicadvocates.cpuc.ca.gov/press-room/reports-and-analyses/distribution-grid-electrification-model-findings.

this tool will inform decision making around the timing and design basis of local distribution grid upgrades. By leveraging this model, Evergy can strategically direct distribution grid investments to areas with the highest anticipated demand, ensuring efficient and effective resource allocation.

Grid Operations. In addition to the ongoing evaluation and implementation of Advanced Distribution and Distributed Energy Resource Management Systems ("ADMS" and "DERMS"), Evergy is deploying advanced tools that utilize Advanced Metering Infrastructure ("AMI") data and other sensors to increase Evergy's ability to promptly identify areas with increasing EV adoption.

Standards. Evergy is currently reviewing the appropriateness of sizing standards for electrical components potentially impacted by electrification. If necessary, identified standards will be updated to ensure long-term grid reliability.

Rate Design. Rate design is critical to encouraging "grid friendly" charging behavior. Evergy currently has a variety of time-varying (a.k.a. time-of-use "TOU") rates applicable to EV charging, including residential whole-home rates and separately metered rates for non-residential EV charging. Going forward, Evergy will continue to develop and refine rate designs to promote off-peak charging and align costs with cost causation.

Customer Products. This filing reflects Evergy's vision for a second phase of EV-related customer programs that builds upon the first phase of programs approved in the 21-320 docket. As detailed within this testimony and the 2024 Report, the two programs proposed in this filing are designed to minimize the costs and potential grid impacts of EV adoption.

Q. Can you elaborate on the programs approved in the 21-320 Docket?

A. Yes. The Commercial EV Charger Rebate program was approved to provide rebates to non-residential customers seeking to install charging stations for public and/or workplace use. A budget of $10 million was approved by the KCC, with $1.6 million of that amount to be targeted to areas that were underserved with respect to EV charging access. During the 5-year program period ending in early 2027, the budget can be increased to $15.4 million if certain conditions are met, most notably full subscription of the underserved budget allocation.

The Residential Customer EV Outlet Rebate program provides eligible residential customers with a rebate towards the cost of installing a dedicated 240-volt ("Level 2") circuit for EV charging. The rebate is $500 if enrolled in a TOU rate; otherwise it is $250. The speed of Level 2 charging is such that the typical EV driver only needs to charge for one to two hours each night. The brief duration of most Level 2 charging sessions presents an opportunity to optimize session timing based on cost and/or grid considerations, which is the fundamental aim of the proposed Residential Managed Charging Pilot.

Q. Did the 21-320 Docket also include TOU rates?

A. Yes, with respect to non-residential customers. The 21-320 docket resulted in an Electric Transit Service ("ETS") rate and a Business EV Charging Service ("BEVCS") rate for separately metered non-residential EV charging services. These rates financially incentivize customers to reduce grid utilization by charging during off-peak periods.

Q. What TOU rates are available for residential customers?

A. Time-varying rates have long been recognized as a tool to shift energy demand away from peak periods. Optional residential time-varying rates were updated in 2023 for both EKC

and EKM. The TOU rates are available as a whole-house rate for both EV drivers and non-EV drivers.

Q. What is the present status of Evergy's Clean Charge Network?

A. The Clean Charge Network has made Kansas City one of the most EV friendly metropolitan areas in the country, effectively addressing range anxiety for EV drivers and reducing emissions more each year as utilization grows.

When the Company announced its plans for the Clean Charge Network in 2015, there were only 22 EV models on the market. Today, the Clean Charge Network includes over 300 stations across Evergy's Kansas service area and consumers have access to over 100 EV models. This growth in EV availability and ownership has significantly boosted Clean Charge Network utilization. The five-year CAGR from August of 2019 through August of 2024 was just over 30%.

IV. THE SEPTEMBER 2024 EVERGY TRANSPORTATION ELECTRIFICATION PORTFOLIO FILING REPORT

Q. Please briefly describe what is covered in the 2024 Report.

A. The 2024 Report is structured in the following manner:

Section 1 includes the Introduction and Portfolio Summary, and addresses managing the system impacts of transportation electrification. It discusses the Residential Managed Charging ("RMC") Pilot and the Fleet Advisory Services ("FAS") Program, referred to collectively as the Evergy's "Phase 2 Electrification Portfolio".

Section 2 discusses Evergy's role and experience with transportation electrification, including Evergy's Clean Charge Network, time-varying rates, transit electrification support, and charging infrastructure rebates. It also sets out some of the lessons learned most pertinent to the proposed RMC Pilot and FAS Program.

Section 3 describes trends in transportation electrification, EV adoption, and potential Evergy territory load growth resulting from both residential and fleet EVs. This section also sets out a summary of peer utility programs and pilots used to inform Evergy's designs for the RMC Pilot and FAS Program.

Section 4 lays out the proposed Phase 2 portfolio, beginning with the RMC Pilot design, budget, and evaluation of pilot benefits. It explains the FAS Program design, budget, expected financial impact, and pertinent equity considerations.

Section 5 addresses regulatory, reporting and cost recovery issues.

Appendices A-F provide more detailed program descriptions, the FAS Program cost effectiveness evaluation, results from a recent fleet customer survey used to inform FAS Program design, stakeholder letters of support for the FAS Program, the proposed tariff sheets, and Evergy's list of witnesses.

Q. What is Evergy proposing in this docket?

A. With this filing, Evergy proposes to launch a second phase of TE programs that will continue to deliver benefits to all ratepayers by aligning EV charging demand with electric grid capacity. This second phase includes the RMC Pilot and the FAS Program.

Q. Please describe these components.

A. The RMC Pilot will optimize the charging patterns of EV drivers who charge at home. The three-year pilot will test two methods of load shaping, passive and active. Insights from this pilot will inform Evergy's approach to a future full-scale program.

The FAS Program provides fleet electrification customers with the information and insights needed to implement optimized charging infrastructure and charging strategies.

These optimizations will ultimately benefit all Evergy customers by reducing overall system costs.

Q. How do the proposed Phase 2 activities build upon the Phase 1 programs approved in the 21-320 Docket?

A. The Residential EV Outlet Rebate approved in 2021 is designed to encourage migration from 120-volt charging ("Level 1") to 240-volt ("Level 2") charging. Compared to Level 1 charging, Level 2 charging sessions are significantly shorter in duration. This short duration allows for managing the timing of charging sessions based on factors such as wholesale energy pricing and/or local grid conditions. The residential rebate program also provides Evergy with data that is advantageous to the proposed RMC Pilot, such as over a thousand addresses where EVs are known to charge and the associated charging power levels.

Similarly, the proposed FAS Program is designed to leverage components of the Phase 1 TE program. The Commercial Charger Rebate and Business EV Charging Service Rate increase Evergy's visibility and access to fleet electrification customers. Further, the rebate and TOU rate are tools Evergy can utilize within the context of the FAS Program to optimize a participating customer's approach to fleet electrification.

Q. Why is Evergy proposing these programs at this time?

A. The transportation sector is electrifying, propelled by consumer demand, technology advancements and tremendous long-term Federal support. As detailed within this filing, Evergy customers are steadily transitioning to EVs and will continue to do so at a rapid pace. It is Evergy's responsibility to ensure that transportation electrification benefits all Evergy customers by ensuring EV-related revenues exceed EV-related costs. The RMC

Pilot and FAS Program detailed in this filing explore two broad strategies for managing this new and growing source of electric load. Evergy's proposed approaches to fleet advisory and residential managed charging will lay the groundwork for shaping how EVs interact with the electrical grid, with both near term and lasting benefits for all customers.

V. EVERGY'S REQUEST OF THE COMMISSION

Q. What exactly is Evergy requesting from the Commission in its Application?

A. The Application seeks an Order from the Commission allowing the Company to (1) implement tariffs that authorize and enable the two new TE programs described above and in the 2024 Report, and (2) authorize use of a deferral accounting mechanism to track all related program costs for recovery in future rate cases through expense amortization over a period of five years.

Q: Does this conclude your Direct Testimony?

A: Yes, it does.

STATE OF KANSAS)
) ss:
COUNTY OF SHAWNEE)

VERIFICATION

Kimberly Winslow, being duly sworn upon her oath deposes and states that she is the Senior Director, Energy Solutions, for Evergy, Inc., that she has read and is familiar with the foregoing Direct Testimony, and attests that the statements contained therein are true and correct to the best of his knowledge, information and belief.

Kimberly Winslow

Subscribed and sworn to before me this 27th day of September, 2024.

Notary Public

My Appointment Expires: May 30, 2026

NOTARY PUBLIC - State of Kansas
LESLIE R. WINES
MY APPT. EXPIRES 5/30/2026