BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

REBUTTAL TESTIMONY OF

CODY VANDEVELDE

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

IN THE MATTER OF THE PETITION OF EVERGY KANSAS CENTRAL, INC., EVERGY KANSAS SOUTH, INC., AND EVERGY METRO, INC. FOR DETERMINATION OF THE RATEMAKING PRINCIPLES AND TREATMENT THAT WILL APPLY TO THE RECOVERY IN RATES OF THE COST TO BE INCURRED FOR CERTAIN ELECTRIC GENERATION FACILITIES UNDER K.S.A. 66-117.

Docket No. 25-EKCE-207-PRE

April 4, 2025

Q. Please state your name and business address.

A. My name is Cody VandeVelde. My business address is 818 S. Kansas Avenue, Topeka, Kansas.

Q. Have you filed Direct Testimony in this case?

A. Yes. I filed Direct Testimony in this docket on November 6, 2024, and filed Supplemental Direct Testimony on February 14, 2025.

Q. What is the purpose of your Rebuttal Testimony?

A. The purpose of my Rebuttal Testimony is to respond to certain issues and positions raised by various intervenors and parties in responsive testimony filed March 14, 2025, and Cross-Answering Testimony filed March 21, 2025. Specifically, I will address issues related to topics covered in my Direct and Supplemental Direct Testimony, namely the manner in which Evergy's Integrated Resource Plan ("IRP") functions and its selection of generation assets, specifically the assets referred to as the McNew and Viola combined cycle gas turbine ("CCGT") facilities and the Kansas Sky solar facility.

Q. Please summarize the topics covered in you Rebuttal Testimony.

A. My Rebuttal Testimony responds to numerous positions and assertions made by KIC witnesses Michael P. Gorman and Colin T. Fitzhenry, to positions of National Resource Defense Counsel ("NRDC") witness Anna Sommer, to issues raised by Council for the New Energy Economics ("NEE") witness William "Nick" Jones, to Citizens Utility Ratepayer Board ("CURB") witness Lucy Metz, and to Climate + Energy Program ("CEP") witness Dorothy Barnett, all regarding EKC's IRP process and preferred portfolio.

<u>RESPONSES TO KIC WITNESSES GORMAN AND FITZHENRY</u>

Q. Please identify the arguments or issues included in KIC witnesses Gorman and Fitzhenry's testimony to which you intend to respond?

A. I am addressing a number of issues from Gorman and Fitzhenry's testimony and will address them one-by-one. The first issue I intend to address is KIC witness Gorman's assertion that the preferred portfolio includes the forecasted additions of significant large new customer loads and that new loads are uncertain and costs to serve them are material, making the preferred portfolio not reliable.

Q. How do you respond to this assertion?

A. Witness Gorman's assertion is incorrect. EKC's 2024 IRP does include some components for what could be considered new or additional large load demand. Specifically, the IRP model includes demand projections for the addition of Panasonic as a large load customer. However, contrary to Mr. Gorman's assertion, Panasonic has already agreed to receive service from Evergy, and thus additional load attributable to Panasonic is not "uncertain." The 2024 IRP also included an additional 150 MW of load addition as a modest projection of additional load attributable to economic development. However, even when the only additional large load demand components included in the 2024 IRP model were these two inputs identified above, the IRP model still selected the preferred portfolio, including the CCGT facilities under review in this docket. Therefore, the IRP model selected the CCGT assets even without introduction of the substantial forecasted new large load additions and continues to select these assets when additional large load additions are included in the model. This shows the robustness of this plan and why it has continued to be EKC's preferred portfolio throughout.

As such, it is incorrect to suggest that the preferred portfolio is dependent on substantial uncertain large load additions. Contrary to Mr. Gorman's assertion, the new generation resources are not intended to serve any specific additional large-load customers. Rather, the need for the units is driven by a variety of factors, including reliable and confirmed projections of load growth, both from native load and from additional large load customers, as well as other factors and risks taken into account by the IRP, including but not limited to resource adequacy initiatives required by SPP, possible future carbon constraints, and risks of EPA greenhouse gas rules.

Q. How do you respond to the assertion that substantial additional large load growth that has been forecasted is "uncertain"?

A. This assertion is also incorrect. As highlighted in the Direct Testimony of Staff witness Justin Grady at page 34, Evergy's current projection anticipates load growth of 2-3% annually from 2024 through 2029, which is primarily driven by native load and growth from large customers that are in active construction today. In addition to those customers already building their facilities, there is at least 10 GWs of additional potential load growth currently in Evergy's large load customer pipeline. As Mr. Grady points out, and as EKC has stated throughout this docket and its IRP docket, this level of growth is not only forecasted by Evergy but is nearly uniformly anticipated and forecast throughout the industry, including throughout SPP territory as shown in SPP's 2024 Integrated Transmission Plan.[1] The resources under review in this docket are part of a modernized, expanded, and diversified generation fleet needed to help address not only this new load growth from all customer

[1] SPP's 2024 Integrated Transmission Plan (ITP) is the organization's biggest-ever single portfolio of transmission enhancements in terms of both size and value, designed to add more than 2,000 miles of new and upgraded transmission lines to the region's grid. The SPP Board of Directors approved the historic $7.7 billion plan in October 2024. See: https://www.spp.org/media/2229/2024-itp-assessment-report-v10.pdf

groups within Evergy's territory, but also to properly address and respond to previously stated risks and factors analyzed by the IRP model.

In addition, as the Commission is aware, it is important to note that Evergy has also filed a separate Large Load Tariff docket, 25-EKME-315-TAR ("LLPS Docket"), designed to establish the terms of service and additional tariffs governing large load customer additions. That docket is discussed in more detail in the Rebuttal Testimony of Darrin Ives.

Q: What other positions in Gorman and Fitzhenry's testimony do you intend to address in your Rebuttal Testimony?

A: The next issue that I will address are the assertions by KIC witnesses Gorman and Fitzhenry regarding the assumptions related to coal retirements and the impact on the IRP results. Initially, KIC witness Fitzhenry asserts that EKC selecting the addition of new resources is more expensive than delaying Jeffrey 2 until 2039. First, the specific NPVRR comparison that Mr. Fitzhenry references in his testimony is not relevant because it was the result of a limited analysis that re-ran the NPVRR rankings tables from the 2024 IRP after only changing the new natural gas resource costs and attributes. A more appropriate and comprehensive IRP evaluation that re-optimizes capacity expansion would give a more accurate comparison of the NPVRR difference between portfolios resulting from various planning assumptions. EKC's 2025 IRP will do just that and will specifically re-consider the economics of delaying the Jeffrey 2 retirement.

Second, as explained in my Direct Testimony, EKC's 2024 IRP preferred portfolio was the third lowest NPVRR alternative resource portfolio on an expected value basis. The only two plans that had lower NPVRR estimates were plans that included a delayed retirement of Jeffrey 2 (from 2032 to 2039). However, as also explained in my opening Direct Testimony, cost was among the factors considered, but was far from the only factor considered, in formulating the preferred portfolio. As I explain, the preferred portfolio advances Evergy's long-term strategy for responsibly transitioning generation away from aging coal units over time while maintaining a diverse asset mix and sufficient flexibility to make appropriate planning adjustments. The plan's flexibility allows us to focus on reliability and affordability while adapting to environmental, technological, and market opportunities and challenges. This includes incorporation of a risk analysis that analyzes four of twelve uncertain factors, including natural gas prices, CO2 restrictions, construction costs, and load growth, and an evaluation of each of the resource plans based on performance in future scenarios with varied levels of the four main critical uncertain factors. The expected NPVRR metric takes into account the critical uncertain risk factors and incorporates them into the NPVRR analysis on a weighted-average risk basis. Therefore, although the IRP process did not select the absolute lowest NPVRR portfolio, it selected the portfolio that performed best under all the factors analyzed in the NPVRR analysis. This appropriately includes the risk analyses based on the critical uncertain factors. In other words, the preferred portfolio performed best when measured by both quantitative cost measures and qualitative risk responsiveness and flexibility factors, which are extremely important when selecting a preferred portfolio.

Q. Are these factors and analyses discussed in Staff's Direct Testimony, and if so, what are Staff's conclusions regarding the reasonableness of EKC preferred portfolio and selection of the CCGT assets?

A. These analyses are discussed in depth in Staff witness Justin Grady's testimony on pages 27-45. In his testimony, Mr. Grady analyzes the selection of the CCGT assets in light of an array of relevant factors, not limited just to cost, but included anticipated coal retirements, load growth in Evergy's territory and in SPP generally, the CCGTs in a carbon constrained future, stranded asset risks, risk of EPA greenhouse gas rules, Resource Adequacy initiatives of SPP, improved fuel diversification, and responsiveness to Kansas energy policy makers, specifically including the Kansas legislature and Governor's office, which passed the new revisions to K.S.A. 66-1239 with near unanimous support. Based on these broad industry-wide factors, which are also discussed in my Direct Testimony, and accurately discussed in Mr. Grady's testimony at pages 27-45, the selection of the CCGT resources is reasonable under all factors, despite the fact that the preferred portfolio is not the absolute lowest NPVRR cost portfolio.

Q: Are there additional positions related to the retirement of coal resources in the KIC witnesses' testimony to which you would like to respond?

A: Yes. In addition to the above assertion by Fitzhenry, witness Gorman also asserts that EKC's preferred portfolio assumes the retirement of coal-fired production resources earlier in the IRP planning period, which inflates the revenue requirements and distorts the IRP planning economic projection of the NVPRR for resource portfolios that includes plants that are already retired. He also asserts that changing the Commission's approved expected remaining life of the production facilities increases the cost of resource portfolios that include the coal resources. He states that, as a result, the Company's planning result is biased towards portfolios that rely on CCGTs.

Q. How do you respond to these assertions by Mr. Gorman?

A. Mr. Gorman is incorrect in his understanding of how these costs are modeled. The coal retirement IRP scenarios do not function in the fashion that he describes and do not inflate the NPVRR of portfolios that include the coal resources. The Evergy modeling evaluates the going-forward cost of continuing to operate coal resources as compared to the cost to develop and operate new resources. The model also treats existing book value as a sunk cost which does not vary among resource plans with different retirement dates, and assumes the remaining book value of coal resources will be recovered over the same time period no matter the retirement date. Specifically, the NPVRR associated with existing remaining net book value of coal assets is the same in scenarios where Jeffrey Unit 2 retires in 2030 and in scenarios where it retires in 2039. In order to continue to operate the coal resources, Evergy must continue to invest in them, therefore, it is extremely difficult to perfectly time a retirement to when resources are "fully depreciated." The IRP appropriately considers the risks and cost savings associated with continuing to spend capital to replace equipment and make necessary environmental upgrades to prolong the operation of the coal units or retiring the resources and meeting energy and capacity needs through other investments. Therefore, the NPVRR economic analysis does not distort resource portfolios that include the coal resources running longer, nor does it bias the IRP model to favor CCGTs.

Q. Do you have any other criticisms with respect to Mr. Gorman's analysis as it relates to the cost and economic viability of retirement of coal facilities?

A. Yes. As stated above, Mr. Gorman states that the preferred portfolio assumes the retirement of coal-fired production resources earlier in the IRP planning period have not been proven to be economic. It appears this assertion is based on a misapplication, and frankly a misrepresentation, regarding the statutory language of K.S.A. 66-1239 as it relates to predetermination of costs of construction of new gas fired generation facilities. On Page 7 of Mr. Gorman's testimony, he includes cherry-picked quotations from various portions of K.S.A. 66-1239, and includes the following language:

> [T]he abandonment or retirement is not expected to harm the utility's customers or decrease the utility's regional rate competitiveness by causing the utility to experience higher costs than would be expected by continuing to operate such electric generating unit in compliance with applicable law, unless, consistent with the integrated resource planning framework utilized by the commission, the commission determines that such higher costs are justified by other factors that are specified by the commission.

Mr. Gorman seems to suggest that this language provides a specific precondition that Evergy must meet in order to utilize the predetermination procedures related to construction of new gas-fired facilities. This is a misrepresentation. The above-quoted language in subsection (c)(4)(B) of K.S.A. 66-1239, which is expressly related to or applicable to "requests by a public utility for a determination of ratemaking principles and treatment relating to the abandonment or retirement of a nuclear powered or fossil fuel-fired electric generating unit …." EKC is not making a request for predetermination of any abandonment costs in this docket. The relevant subsections of the statute as it relates to EKC's Petition are (c)(1), (2) and (3), which do not include language related to abandonment costs. Mr. Gorman is apparently seeking to inject issues related to abandonment costs of retired coal plants into this docket to create a false prerequisite for obtaining predetermination of construction costs. This prerequisite is not provided by the applicable statutory language is not relevant to EKC's application in this docket.

Q: Witness Gorman also asserts that the cost of the CCGTs may be far more expensive than estimated by EKC in the IRP analyses because EKC did not identify the cost of firm gas delivery capacity or adequate amounts of backup fuel storage. How do you respond to this assertion?

A: Again, Mr. Gorman is incorrect as to what costs are included in the IRP modeling analysis. As stated above, the IRP model is a full production cost model and incorporates estimated gas costs, including costs associated with firm gas transport service, as an ongoing cost of operation for the purpose of modeling the cost of the various portfolios analyzed in the IRP process. EKC has included estimated costs of gas supply in the IRP process for the purposes of modeling costs of various portfolios including CCGT facilities, that result in the preferred portfolio. EKC did not include fuel costs in its definitive cost estimates for the CCGT facilities in this application, and it is not seeking predetermination with respect to those costs since it would be inappropriate to do so. It has focused its predetermination request and its definitive cost estimates on capital costs to construct the facilities. However, the fact that these costs are appropriately not included in the definitive cost estimates does not mean they were not included in the IRP model analysis that selected the units to meet customer needs.

RESPONSE TO NRDC WITNESS SOMMER

Q. How do you respond to Ms. Sommers' assertion that the CCGT capital cost assumption used in the initial IRP is materially low and out of line with other assumptions around the country?

A. As I stated in my Direct and Supplemental Testimony, when EKC received its initial owner's engineer informed estimates for the CCGT facilities, it was clear that the costs had substantially increased from the estimated costs included in the IRP analysis. In response, EKC performed an updated IRP analysis incorporating new cost figures, both at the time of the initial cost estimates and at the time of the definitive cost estimates. As I have stated repeatedly, even with these new cost figures, the IRP model still selected a preferred portfolio that included the CCGT facilities.

Q. Do you agree with Ms. Sommer's assertion that Evergy will hold a buffer of capacity above currently mandated SPP reserve margin in anticipation of changes to the SPP reserve margin requirements?

A. Yes. EKC's IRP does hold a buffer of capacity above currently mandated SPP reserve margins because, as stated above, those margins and the performance of our assets are subject to change. In the 2024 IRP, EKC generally planned for a 2% reserve margin buffer above future SPP indicative reserve margin requirements. This equates to just an approximately100 MW buffer on a more than 5,000 MW load. In addition, the risk that some operational issue would cause the accreditation of EKC's facilities to fall below SPP minimum requirements is a substantial risk that warrants the use of a buffer. In other words, this strategy should be viewed as a prudent operational measure to protect SPP accreditation of EKC's assets, and to hedge against normal operational issues that would otherwise cause EKC's facilities to fall below the SPP minimum reserve margins.

RESPONSES TO NEE WITNESS JONES

Q. How do you respond to NEE witness Jones' criticism of EKC's IRP process and his assertion that a higher natural gas forecast should be utilized in Evergy's modeling process?

A. This assertion is incorrect. Evergy's estimates for fuel costs in the 2024 IRP do not underestimate actual fuel costs or bias the model in favor of CCGT facilities. First, Mr. Jones' assertion is based on an assumption that EKC simply utilized the Henry Hub national price benchmark to forecast gas prices. In reality, Evergy adjusted this benchmark price by the Panhandle Eastern basis differential for the purposes of its forecast in its most recent IRP.

Evergy used recognized vendor forecasts to form its mid natural gas price forecast and used EIA modeling results to create high and low forecast sensitivities that are based on long-term fundamental supply and demand drivers expected to influence natural gas prices. The IRP process considers expected resource economics over a 20-year time horizon and the use of three different natural gas price scenarios enables Evergy to consider the robustness of its portfolio to future conditions. Use of a risk-weighted NPVRR incorporates the assumption that sometimes prices will be high and sometimes they will be low in the future. In addition, and with that understanding, EKC's forecasted natural gas costs contained in the 2024 IRP compare well with Evergy's historical natural gas costs, and that comparison further confirms the reasonableness of EKC's forecast in its 2024 IRP. Consistent with the opinions stated in the Direct Testimony of Justin Grady at pages 66-67, a true "apples to apples" comparison on the same components of cost between Evergy's historical gas commodity costs and the elements included in the most recent IRP analysis, the natural gas costs included in the 2024 IRP are reasonable. Contrary to Mr. Jones' testimony, when fairly analyzed and compared with actual costs comprised of the same components and charges, the natural gas forecasts used in the IRP analysis are reasonable, and they do not establish or create a bias in favor of CCGT assets.

Q. Does Evergy's model underestimate the potential for short-term fluctuations in natural gas costs?

A. No, it does not. Again, as stated in the Cross-Answering Testimony of Staff witness Justin Grady, when compared with Evergy's historical realized natural gas costs, the forecasts in the 2024 IRP are generally confirmed. Purchases during periods of short-term price spikes are represented in Evergy's historical data, and although they occur, they appear to be anomalous and do not cause wide variations in historical cost data. Evergy is mindful that its cost figures should be consistent with and reflect real-world costs, and in this instance the fact that the IRP natural gas costs are consistent with and confirmed by Evergy's historical natural gas costs is supportive of figures utilized to forecast natural gas costs for the purposes of the 2024 IRP.

Q. Would you like to respond to Mr. Jones' assertion that EKC should have considered fuel costs for the new plants in the IRP analysis?

A. As stated above in response to KIC witness Gorman's assertion, EKC did consider fuel costs for the new plants in the IRP analysis, even though it did not include these costs in the definitive cost estimates and is appropriately not seeking predetermination of those costs in this docket. It did, however, consider fuel costs in modelling NPVRR of the various considered portfolios and in selecting the preferred portfolio as part of the IRP analysis as part of its production cost model.

Q: Finally, as to Mr. Jones' assertion that EKC should reduce its ownership in the McNew plant and instead deploy battery storage, how do you respond?

A: The inclusion of the assets under review in this docket are directly in line with EKC's most recent IRP and its selection of CCGT additions to the generation fleet. EKC's IRP process considers battery storage as one of many possible solutions to growing demand and increased resource adequacy requirements. Although battery storage was not selected as part of the preferred portfolio by the 2024 IRP analysis, EKC continues to consider alternative solutions, including but not limited to battery storage, in its future IRP analyses and models going forward.

<u>RESPONSES TO CURB WITNESS METZ</u>

Q: Please sate and identify the assertions made by CURB witness Metz that you would like to address.

A: I would like to respond to Ms. Metz's assertion that problems with EKC's IRP modeling prevented EKC from identifying lowest cost and lowest risk additions to its portfolio, specifically (1) that EKC did not model compliance with Clean Air Act Sec. 111, which means it omitted limitations and risks posed by current and future environmental regulations; (2) that EKC's firm capacity rating and book life assumptions for new resources bias the model toward adding CCGT capacity over renewables; (3) that EKC did not model exposure to fuel cost volatility, which is a substantial risk for CCGTs; (4) that EKC did not adequately analyze and test the market for alternatives to CCGTs; (5) that solar and battery additions are lower cost and could be procured incrementally to allow flexibility and adaptability; and (6) that Evergy should issue an all-source RFP with options for PPA to determine whether responses indicate alternative

Q. How do you respond to Ms. Metz's assertion that EKC did not model compliance with Clean Air Act Section 111?

A. Clean Air Act Section 111 rules were published after EKC's completion of its 2024 IRP. Therefore, Evergy could not reasonably have considered these final rules in the IRP process. The EKC 2024 IRP has analysis of compliance options based on the originally proposed rules. Evergy also analyzed future carbon restrictions as a risk to the future performance of the resource plan and used three levels of carbon restrictions in its modeling and calculation of risk-adjusted net present value revenue requirements in the 2024 IRP. Ms. Metz has not identified any specific aspect of the Section 111 final rules that have not been adequately accounted for in the IRP process, EKC's IRP, particularly at the time it was modeled, was and remains sufficient to account for the risks of mandated carbon restrictions, similar to those found in Federal regulations, including those adopted under Clean Air Act Section 111.

Q. What is your response to the assertion that EKC's firm capacity rating and book life assumptions for new resources bias the model toward adding CCGT capacity over renewables?

A. EKC did not make the assumptions concerning accredited capacity and book lives of various technologies in a vacuum or as Ms. Metz implies to bias the model; instead, these assumptions are based on current reality. For purposes of modeling that resulted in selection of EKC's IRP preferred portfolios, book life assumptions or depreciation rates are based on current authorized rates established by the Commission, and the capacity accreditation for various technologies is based on SPP's current criteria. Using assumptions that do not apply to EKC would produce inaccurate model results and potentially lead to decisions that are not in the best interest of EKC's customers.

Q. Do you agree with Ms. Metz that EKC did not model exposure to fuel cost volatility?

A. No, I disagree with this assertion. As discussed above with respect to NEE witness Jones' testimony, EKC conducted detailed analysis of natural gas costs, and incorporated this data in its IRP analysis and forecasting to make the resource selection in the preferred portfolio. This analysis includes elements of and recognition of volatility of natural gas prices and costs. For example, the possible volatility of natural gas prices is a risk accounted for and analyzed in the IRP process and was specifically factored into the analysis of all of the alternative portfolios in selecting the preferred portfolio including the CCGT resources.

Q. How do you respond to Ms. Metz's statement that EKC did not adequately analyze and test the market for alternatives to CCGTs?

A. Similar to her testimony regarding the modeling of fuel cost volatility, Ms. Metz is incorrect in her statement. As stated in my opening testimony describing the IRP process, the analysis and process involves numerous different asset portfolios, which included different mixes of generation resources and alternatives to CCGT, including renewable resources. These analyses included evaluating these resource portfolio alternatives for the various factors discussed in my initial Direct Testimony, including costs, and various risk and performance factors. Contrary to Ms. Metz's assertion, EKC's IRP process includes a reasonable and full analysis of possible alternatives to CCGT resources.

Q. How do you respond to Ms. Metz's assertion that solar and battery additions are lower cost and could be procured incrementally to allow flexibility and adaptability?

A. As stated above, the IRP analysis incorporated modeling of a variety of different possible portfolios, including solar and battery additions. Contrary to Ms. Metz's assertions, EKC's 2024 IRP considered a plan (Plan AAAG) allowing only renewables and storage to meet incremental capacity and energy needs and the plan performed considerably worse from a reliability perspective and had an expected NPVRR cost that was over $5 billion dollars higher than EKC's preferred portfolio.

Q. Finally, how do you respond to Ms. Metz's assertion that Evergy should issue an all-source RFP with options for PPA to determine whether responses indicate alternative?

A. As addressed in Direct Testimony of EKC witnesses Jason Humphrey, John Carlson, and Kyle Olson, and in responses to data requests in this docket, Evergy utilized competitive processes at every step, including running an All-Source RFP in 2023, which included PPAs, to receive broad competitive input and bids for construction of the resources under review in this docket. That competitive process was described in Evergy's response to CURB's Data Request 18.c., which states:

> Evergy has run a competitive process at every step of this project. The selection of advanced class machines was made on the anticipation of the lowest cost per kilowatt resource with the highest efficiency and the most flexibility for customers. The owner's engineer was selected through a competitive RFP, the gas turbine provider was selected from a competitive RFP to all major gas turbine suppliers, the generator-step-up transformers were selected through a competitive RFP and the EPC is being selected through a competitive RFP. Every phase of the project has been advanced through a competitive process and is striving for the best balance of cost, reliability, execution, long-term flexibility, and ability to meet market mission. The supply and demand forces affecting the market for firm-dispatchable power have caused prices to increase but, as evidenced by the recent pricing from Basin Electric and similar pricing from other referenced utilities, Evergy's prices are in line with or slightly better than the broader market today.
>
> Due to these market-forces including supply and demand balance for energy and capacity projects, general and construction materials specific inflation, tariffs, and a competitive construction market broadly – not just in utility construction – there are strong risks for prices to continue to increase in the short to medium term. This anticipation is for both renewable and for conventional resources.

This competitive acquisition process was also discussed in the Direct Testimony of Staff witness Justin Grady, in which he found EKC sought competitive input from a wide audience of participants.

<u>RESPONSE TO CROSS-ANSWERING TESTIMONY OF CEP WITNESS DOROTHY BARNETT</u>

Q. How do you respond to CEP witness Dorothy Barnett's assertion that Evergy should have constructed just one of the two CCGT facilities?

A. Ms. Barnett asserts that "[s]imply math shows that a single 710 CCGT can accommodate the IRP's projected thermal adds of 650 MW for 2029 and 2030" in making this assertion. It is true that essentially one whole CCGT facility (50% of the MeNew and 50% of the Viola) are being allocated to EKC. However, as noted in the Supplemental Testimony submitted by EKC in this docket, the second half of the McNew and Viola plants are allocated to other Evergy utilities, namely Evergy Missouri West ("EMW"). The costs associated with those 50% interests in the CCGT facilities will be recovered through rates charged to EMW customers, not EKC customers, and the need for addition of those assets to EMW's generation fleet will be addressed in proceedings before the Missouri Public Service Commission. Additionally, as has been discussed by Company witnesses Kyle Olson and Jason Humphrey, constructing two CCGT facilities now, as opposed to building or acquiring them incrementally, also provides some savings through economies of scale as well. For these reasons, among others, the construction of both CCGT facilities is reasonable.

Q. How do you respond to the assertion by Ms. Barnett that Evergy did not consider the environmental costs of the McNew and Viola CCGT facilities?

A. This assertion is incorrect. EKC thoroughly analyzes the environmental impacts and costs of all generation resources and portfolios in the course of its IRP. EKC evaluates various risks and factors related to environmental impacts as well as current and future environmental policy when it creates its IRP model. The model evaluates the performance of all resources and portfolios against a number of varied factors, among which are certain efficiency and environmental metrics. As Ms. Barnett admits, in response to CEP DR 1-1, EKC expressly stated that the IRP model included modeling of CO2, SO2 and NOX emissions. Ms. Barnett is simply incorrect in her assertion that EKC did not consider environmental costs of the CCGTs in this docket.

Q. Ms. Barnett also states that large load customers generally prefer power sourced from renewable, clean energy, and that the CCGTs is not in line with large load customers' generation preference. How do you respond to this assertion?

A. As has been stated numerous times in this docket, the generation resources under review are not specifically directed toward serving any specific large load customers, nor generally toward large load customers as a whole. Although increased load is one supporting purpose of the addition of these new generation assets, there are many other supporting purposes and reasons, all of which have been discussed above in my testimony. In addition, as discussed above, the forecasted load growth in EKC's territory is not merely driven by new large load additions; rather, there is substantial expected load growth among native existing customers as well. Therefore, the perceived generation preference of large load customers is not pertinent in this docket.

However, as discussed in the Rebuttal Testimony of company witness Darrin Ives, in the LLPS Docket, Evergy has proposed a number of efficiency and clean energy generation tariff riders, including a Demand Response & Local Generation Rider, Clean Energy Choice Rider, Renewable Energy Program Rider, Alternative Energy Credit Rider, and a Green Solutions Connections Rider. Therefore, if these are approved by the Commission in the LLPS Docket, there will be a number of options for large load customers to enhance their renewable, clean energy generation portfolio and to participate in efficiency initiatives through these various programs. Finally, it is important to note that in addition to the CCGT resources, EKC is seeking approval for the Kansas Sky solar facility, which will in fact add an important renewable generation asset to EKC's generation fleet.

<u>CONCLUSION</u>

Q. Please provide a summary of your testimony.

A. While several intervenors and parties have raised questions related to the IRP and preferred portfolio, those questions largely represent unfounded, unsubstantiated claims, which I have substantively addressed in this Rebuttal Testimony. Importantly, these assertions made by other parties in this docket are also substantively refuted by the substantial analysis and testimony performed by KCC Staff. Through EKC's Petition and testimony in this case, EKC has supported the need for the CCGTs and solar facility requested in this predetermination. KCC Staff supports EKC's request with the exception of a few specific requests for modifications, and no party has raised a substantial or substantiated concern which would overcome the showing made by EKC in this docket. I therefore respectfully request that the Commission affirm the appropriateness and sufficiency of EKC's analysis and support in providing its approval of EKC's predetermination application.

Q. Does this conclude your testimony?

A. Yes.

STATE OF KANSAS)
) ss:
COUNTY OF SHAWNEE)

VERIFICATION

Cody VandeVelde, being duly sworn upon his oath deposes and states that he is the Sr Director Strategy and LT Planning, for Evergy, Inc., that he has read and is familiar with the foregoing Testimony, and attests that the statements contained therein are true and correct to the best of his knowledge, information and belief.

Cody VandeVelde

Cody VandeVelde

Subscribed and sworn to before me this 4th day of April 2025.

Leslie R. Wines

Notary Public

My Appointment Expires: May 30, 2026

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

CERTIFICATE OF SERVICE

I do hereby certify that a true and correct copy of the foregoing document has been emailed, this 4th day of April 2025, to all parties of record as listed below:

JAMES G. FLAHERTY, ATTORNEY
ANDERSON & BYRD, L.L.P.
216 S HICKORY
PO BOX 17
OTTAWA, KS 66067-0017
jflaherty@andersonbyrd.com

SHELLY M BASS, SENIOR ATTORNEY
ATMOS ENERGY CORPORATION
5430 LBJ FREEWAY
1800 THREE LINCOLN CENTRE
DALLAS, TX 75240
shelly.bass@atmosenergy.com

KATHLEEN R OCANAS, DIVISION VP OF RATES & REGULATORY AFFAIRS
ATMOS ENERGY CORPORATION
25090 W 110TH TERR
OLATHE, KS 66061
Kathleen.Ocanas@atmosenergy.com

JOSEPH R. ASTRAB, CONSUMER COUNSEL
CITIZENS' UTILITY RATEPAYER BOARD
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
Joseph.Astrab@ks.gov

TODD E. LOVE, ATTORNEY
CITIZENS' UTILITY RATEPAYER BOARD
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
Todd.Love@ks.gov

SHONDA RABB
CITIZENS' UTILITY RATEPAYER BOARD
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
Shonda.Rabb@ks.gov

DELLA SMITH
CITIZENS' UTILITY RATEPAYER BOARD
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
Della.Smith@ks.gov

Randall F. Larkin, Attorney
CITY OF LAWRENCE
PO Box 708
Lawrence, KS 66044
rlarkin@lawrenceks.org

Brandon McGuire, Asst. City Manager
CITY OF LAWRENCE
PO Box 708
Lawrence, KS 66044
bmcguire@lawrenceks.org

Kathy Richardson, Sustainability Director
CITY OF LAWRENCE
PO Box 708
Lawrence, KS 66044
krichardson@lawrenceks.org

TONI WHEELER, DIRECTOR, LEGAL SERVICES DEPT.
CITY OF LAWRENCE
CITY HALL
6 EAST SIXTH ST
LAWRENCE, KS 66044
twheeler@lawrenceks.org

DOROTHY BARNETT
CLIMATE & ENERGY PROJECT
PO BOX 1858
HUTCHINSON, KS 67504-1858
barnett@climateandenergy.org

CATHRYN J. DINGES, SR DIRECTOR & REGULATORY AFFAIRS COUNSEL
EVERGY KANSAS CENTRAL, INC
818 S KANSAS AVE
PO BOX 889
TOPEKA, KS 66601-0889
Cathy.Dinges@evergy.com

LESLIE WINES, Sr. Exec. Admin.

Asst.
EVERGY KANSAS CENTRAL, INC
818 S KANSAS AVE
PO BOX 889
TOPEKA, KS 66601-0889
leslie.wines@evergy.com

DANIEL J BULLER, ATTORNEY
FOULSTON SIEFKIN LLP
7500 COLLEGE BOULEVARD, STE 1400
OVERLAND PARK, KS 66201-4041
dbuller@foulston.com

MOLLY E MORGAN, ATTORNEY
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway
Suite 100
Wichita, KS 67206
mmorgan@foulston.com

SARAH C. OTTO
FOULSTON SIEFKIN LLP
7500 COLLEGE BOULEVARD, STE 1400
OVERLAND PARK, KS 66201-4041
sotto@foulston.com

LEE M SMITHYMAN, ATTORNEY
FOULSTON SIEFKIN LLP
7500 COLLEGE BOULEVARD, STE 1400
OVERLAND PARK, KS 66201-4041
lsmithyman@foulston.com

C. EDWARD WATSON, ATTORNEY
FOULSTON SIEFKIN LLP
1551 N WATERFRONT PKWY STE 100
WICHITA, KS 67206-4466
cewatson@foulston.com

JAMES P ZAKOURA, ATTORNEY
FOULSTON SIEFKIN LLP
7500 COLLEGE BOULEVARD, STE 1400
OVERLAND PARK, KS 66201-4041
jzakoura@foulston.com

Kevin M Fowler, Counsel
Frieden & Forbes, LLP
1414 SW Ashworth Place Ste 201
Topeka, KS 66604
kfowler@fflawllp.com

Constance Chan, Senior Category Manager - Electricity & Business Travel
HF SINCLAIR EL DORADO REFINING LLC
2323 Victory Ave. Ste 1400
Dalla, TX 75219
constance.chan@hfsinclair.com

Jon Lindsey, Corporate Counsel
HF SINCLAIR EL DORADO REFINING LLC
550 E. South Temple
Salt Lake City, UT 84102
jon.lindsey@hfsinclair.com

BRIAN G. FEDOTIN, GENERAL COUNSEL
KANSAS CORPORATION COMMISSION
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
Brian.Fedotin@ks.gov

JUSTIN GRADY, CHIEF OF REVENUE REQUIREMENTS, COST OF SERVICE & FINANCE
KANSAS CORPORATION COMMISSION
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
Justin.Grady@ks.gov

PATRICK HURLEY, CHIEF LITIGATION COUNSEL
KANSAS CORPORATION COMMISSION
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
Patrick.Hurley@ks.gov

CARLY MASENTHIN, LITIGATION COUNSEL
KANSAS CORPORATION COMMISSION
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
Carly.Masenthin@ks.gov

JANET BUCHANAN, DIRECTOR OF RATES & REGULATORY

KANSAS GAS SERVICE, A DIVISION OF ONE GAS, INC.
7421 W 129TH STREET
OVERLAND PARK, KS 66213
janet.buchanan@onegas.com

LORNA EATON, MANAGER OF RATES AND REGULATORY AFFAIRS
KANSAS GAS SERVICE, A DIVISION OF ONE GAS, INC.
7421 W 129TH STREET
OVERLAND PARK, KS 66213
lorna.eaton@onegas.com

ROBERT E. VINCENT, MANAGING ATTORNEY
KANSAS GAS SERVICE, A DIVISION OF ONE GAS, INC.
7421 W. 129TH STREET
OVERLAND PARK, KS 66213
robert.vincent@onegas.com

PAUL MAHLBERG, GENERAL MANAGER
KANSAS MUNICIPAL ENERGY AGENCY
6300 W 95TH ST
OVERLAND PARK, KS 66212-1431
mahlberg@kmea.com

TERRI J PEMBERTON, GENERAL COUNSEL
KANSAS MUNICIPAL ENERGY AGENCY
6300 W 95TH ST
OVERLAND PARK, KS 66212-1431
pemberton@kmea.com

DARREN PRINCE, MANAGER, REGULATORY & RATES
KANSAS MUNICIPAL ENERGY AGENCY
6300 W 95TH ST
OVERLAND PARK, KS 66212-1431
prince@kmea.com

JAMES GING, DIRECTOR ENGINEERING SERVICES
KANSAS POWER POOL
100 N BROADWAY STE L110
WICHITA, KS 67202
jging@kpp.agency

COLIN HANSEN, CEO/GENERAL MANAGER
KANSAS POWER POOL
100 N BROADWAY STE L110
WICHITA, KS 67202
chansen@kpp.agency

LARRY HOLLOWAY, ASST GEN MGR OPERATIONS
KANSAS POWER POOL
100 N BROADWAY STE L110
WICHITA, KS 67202
lholloway@kpp.agency

ALISSA GREENWALD, ATTORNEY
KEYES & FOX LLP
1580 LINCOLN STREET STE 1105
DENVER, CO 80203
AGREENWALD@KEYESFOX.COM

JASON KEYES, PARTNER
KEYES & FOX LLP
580 CALIFORNIA ST 12TH FLOOR
SAN FRANCISCO, CA 94104
JKEYES@KEYESFOX.COM

PATRICK PARKE, CEO
MIDWEST ENERGY, INC.
1330 Canterbury Rd
PO Box 898
Hays, KS 67601-0898
patparke@mwenergy.com

AARON ROME, VP OF ENERGY SUPPLY
MIDWEST ENERGY, INC.
1330 CANTERBURY DRIVE
PO BOX 898
HAYS, KS 67601-0898
arome@mwenergy.com

VALERIE SMITH, ADMINISTRATIVE ASSISTANT
MORRIS LAING EVANS BROCK & KENNEDY
800 SW JACKSON
SUITE 1310
TOPEKA, KS 66612-1216
vsmith@morrislaing.com

TREVOR WOHLFORD, ATTORNEY
MORRIS LAING EVANS BROCK & KENNEDY

800 SW JACKSON
SUITE 1310
TOPEKA, KS 66612-1216
twohlford@morrislaing.com

GLENDA CAFER, MORRIS LAING LAW FIRM
MORRIS LAING EVANS BROCK & KENNEDY CHTD
800 SW JACKSON STE 1310
TOPEKA, KS 66612-1216
gcafer@morrislaing.com

RITA LOWE, PARALEGAL
MORRIS LAING EVANS BROCK & KENNEDY CHTD
300 N MEAD STE 200
WICHITA, KS 67202-2745
rlowe@morrislaing.com

WILL B. WOHLFORD, ATTORNEY
MORRIS LAING EVANS BROCK & KENNEDY CHTD
300 N MEAD STE 200
WICHITA, KS 67202-2745
wwohlford@morrislaing.com

ASHOK GUPTA, EXPERT
NATIONAL RESOURCES DEFENSE COUNCIL
20 N WACKER DRIVE SUITE 1600
CHICAGO, IL 60606
agupta@nrdc.org

DAN BRUER, EXECUTIVE DIRECTOR
NEW ENERGY ECONOMICS
1390 YELLOW PINE AVE
BOULDER, CO 80305
DAN.BRUER@NEWENERGYECONOMICS.ORG

TIM OPITZ
OPITZ LAW FIRM, LLC
308 E. HIGH STREET
SUITE B101
JEFFERSON CITY, MO 65101
tim.opitz@opitzlawfirm.com

ANNE E. CALLENBACH, ATTORNEY
POLSINELLI PC
900 W 48TH PLACE STE 900
KANSAS CITY, MO 64112
acallenbach@polsinelli.com

FRANK A. CARO, ATTORNEY
POLSINELLI PC
900 W 48TH PLACE STE 900
KANSAS CITY, MO 64112
fcaro@polsinelli.com

JARED R. JEVONS, ATTORNEY
POLSINELLI PC
900 W 48TH PLACE STE 900
KANSAS CITY, MO 64112
JJEVONS@POLSINELLI.COM

Greg Wright
Priority Power Mgt.
12512 Augusta Dr
Kansas City, KS 66109
gwright@prioritypower.com

JAMES OWEN, COUNSEL
RENEW MISSOURI ADVOCATES
915 E ASH STREET
COLUMBIA, MO 65201
JAMES@RENEWMO.ORG

TIMOTHY J LAUGHLIN, ATTORNEY
SCHOONOVER & MORIARTY, LLC
130 N. CHERRY STREET, STE 300
OLATHE, KS 66061
tlaughlin@schoonoverlawfirm.com

Peggy A. Trent, Chief County Counselor
The Board of County Commissioners of Johnson County
111 S. Cherry Ste 3200
Olathe, KS 66061
peg.trent@jocogov.org

ROBERT R. TITUS
TITUS LAW FIRM, LLC
7304 W. 130th St.
Suite 190
Overland Park, KS 66213
rob@tituslawkc.com

J.T. KLAUS, ATTORNEY
TRIPLETT, WOOLF & GARRETSON, LLC
2959 N ROCK RD STE 300
WICHITA, KS 67226
jtklaus@twgfirm.com

KACEY S MAYES, ATTORNEY
TRIPLETT, WOOLF & GARRETSON, LLC
2959 N ROCK RD STE 300
WICHITA, KS 67226
ksmayes@twgfirm.com

TIMOTHY E. MCKEE, ATTORNEY
TRIPLETT, WOOLF & GARRETSON, LLC
2959 N ROCK RD STE 300
WICHITA, KS 67226
TEMCKEE@TWGFIRM.COM

JOHN J. MCNUTT, General Attorney
U.S. ARMY LEGAL SERVICES AGENCY
REGULATORY LAW OFFICE
9275 GUNSTON RD., STE. 1300
FORT BELVOIR, VA 22060-5546
john.j.mcnutt.civ@army.mil

DAN LAWRENCE, GENERAL COUNSEL - USD 259
UNIFIED SCHOOL DISTRICT 259
903 S EDGEMOOR RM 113
WICHITA, KS 67218
dlawrence@usd259.net

KEVIN K. LACHANCE, CONTRACT LAW ATTORNEY
UNITED STATES DEPARTMENT OF DEFENSE
ADMIN & CIVIL LAW DIVISION
OFFICE OF STAFF JUDGE ADVOCATE
FORT RILEY, KS 66442
kevin.k.lachance.civ@army.mil

/s/ Cathy J Dinges
Cathy J. Dinges