Exhibit No.:Issue:AllocationsWitness:John WolframType of Exhibit:Direct TestimonySponsoring Party:Evergy Missouri WestCase No.:ER-2022-0130Date Testimony Prepared:January 7, 2022

MISSOURI PUBLIC SERVICE COMMISSION

CASE NOS.: ER-2022-0130

DIRECT TESTIMONY

OF

JOHN WOLFRAM

ON BEHALF OF

EVERGY MISSOURI WEST

Kansas City, Missouri January 2022

DIRECT TESTIMONY

OF

JOHN WOLFRAM

Case No. ER-2022-0130

1		I. INTRODUCTION
2	Q.	PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.
3	A.	My name is John Wolfram. I am the founder and Principal of Catalyst
4		Consulting LLC, a rate and regulatory consulting firm. My business address
5		is 3308 Haddon Road, Louisville, Kentucky, 40241.
6	Q.	ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?
7	Α.	I am testifying on behalf of Evergy Metro, Inc. d/b/a as Evergy Missouri
8		Metro ("Evergy Missouri Metro"), a subsidiary of Evergy, Inc. ("Evergy" or
9		"Company").
10	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.
11	Α.	I received a Bachelor of Science degree in Electrical Engineering from the
12		University of Notre Dame in 1990 and a Master of Science degree in
13		Electrical Engineering from Drexel University in Philadelphia, PA, in 1997. I
14		have also completed numerous professional education courses throughout
15		my career, including the Leadership Louisville program in 2006.
16	Q.	PLEASE DESCRIBE YOUR BUSINESS EXPERIENCE.
17	Α.	I began my career in 1990 as an engineer with PJM Interconnection, L.L.C.
18		("PJM"), where I implemented energy management systems for the reliable
19		operation of the multi-state transmission grid. I left PJM to work with

Cincinnati Gas & Electric Company in 1993 on a similar project before
 returning to PJM in 1994 during the deregulation of the electric wholesale
 market. I implemented new practices and tools for PJM in conjunction with
 FERC Order Nos. 888 and 889.

5 In 1997, I joined Louisville Gas & Electric Company ("LG&E"), first in 6 the Energy Trading group and then in the Generation Planning department, 7 where I produced least-cost planning assessments and written testimony 8 for state approval for new power plants. As Manager of Regulatory Affairs 9 for LG&E and Kentucky Utilities Company ("KU"), I directed strategic 10 regulatory initiatives with FERC and with regulators in Kentucky and 11 Virginia, including rate cases, certificates of public convenience and 12 necessity and transmission siting proceedings, compliance & management 13 audits, regional transmission organization membership, and hydroelectric 14 power plant relicensing. I then served as Director of Customer Service & 15 Marketing for LG&E and KU, where I was responsible for all facets of 16 customer interaction, including marketing, major accounts, walk-in offices, 17 call centers, customer inquiries, negotiation of franchise agreements, 18 economic development, and energy efficiency program design and 19 implementation.

In 2010, I joined The Prime Group, LLC, a rate and regulatory
consulting firm, as a Senior Consultant.

In 2012, I founded Catalyst Consulting LLC, a rate and regulatory
 consulting firm specializing in utility rate cases, tariffs and complex

1		regulatory matters. In this role, I provide consulting services to electric
2		utilities on matters related to rate design, cost of service studies, revenue
3		requirements, open access transmission tariffs, RTO membership, formula
4		rates, special rate structures, and other rate or regulatory matters.
5	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?
6	Α.	Yes. A complete listing of my testimony is provided in Schedule JW-1.
7	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
8	Α.	The purpose of my testimony is to
9		1) Explain the need for jurisdictional allocators and provide an overview of
10		the approach;
11		2) Describe the primary allocators;
12		3) Expound on the proposal for the Demand allocator;
13		4) Describe the derived allocators.
14	Q.	ARE YOU SPONSORING ANY SCHEDULES OR SCHEDULES?
15	Α.	Yes. I have prepared the following schedules to support my testimony:
16		Schedule JW-1 – Qualifications of John Wolfram
17		Schedule JW-2 – Jurisdictional Demand Allocator Analysis
18		II. JURISDICTIONAL ALLOCATION
19	Q.	WHY IS IT NECESSARY TO ALLOCATE REVENUES, EXPENSES AND
20		RATE BASE TO THE COMPANY'S VARIOUS JURISDICTIONS?
21	Α.	Evergy Metro operates a single, comprehensive system for its Kansas,
22		Missouri, and firm wholesale jurisdictions. It operates a single production
23		and transmission system that is used to provide service to retail customers
24		in Missouri and Kansas, as well as the full requirements firm wholesale

customers. While some revenue, expense and/or rate base items may be
 directly assigned to particular jurisdictions, many others cannot; therefore,
 jurisdictional allocations of operating expenses, certain operating revenues
 and rate base are necessary.

Q. WHY IS THE METHOD BY WHICH THE ALLOCATIONS ARE MADE 6 IMPORTANT?

Α. 7 The method of allocation is critical to ensure that the rates charged to 8 customers in each jurisdiction reflect the actual cost of serving those 9 customers without reflecting the cost of serving customers in other 10 jurisdictions. Also, the method of allocation must allow the Company the 11 opportunity to fully recover its prudently incurred costs of serving those 12 customers. Regulated utilities are entitled to a reasonable opportunity to 13 recover their prudently-incurred costs and are entitled to earn a fair and 14 reasonable rate of return on their capital investments. If the sum of the 15 allocation factors allowed in each jurisdiction is less than 100%, then the 16 Company will not have the opportunity to recover its prudently incurred cost 17 of service and return on rate base.

18 Q. WHAT ALLOCATORS DID THE COMPANY USE?

A. The allocators that were used can be classified as primary allocators and derived allocators. The primary allocators are based on weather-normalized demand and energy amounts, as well as customer information, for the twelve-month test period in this case. This data is described in more detail in the Direct Testimony of Albert R. Bass ("Bass Testimony"). The derived allocators are, at their root, based on the Demand, Energy, and Customer

allocators. The derived allocators are calculated as a combination of
amounts that have previously been allocated using one or more of the
primary allocators and/or in combination with amounts that are directly
assignable. The jurisdictional allocators are listed in Schedule RAK-6 of the
Direct Testimony of Ronald A. Klote. I discuss these in more detail in the
sections that follow.

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III. PRIMARY ALLOCATORS

8 Q. WHAT ARE THE PRIMARY ALLOCATORS?

9 A. The primary allocators are the Customer allocator, the Energy allocator,

10 and the Demand allocator.

11 Q. PLEASE DESCRIBE THE CUSTOMER ALLOCATOR.

- A. The Customer allocator is based on the average number of customers in
 Missouri, Kansas, and the firm wholesale jurisdiction for the test period.
 Specifically, the allocator is determined as the jurisdictional share of the
 average number of electric customers for the twelve months ended June
 30, 2021, including customer growth through May 31, 2022. These values
 are supported in the Bass Testimony.
- 18Q.IS THE CUSTOMER ALLOCATOR DETERMINED IN A MANNER19CONSISTENT WITH THE MOST RECENT COMPANY RATE FILING WITH20THIS COMMISSION?
- 21 A. Yes.
- 22 Q. PLEASE DESCRIBE THE ENERGY ALLOCATOR.
- A. The Energy allocator is based on the total weather-normalized kilowatt-hour
 usage by the Missouri and Kansas retail customers and the firm wholesale

- jurisdiction for the twelve months ended June 30, 2021, including customer
 growth through May 31, 2022. These amounts are also supported in the
 Bass Testimony.
- 4Q.IS THE ENERGY ALLOCATOR DETERMINED IN A MANNER CONSISTENT5WITH THE MOST RECENT COMPANY RATE FILING WITH THIS6COMMISSION?
- 7 A. Yes.

8 Q. PLEASE DESCRIBE THE DEMAND ALLOCATOR.

9 Α. The Demand allocator is based coincident peak demand data for the 10 Missouri and Kansas retail jurisdictional customers and the firm wholesale 11 jurisdiction for the twelve month period from July 2020 through June 2021. 12 The weather normalized coincident peak demands include losses and 13 customer growth projected to May 2022, as supported in the Bass 14 Testimony. The Demand allocator is calculated as the average of the 15 values derived from two methods. The first method is the average of 16 coincident peak demands for four months ("4 CP") and the second method is the average of the coincident peak demands for twelve months ("12 17 CP").1 18

19Q.IS THE DEMAND ALLOCATOR DETERMINED IN A MANNER20CONSISTENT WITH THE MOST RECENT COMPANY RATE FILING WITH21THIS COMMISSION?

¹ References herein to any demand allocation of "n CP" means the use of n months of Coincident Peak demand to determine the apportionment of demand costs for integer n between 1 and 12.

1	Α.	No. While part of the determination is consistent, the overall approach
2		represents a change from what the Commission approved in the Company's
3		most recent rate filing. I explain this approach further in the next section of
4		my testimony.
5		IV. DEMAND ALLOCATOR
6	Q.	WHAT IS THE PURPOSE OF THE DEMAND ALLOCATOR?
7	Α.	The Demand allocator determines what portion of the Company's fixed cost
8		is assigned to Missouri retail jurisdiction and what portion is assigned to the
9		Kansas retail and the wholesale jurisdictions. The fixed costs in question
10		(also referred to as "capacity costs") are those classified as demand-related,
11		or those cost that vary with the KW demand imposed by the customer. ²
12	Q.	IS THE ALLOCATION OF DEMAND COSTS PARTICULARLY
13		CHALLENGING?
14	Α.	Yes. In his treatise "Principles of Public Utility Rates," James Bonbright
15		observes the following about capacity costs:
16 17 18 19 20 21		"Of all of the many problems of rate making that are bedeviled by unresolved disputes about issues of fairness, the one that deserves first rank for frustration is that concerned with the apportionment among different classes of consumers of the demand costs or capacity costs." ³

² National Association of Regulatory Utility Commissioners *Electric Utility Cost Allocation Manual*, January 1992, ("NARUC CAM") pg. 20.

³ Bonbright, James C, Principles of Public Utility Rates, Columbia University Press, New York NY, 1961, p. 184.

1 The challenge of apportionment among different classes of consumers 2 similarly applies to the apportionment among different jurisdictions. It can 3 be difficult because the notion of what parameters reasonably represent 4 how costs vary with capacity, or the "size" of facilities like power plants, 5 transmission lines, distribution transformers, etc., is less readily deduced 6 than the amount of power consumed (Energy allocator) or the number of 7 customers taking service (Customer allocator).

HOW HAS THE DEMAND ALLOCATOR BEEN ADDRESSED IN PREVIOUS

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RATE FILINGS?

A. In Missouri, prior to 1983, the Company allocated jurisdictional demand
 costs using 1 CP. Since then, in eleven different rate proceedings between
 1985 and 2018, and given numerous different proposals by the Company,
 Commission Staff, and intervenors in those cases, all of the Commission
 orders (in settled cases and otherwise) have implemented a Demand
 allocator in Missouri based on 4 CP.

In the Kansas jurisdiction, the Company used a 7 CP Demand allocator prior to 1983. Since then, in ten different rate proceedings between 1985 and 2018, and again given numerous proposals by parties to those cases, all of the Kansas Corporation Commission ("KCC") orders (in settled cases and otherwise) have implemented a Demand allocator based on 12 CP.

22Q:CAN UTILIZATION OF DIFFERENT DEMAND ALLOCATORS RESULT IN23INAPPROPRIATE RECOVERY FOR A MULTI-JURISDICTIONAL UTILITY24SUCH AS METRO?

A. Yes. While variances in general may be in either direction and may not be
 sizable, the use of different allocators may result in inappropriate recovery
 across multiple jurisdictions. An example of this kind of unreasonable outcome
 just occurred with the extraordinary Winter Storm Uri in February 2021.

5 As noted in the Application of Evergy Missouri Metro and Evergy 6 Missouri West for Accounting Authority Order ("AAO") related to Winter Storm 7 Uri in Docket No. EU-2021-0283, the difference in demand allocation 8 approaches between the jurisdictions created a situation where Evergy 9 Missouri Metro and Evergy Kansas Metro customers would receive a "windfall" 10 credit for off-system sales revenues that Evergy Metro, Inc. did not receive. 11 Because Winter Storm Uri caused an extraordinary amount of such revenue 12 being attributed to the operations of Evergy Metro, Inc., the credit provided to 13 its customers in Missouri and Kansas would total approximately 107% of its 14 actual off-system sales revenue under existing cost allocation methodologies 15 if not addressed by this Commission and the KCC in Evergy Metro, Inc.'s 16 deferral requests. Evergy Missouri Metro proposed an adjustment to 17 appropriately correct this situation in an amount that reflected the under-18 recovery that should have been allocated to Missouri customers. Evergy 19 Kansas Metro proposed a similar adjustment in Kansas so that the total amount 20 refunded to Evergy Metro, Inc. customers across both states would be 100% 21 of the actual off-system sales revenues.⁴

⁴ In the Matter of the Application of Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West for an Accounting Authority Order Allowing the companies to Record and Preserve Costs Related to the February 2021 Cold Weather Event, Case No. EU-2021-0283, Filed June 30, 2021, Paragraph 34.

1Q.IN THEIR FILINGS IN MISSOURI AND KANSAS REGARDING WINTER2STORM URI AND THE ASSOCIATED COSTS, DID EVERGY INDICATE3THAT THEY WOULD PROPOSE A SOLUTION TO CORRECT THIS4ALLOCATION PROBLEM ON A PROSPECTIVE BASIS IN THE NEXT5GENERAL RATE CASE FILINGS IN EACH STATE?

A: Yes. The extraordinary, irrational results from Winter Storm Uri and Evergy's
commitment to address the different allocation factors utilized by Missouri and
Kansas is the reason for my research, testimony and recommendation in this
case.

10Q.IS THERE A CONVENTIONAL APPROACH IN UTILITY RATEMAKING TO11DETERMINING WHETHER 12 CP IS APPROPRIATE?

- 12 Α. To a considerable extent, yes. The Federal Energy Regulatory Commission 13 ("FERC") has adopted three different tests ("FERC Tests") to assess 14 whether a 12 CP demand allocation is appropriate. The FERC Tests were 15 set forth in FERC Opinion No. 501 issued on April 21, 2008. The three tests 16 all involve mathematical comparisons using monthly coincident peak load 17 data. Utilities have come to apply these tests before FERC and in other 18 jurisdictions to assess whether demand costs should be allocated using 12 19 CP or using factors based on a more seasonal calculation.
- 20

Q. PLEASE DESCRIBE THE FERC TESTS.

A. The first test is the On and Off Peak test. Here, FERC compares the
 average of the system peaks during the purported peak period, as a
 percentage of the annual peak, to the average of the system peaks during
 the off-peak months, as a percentage of the annual peak. Generally, FERC

- 1 has held that a nineteen percentage point or less difference between these 2 two figures supports using the 12 CP method.
- 3 The second test is the Low-to-Annual Peak test. This involves the 4 lowest monthly peak as a percentage of the annual peak. FERC considers 5 a range of sixty-six percent or higher as indicative of a 12 CP system.
- 6 The third test is the Average to Annual Peak test, and it computes 7 the average of the twelve monthly peaks as a percentage of annual peak. 8 Generally, the range for a utility to be considered 12 CP is eighty-one percent or higher.⁵ 9

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Q. DID YOU APPLY THE THREE FERC TESTS IN THIS CASE?

- 11 Α. Yes. I performed the tests using test period demand data to compare 12 CP 12 to several other CP demand scenarios: 1 CP, 3 CP using June, July and 13 August; 3 CP using July, August and September; 4 CP; 6 CP; 8 CP; and 10 14 CP. I performed the tests for each Company jurisdiction (Missouri, Kansas, 15 and wholesale) as well as for total. The analysis and results are provided 16 in Schedule JW-2.
- 17 Q. WHAT DO THE TEST RESULTS INDICATE?
- The test results indicate that using a more seasonal peak determination is 18 Α. 19 more appropriate than using 12 CP for determining the Demand allocator. 20 This is the case in every scenario for all jurisdictions, as indicated in 21 Schedule JW-2.

⁵ FERC Opinion 501 (123 FERC ¶ 61,047), paragraph 76.

1Q.DOES THIS MEAN THAT THE COMPANY SHOULD SIMPLY USE THE 4 CP2METHOD AS IT HAS IN THE PAST?

3 Α. No. There are other factors that the FERC Tests do not address that must be considered. I discuss those further below. In addition, while the FERC 4 5 Tests are a strong indicator for appropriate development of the Demand 6 allocator, they are not the sole criteria to use when making this decision. 7 FERC itself recognized that the full range of a company's operating realities 8 should be considered along with peak demands, including but not limited to 9 scheduled maintenance. unscheduled outages, diversity, reserve 10 requirements, and off-system sales commitments.⁶

11 Q. WHAT OPERATING REALITIES ARE ESPECIALLY RELEVANT HERE?

12 A. Participation in a Regional Transmission Organization ("RTO"), or in this 13 case the Company's participation in the Southwest Power Pool ("SPP"), is 14 particularly important because it affects Evergy Metro's system planning 15 efforts. Company participation in the SPP integrated wholesale markets is 16 also a considerable factor because the evolving market operations also 17 impact Evergy's resource planning paradigm. I discuss this further below. 18 Simply adopting the 4 CP method due to the results of the FERC Tests 19 would ignore significant factors relevant to the just and reasonable 20 determination of customer rates.

⁶ FERC Opinion 501 (123 FERC ¶ 61,047), paragraph 75.

1Q.GIVEN THIS BACKGROUND AND ANALYTIC FOUNDATION, WHAT IS2THE COMPANY'S GOAL WITH RESPECT TO THE DEMAND3ALLOCATOR?

Α. The goal of the Company with respect to the Demand allocator is to secure 4 5 approval by both this Commission and the KCC of a single, comprehensive 6 determination of the jurisdictional Demand allocators to be consistently 7 applied in both of the retail jurisdictions of Evergy Metro. The equitable, 8 consistent allocation of the Company's demand costs between the two retail 9 jurisdictions will ensure that the rates charged to customers in each 10 jurisdiction reflect the actual cost of serving those customers while also 11 allowing the Company the opportunity to fully recover the prudently incurred 12 costs of serving those customers.

13Q.WHAT DOES THE COMPANY SPECIFICALLY PROPOSE FOR THE14DEMAND ALLOCATOR?

A. Because the Missouri Commission has historically approved a Demand
allocator based on 4 CP and the KCC has historically approved a Demand
Allocator based on 12 CP, the Company proposes to use a Demand
Allocator in its rate filings with both this Commission and the KCC that is the
arithmetic average of the values derived from the 4 CP and 12 CP
calculations. This calculation is shown in Schedule JW-2.

21 Q. WHY DOES EVERGY PROPOSE THIS NOVEL BUT SIMPLE APPROACH?

A. Given the importance of precedent in both jurisdictions, the nature and
 results of the FERC Tests, and other considerations that I describe later in
 my testimony, the proposed approach is a reasonable one aimed at bridging

the current gap between the jurisdictional history of Evergy Metro operating
in both Missouri and Kansas. The method is consistent with traditional
ratemaking principles, is objective, is consistent with the treatment afforded
other utilities that operate in multiple retail jurisdictions, and is appropriate
for the new paradigm in which the Company operates as a member of SPP.
As such, the approach is just and reasonable.

- 7 Q. HOW IS THE DEMAND ALLOCATOR CONSISTENT WITH TRADITIONAL
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RATEMAKING PRINCIPLES?

- 9 A. In the aforementioned treatise *Principles of Public Utility Rates*, James
- 10 Bonbright established several attributes of a sound rate structure for utilities.
- 11 These attributes have been largely adopted or affirmed by energy regulators
- 12 across the country for many decades. Bonbright's attributes of a sound rate
- 13 structure include the following:
 - Rates should have the following practical attributes: simplicity, certainty, convenience of payment, economy in collection, understandability, public acceptability, and feasibility of application.
- 17 2) Rates should be free from controversies as to proper interpretation.
- 183)Rates should effectively yield total revenue requirements under the19fair return standard.
- 20 4) Rates should provide revenue stability from year to year.
- 215)Rates themselves should be stable, i.e. rates should experience22minimal unexpected changes that are seriously adverse to existing23customers.
 - 6) Rates should apportion the total cost of service fairly among different consumers.
- 26 7) Rate relationships should avoid "undue discrimination."
- 278)Rates should promote efficiency, discouraging wasteful use of
energy while promoting all justified types and amounts of use.

responding economically to changing demand and supply patterns.
 Rates should reflect all of the present and future private and social costs and benefits occasioned by a service's provisions (i.e. all internalities and externalities.)⁷
The Demand allocator is plainly consistent with the first seven of these
attributes as follows:
 As the arithmetic average of two common approaches to allocating capacity costs, the Demand allocator is simple, understandable, publicly acceptable, and feasible to apply.
2) As a simple average, the Demand allocator is free from controversies as to proper interpretation.
 As a consistent approach across two jurisdictions, the Demand allocator will develop rates that should effectively yield total revenue requirements under the fair return standard.
 The averaging of two methods in the Demand allocator should provide revenue stability from year to year.
5) The averaging of two methods in the Demand allocator should yield rates that are stable with minimal unexpected changes adverse to customers.
 A single, comprehensive Demand allocator will help the Company apportion the total cost of service fairly among different consumers.
The formulaic, objective approach of determining the Demand allocator should avoid "undue discrimination."
The approach does not violate any of the other attributes. For these
reasons, the Demand allocator is consistent with traditional ratemaking
principles.

⁷ Bonbright, p. 383-384.

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Q. HOW IS THE DEMAND ALLOCATOR OBJECTIVE?

A. The Demand allocator is objective, not subjective, because it relies upon
the averaging of the 4 CP and 12 CP values without regard for what results
the numeric values of either method yield for either jurisdiction. The
approach is process-based and is not driven by the outcome for one
jurisdiction or another.

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Q. HOW IS THE DEMAND ALLOCATOR CONSISTENT WITH OTHER UTILITIES THAT OPERATE IN MULTIPLE RETAIL JURISDICTIONS?

9 A. The same Demand allocator approach will be used in Company rate filings 10 in both the Missouri and Kansas jurisdictions. Other companies that 11 operate in multiple retail jurisdictions also use the same method in both 12 jurisdictions (regardless of what that method is). For example, Liberty 13 Utilities d/b/a The Empire District Electric Company uses the 12 CP 14 allocator to assign capacity costs both in Missouri and in Kansas. Kentucky 15 Utilities Company uses a single approach, the 12 CP method, to allocate 16 capacity costs between its Kentucky affiliate and Old Dominion Power, its 17 affiliate in Virginia.

18 Q. HOW IS THE DEMAND ALLOCATOR APPROPRIATE FOR THE 19 COMPANY'S CHANGED PARADIGM?

A. By virtue of its membership in SPP, the Company is operating in a different
 arrangement or construct that it did in the historic rate filings where the
 Demand allocator was determined using 4 CP.

1 Q. PLEASE EXPLAIN.

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2 Α. The operating environment for Evergy has changed since the Commission 3 first adopted the long-standing approach for determining the Demand 4 allocator in Missouri. The Company is a member of SPP. Participation in 5 SPP introduces a new framework for operations and resource planning that 6 warrants consideration when examining the apportionment of capacity 7 costs.

8 Q. HOW DOES THE COMPANY'S PARTICIPATION IN SPP INTRODUCE A NEW FRAMEWORK WHEN CONSIDERING APPORTIONMENT OF 10 CAPACITY COSTS?

- 11 Α. Participation in SPP changes the fundamental way that Evergy operates, in 12 several ways, including but not limited to the following:
- 13 1) As a participant in the SPP Integrated Marketplace, Evergy no longer 14 directly dispatches its own power plants in order to meet its 15 obligations to serve its own native load. Instead, the Company bids 16 all of its power plant output into the SPP day-ahead and/or real-time 17 markets, and sells its power into those markets in accordance with 18 the price signals determined by SPP. The Company also meets all 19 of its load obligations by purchasing power from the SPP market. 20 The direct link between Company power plants and meeting 21 Company load is split in the RTO market model, which bifurcates the 22 sale of power from resources and the purchase of power by load 23 serving entities.

As a member of SPP, the Company participates in regional planning
 and is obligated to meet reserve margin targets set by SPP. This
 regional focus changes how the Company assesses the need for
 capacity resources and how the Company meets its demand
 obligations – not only in the summer months, but in all months of the
 year.

7 All of this means that the former paradigm of Evergy building power plants 8 for its projected base, intermediate, and peak load needs is really no longer 9 appropriate for ratemaking purposes due to the Company's participation in 10 the regional SPP wholesale power market and coordinated bulk electric grid 11 operation. Historically, the argument that the Company should use a 4 CP 12 Demand allocator because its power plants were predominantly needed to 13 meet summer peak load, and not peak load in all twelve months, had merit. 14 But now that the Company participates in SPP, this is no longer the case; 15 the Company resources are bid into the SPP markets in all months, and the 16 Company load is met from purchases from the SPP market in all months, 17 regardless of how Company demands vary from month to month or when 18 the Company peak demand occurs. SPP does not operate a capacity 19 market, but SPP is responsible for the development and implementation of 20 policies and processes to ensure the reliable supply of capacity necessary 21 to meet demand and supply adequacy requirements throughout the entire 22 SPP regional footprint – not just the Company footprint -- consistent with 23 the compliance obligations of NERC Reliability Standards.

1 Note that these facts do not invalidate the use of a 4 CP for 2 determining the Demand allocator; rather, they reinforce the position that 3 circumstances change, and the historic approach to the Demand allocator 4 should not be immutable, binding, or absolute.

Q. GIV

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GIVEN ALL OF THESE CONSIDERATIONS, HOW IS THE DEMAND ALLOCATOR FAIR, JUST AND REASONABLE?

A. The Demand allocator as proposed embraces an approach aimed at
bridging the current gap between the jurisdictional history of the Evergy
Metro companies operating in both Missouri and Kansas. The method is
consistent with traditional ratemaking principles, is objective, is consistent
with the treatment afforded other utilities that operate in multiple retail
jurisdictions, is appropriate for the new construct in which the Company
operates as a member of SPP, and as such is just and reasonable.

Bonbright also notes that "the art of ratemaking is an art of wise compromise." ⁸ This effectively is what the Company seeks with this proposal for the Demand allocator.

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V. DERIVED ALLOCATORS

18 Q. WHAT ARE THE DERIVED ALLOCATORS?

A. The derived allocators are those allocators calculated as a combination of
 amounts that have previously been allocated using one or more of the
 primary allocators, and/or using other determined allocators in combination
 with directly-assignable amounts.

⁸ Bonbright, pg. 82.

1 Q. HOW ARE THE DERIVED ALLOCATORS CALCULATED?

- A. The derived allocators are calculated as a combination of amounts that
 have previously been allocated using one or more of the primary allocators
 and/or in combination with amounts that are directly assignable.
- 5 Q. ARE THE DERIVED ALLOCATORS DETERMINED IN A MANNER 6 CONSISTENT WITH PAST COMPANY RATE FILINGS WITH THIS 7 COMMISSION?
- 8 A. Yes.

9 Q. PLEASE EXPLAIN HOW THE VARIOUS REVENUE, EXPENSE AND RATE
 10 BASE COMPONENTS ARE ALLOCATED AMONG EVERGY METRO'S
 11 REGULATORY JURISDICTIONS.

- A. A narrative summary of the method for determining the allocation of the
 Company's revenue, expense, and rate base components is provided in
 Schedule RAK-7 of the Direct Testimony of Ronald A. Klote.
- 15

VI. <u>CONCLUSION</u>

16 Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION?

17 A. Because Metro operates a single, comprehensive system for its Missouri, 18 Kansas, and firm wholesale jurisdictions, the Company must allocate 19 revenues, expenses and rate base to the respective jurisdictions. The 20 general methods proposed in this case for allocating these amounts are 21 reasonable and have been accepted by this Commission in previous rate 22 filings with one exception. The Demand allocator proposed herein relies 23 upon a novel, but simple and straightforward approach, but one that enables 24 an equitable, consistent allocation of the Company's demand costs

1 between the Missouri and Kansas retail jurisdictions. Such an allocation will 2 ensure that the rates charged to customers in each jurisdiction reflect the 3 actual cost of serving those customers while also allowing the Company a 4 reasonable opportunity to fully recover the prudently incurred costs of 5 serving those customers. The approach will bridge the current gap between 6 the jurisdictional history of the Evergy Metro Missouri and Kansas retail 7 The method is consistent with traditional ratemaking jurisdictions. 8 principles, is objective, is consistent with the treatment afforded other 9 utilities that operate in multiple retail jurisdictions, is appropriate for the new 10 paradigm in which the Company operates as a member of SPP, and as 11 such is just and reasonable.

For these reasons I recommend that the Commission accept the proposed jurisdictional allocators for use in developing the rates proposed in this proceeding and approve them as filed.

15 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

16 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Evergy Metro, Inc. d/b/a Evergy Missouri Metro's Request for Authority to Implement A General Rate Increase for Electric Service

Case No. ER-2022- 0129

AFFIDAVIT OF JOHN WOLFRAM

)

STATE OF KENTUCKY) ss **COUNTY OF JEFFERSON**

Joh Wolfram, being first duly sworn on her oath, states:

1. My name is John Wolfram. I work in Louisville, Kentucky, and I am founder and Principal of Catalyst Consulting LLC.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Evergy Metro, Inc. d/b/a Evergy Missouri Metro ("Evergy Missouri Metro") twenty-two (22) pages, having been prepared in written form for consisting of introduction into evidence in the above-captioned dockets.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

John Wolfram Subscribed and sworn before me this $\frac{124}{124}$ day of December, 2021

PATRICK ANDREW MEKO Notary Public - State at Large Kentucky My Commission Expires Nov. 4, 2025 Notary ID KYNP39855

Notary Public

My commission expires: November 4, 2025

JOHN WOLFRAM

Summary of Qualifications

Provides consulting services to investor-owned utilities, rural electric cooperatives, and municipal utilities regarding utility rate and regulatory filings, cost of service studies, wholesale and retail rate designs, tariffs and special contracts, formula rates, and other analyses.

Employment

CATALYST CONSULTING LLC	June 2012 – Present
Principal	

Provide consulting services in the areas of tariff development, formula rates, regulatory analysis, economic development, revenue requirements, cost of service, rate design, special rates, audits, rate filings, and other utility regulatory areas.

THE PRIME GROUP, LLC	March 2010 – May 2012
Senior Consultant	
LG&E and KU, Louisville, KY (Louisville Gas & Electric Company and Kentucky Utilities Company) Director, Customer Service & Marketing (2006 - 2010) Manager, Regulatory Affairs (2001 - 2006) Lead Planning Engineer, Generation Planning (1998 - 2001) Power Trader, LG&E Energy Marketing (1997 - 1998)	1997 - 2010
<u>PJM INTERCONNECTION, LLC, Norristown, PA</u> Project Lead – PJM OASIS Project Chair, Data Management Working Group	1990 - 1993; 1994 - 1997
CINCINNATI GAS & ELECTRIC COMPANY, Cincinnati, OH Electrical Engineer - Energy Management System	1993 - 1994

Education

Bachelor of Science Degree in Electrical Engineering, University of Notre Dame, 1990 Master of Science Degree in Electrical Engineering, Drexel University, 1997 Leadership Louisville, 2006

Associations

Senior Member, Institute of Electrical and Electronics Engineers ("IEEE") & Power Engineering Society

<u>Articles</u>

"FERC Formula Rate Resurgence" Public Utilities Fortnightly, Vol. 158, No. 9, July 2020, 34-37.

"Economic Development Rates: Public Service or Piracy?" *IAEE Energy Forum*, International Association for Energy Economics, 2016 Q1 (January 2016), 17-20.

Presentations

"Avoiding Shock: Communicating Rate Changes" presented to APPA Business & Financial Conference, Sep. 2020.

"Revisiting Rate Design Strategies" presented to APPA Public Power Forward Summit, Nov. 2019.

"Utility Rates at the Crossroads" presented to APPA Business & Financial Conference, Sep. 2019.

"New Developments in Kentucky Rate Filings" presented to Kentucky Electric Cooperatives Accountants' Association Summer Meeting, Jun. 2019.

"Electric Rates: New Approaches to Ratemaking" presented to CFC Statewide Workshop for Directors, Jan. 2019.

"The Great Rate Debate: Residential Demand Rates" presented to CFC Forum, Jun. 2018.

"Benefits of Cost of Service Studies" presented to Tri-State Electric Cooperatives Accountants' Association Spring Meeting, Apr. 2017.

"Proper Design of Utility Rate Incentives" presented to APPA/Area Development's Public Power Consultants Forum, Mar. 2017.

"Utility Hot Topics and Economic Development" presented to APPA/Area Development's Public Power Consultants Forum, Mar. 2017.

"Emerging Rate Designs" presented to CFC Independent Borrowers Executive Summit, Nov. 2016.

"Optimizing Economic Development" presented to Grand River Dam Authority Municipal Customer Annual Meeting, Sept. 2016.

"Tomorrow's Electric Rate Designs, Today" presented to CFC Forum, Jun. 2016.

"Reviewing Rate Class Composition to Support Sound Rate Design" presented to EEI Rate and Regulatory Analysts Group Meeting, May 2016.

"Taking Public Power Economic Development to the Next Level" presented to APPA/Area Development's Public Power Consultants Forum, Mar. 2016.

"Ratemaking for Environmental Compliance Plans" presented to NARUC Staff Subcommittee on Accounting and Finance Fall Conference, Sep. 2015.

"Top Utility Strategies for Successful Attraction, Retention & Expansion" presented to APPA/Area Development's Public Power Consultants Forum, Mar. 2015.

"Economic Development and Load Retention Rates" presented to NARUC Staff Subcommittee on Accounting and Finance Fall Conference, Sep. 2013.

"Rates for Distributed Generation" presented to 2010 Electric Cooperative Rate Conference, Oct. 2010.

"What Utilities Can Do to Advance Energy Efficiency in Kentucky" panel session of Second Annual Kentucky Energy Efficiency Conference, Oct. 2007.

Expert Witness Testimony & Proceedings

FERC: Submitted affidavit for Constellation Mystic Power, LLC in FERC Docket No. ER18-1639-000 in response to arguments raised in formal challenges to an informational filing required for a cost-of-service rate for the operation of power plants in ISO New England.

Submitted direct testimony for El Paso Electric Company in FERC Docket No. ER22-282 regarding a proposed Transmission Formula Rate.

Submitted direct testimony for TransCanyon Western Development, LLC in FERC Docket No. ER21-1065 regarding a proposed Transmission Formula Rate.

Submitted direct testimony for Cleco Power LLC in FERC Docket No. ER21-370 regarding a proposed rate schedule for Blackstart Service under Schedule 33 of the MISO Open Access Transmission, Energy and Operating Reserve Markets Tariff.

Submitted direct testimony for Constellation Mystic Power, LLC in FERC Docket No. ER18-1639-005 supporting a compliance filing for a cost-of-service rate for compensation for the continued operation of power plants in ISO New England.

Submitted direct testimony for DATC Path 15, LLC in FERC Docket No. ER20-1006 regarding a proposed wholesale transmission rate.

Submitted direct testimony for Tucson Electric Power Company in FERC Docket No. ER19-2019 regarding a proposed Transmission Formula Rate.

Submitted direct testimony for Cheyenne Light, Fuel & Power Company in FERC Docket No. ER19-697 regarding a proposed Transmission Formula Rate.

Supported Kansas City Power & Light in FERC Docket No. ER19-1861-000 regarding revisions to fixed depreciation rates in the KCP&L SPP Transmission Formula Rate.

Supported Westar Energy and Kansas Gas & Electric Company in FERC Docket No. ER19-269-000 regarding revisions to fixed depreciation rates in the Westar SPP Transmission Formula Rate.

Submitted direct testimony for Midwest Power Transmission Arkansas, LLC in FERC Docket No. ER15-2236 regarding a proposed Transmission Formula Rate.

Submitted direct testimony for Kanstar Transmission, LLC in FERC Docket No. ER15-2237 regarding a proposed Transmission Formula Rate.

Supported Westar Energy and Kansas Gas & Electric Company in FERC Docket Nos. FA15-9-000 and FA15-15-000 regarding an Audit of Compliance with Rates, Terms and Conditions of Westar's Open Access Transmission Tariff and Formula Rates, Accounting Requirements of the Uniform System of Accounts, and Reporting Requirements of the FERC Form No. 1.

Submitted direct testimony for Westar Energy in FERC Docket Nos. ER14-804 and ER14-805 regarding proposed revisions to a Generation Formula Rate.

Supported Intermountain Rural Electric Association and Tri-State G&T in FERC Docket No. ER12-1589 regarding revisions to Public Service of Colorado's Transmission Formula Rate.

Supported Intermountain Rural Electric Association in FERC Docket No. ER11-2853 regarding revisions to Public Service of Colorado's Production Formula Rate.

Supported Kansas Gas & Electric Company in FERC Docket No. FA14-3-000 regarding an Audit of Compliance with Nuclear Plant Decommissioning Trust Fund Regulations and Accounting Practices.

Supported LG&E Energy LLC in FERC Docket No. PA05-9-000 regarding an Audit of Code of Conduct, Standards of Conduct, Market-Based Rate Tariff, and MISO's Open Access Transmission Tariff at LG&E Energy LLC.

Submitted remarks and served on expert panel in FERC Docket No. RM01-10-000 on May 21, 2002 in Standards of Conduct for Transmission Providers staff conference, regarding proposed rulemaking on the functional separation of wholesale transmission and bundled sales functions for electric and gas utilities.

Kansas: Submitted report for Westar Energy, Inc. in Docket No. 21-WCNE-103-GIE regarding plans and options for funding the decommissioning trust fund, depreciation expenses, and overall cost recovery in the event of premature closing of the Wolf Creek nuclear plant.

Submitted direct and rebuttal testimony for Westar Energy, Inc. in Docket No. 18-WSEE-328-RTS regarding overall rate design, prior rate case settlement commitments, lighting tariffs, an Electric Transit rate schedule, Electric Vehicle charging tariffs, and tariff general terms and conditions.

Submitted direct and rebuttal testimony for Westar Energy, Inc. in Docket No. 18-KG&E-303-CON regarding the Evaluation, Measurement and Verification ("EM&V") of an energy efficiency demand response program offered pursuant to a large industrial customer special contract.

Submitted report for Westar Energy, Inc. in Docket No. 18-WCNE-107-GIE regarding plans and options for funding the decommissioning trust fund, depreciation expenses, and overall cost recovery in the event of premature closing of the Wolf Creek nuclear plant.

Submitted direct and rebuttal testimony for Westar Energy, Inc. in Docket No. 15-WSEE-115-RTS regarding rate designs for large customer classes, establishment of a balancing account related to new rate options, establishment of a tracking mechanism for costs related to compliance with mandated cyber and physical security standards, other rate design issues, and revenue allocation.

Kentucky: Submitted direct testimony and responses to data requests on behalf of Jackson Purchase Energy Corporation in Case No. 2021-00358 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a base rate case. Submitted direct and rebuttal testimony and responses to data requests on behalf of Big Rivers Electric Corporation in Case No. 2021-00289 regarding a Large Industrial Customer Standby Service Tariff.

Submitted direct testimony on behalf of Big Rivers Electric Corporation and Jackson Purchase Energy Corporation in Case No. 2021-00282 regarding a marginal cost of service study in support of an economic development rate for a special contract.

Submitted direct testimony, responses to data requests, and rebuttal testimony on behalf of sixteen distribution cooperative owner-members of East Kentucky Power Cooperative in Case Nos. 2021-00104 through 2021-00119 regarding rate design for the pass-through of a proposed wholesale rate revision.

Submitted direct testimony and responses to data requests on behalf of Kenergy Corp. in Case No. 2021-00066 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony on behalf of Big Rivers Electric Corporation in Case No. 2021-00061 regarding two cost of service studies in a review of the Member Rate Stability Mechanism Charge for calendar year 2020.

Submitted direct testimony and responses to data requests on behalf of Licking Valley R.E.C.C. in Case No. 2020-00338 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and responses to data requests on behalf of Cumberland Valley Electric in Case No. 2020-00264 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and responses to data requests on behalf of Taylor County R.E.C.C. in Case No. 2020-00278 regarding the cost support and tariff changes for the implementation of a Prepay Metering Program.

Submitted direct testimony and responses to data requests on behalf of Meade County R.E.C.C. in Case No. 2020-00131 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and responses to data requests on behalf of Clark Energy Cooperative in Case No. 2020-00104 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and responses to data requests on behalf of Big Rivers Electric Corporation in Case No. 2019-00435 regarding an Environmental Compliance Plan and Environmental Surcharge rate mechanism.

Submitted direct testimony and responses to data requests on behalf of Jackson Energy Cooperative in Case No. 2019-00066 regarding revenue requirements, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and responses to data requests on behalf of Jackson Purchase Energy Corporation in Case No. 2019-00053 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case. Submitted direct testimony and data request responses on behalf of Big Rivers Electric Corporation in Case No. 2018-00146 regarding ratemaking issues associated with the anticipated termination of contracts regarding the operation of an electric generating plant owned by the City of Henderson, Kentucky.

Submitted direct testimony on behalf of fifteen distribution cooperative owner-members of East Kentucky Power Cooperative in Case No. 2018-00050 regarding the economic evaluation of and potential cost shift resulting from a proposed member purchased power agreement.

Submitted direct testimony on behalf of Big Sandy R.E.C.C. in Case No. 2017-00374 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a base rate case.

Submitted direct testimony on behalf of Progress Metal Reclamation Company in Kentucky Power Company Case No. 2017-00179 regarding the potential implementation of a Load Retention Rate or revisions to an Economic Development Rate.

Submitted direct testimony on behalf of Kenergy Corp. and Big Rivers Electric Corporation in Case No. 2016-00117 regarding a marginal cost of service study in support of an economic development rate for a special contracts customer.

Submitted rebuttal testimony on behalf of Big Rivers Electric Corporation in Case No. 2014-00134 regarding ratemaking treatment of revenues associated with proposed wholesale market-based-rate purchased power agreements with entities in Nebraska.

Submitted direct and rebuttal testimony on behalf of Big Rivers Electric Corporation in Case No. 2013-00199 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a base rate case.

Submitted direct and rebuttal testimony on behalf of Big Rivers Electric Corporation in Case No. 2012-00535 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a base rate case.

Submitted direct and rebuttal testimony on behalf of Big Rivers Electric Corporation in Case No. 2012-00063 regarding an Environmental Compliance Plan and Environmental Surcharge rate mechanism.

Submitted direct, rebuttal, and rehearing direct testimony on behalf of Big Rivers Electric Corporation in Case No. 2011-00036 regarding revenue requirements and pro forma adjustments in a base rate case.

Submitted direct testimony for Louisville Gas & Electric Company in Case No. 2009-00549 and for Kentucky Utilities Company in Case No. 2009-00548 for adjustment of electric and gas base rates, in support of a new service offering for Low Emission Vehicles, revised special charges, and company offerings aimed at assisting customers.

Submitted discovery responses for Kentucky Utilities and/or Louisville Gas & Electric Company in various customer inquiry matters, including Case Nos. 2009-00421, 2009-00312, and 2009-00364.

Submitted discovery responses for Louisville Gas & Electric Company and Kentucky Utilities Company in Case No. 2008-00148 regarding the 2008 Joint Integrated Resource Plan.

Submitted discovery responses for Louisville Gas & Electric Company and Kentucky Utilities Company in Administrative Case No. 2007-00477 regarding an investigation of the energy and regulatory issues in Kentucky's 2007 Energy Act.

Submitted direct testimony for Louisville Gas & Electric Company and Kentucky Utilities Company in Case No. 2007-00319 for the review, modification, and continuation of Energy Efficiency Programs and DSM Cost Recovery Mechanisms.

Submitted direct testimony for Louisville Gas & Electric Company and Kentucky Utilities Company in Case No. 2007-00067 for approval of a proposed Green Energy program and associated tariff riders.

Submitted direct testimony for Louisville Gas & Electric Company and Kentucky Utilities Company in Case No. 2005-00467 and 2005-00472 regarding a Certificate of Public Convenience and Necessity for the construction of transmission facilities.

Submitted discovery responses for Kentucky Utilities in Case No. 2005-00405 regarding the transfer of a utility hydroelectric power plant to a private developer.

Submitted discovery responses for Louisville Gas & Electric Company and Kentucky Utilities Company in Case No. 2005-00162 for the 2005 Joint Integrated Resource Plan.

Presented company position for Louisville Gas & Electric Company and Kentucky Utilities Company at public meetings held in Case Nos. 2005-00142 and 2005-00154 regarding routes for proposed transmission lines.

Supported Louisville Gas & Electric Company and Kentucky Utilities Company in a Focused Management Audit of Fuel Procurement practices by Liberty Consulting in 2004.

Supported Louisville Gas & Electric Company and Kentucky Utilities Company in an Investigation into their Membership in the Midwest Independent Transmission System Operator, Inc. ("MISO") in Case No. 2003-00266.

Supported Louisville Gas & Electric Company and Kentucky Utilities Company in a Focused Management Audit of its Earning Sharing Mechanism by Barrington-Wellesley Group in 2002-2003.

Submitted direct testimony for Louisville Gas & Electric Company and Kentucky Utilities Company in Case No. 2002-00381 regarding a Certificate of Public Convenience and Necessity for the acquisition of four combustion turbines.

Submitted direct testimony for Louisville Gas & Electric Company and Kentucky Utilities Company in Case No. 2002-00029 regarding a Certificate of Public Convenience and Necessity for the acquisition of two combustion turbines.

Virginia: Submitted direct testimony for Kentucky Utilities Company d/b/a Old Dominion Power in Case No. PUE-2002-00570 regarding a Certificate of Public Convenience and Necessity for the acquisition of four combustion turbines.

EVERGY METRO INC. JURISDICTIONAL DEMAND ALLOCATOR ANALYSIS

MISSOURI												
Date	Res	<u>Sml</u>	Med	Lrg	LrgPwr	Resale	StreetLght	TrafficLght	<u>AreaLght</u>	MORetail		
Jul-20	854	121	239	334	248	5.0	-	0.01	-	1,796		
Aug-20	843	130	261	387	238	5.0	-	0.01	-	1,860		
Sep-20	720	118	246	334	222	5.0	-	0.01	-	1,639		
Oct-20	400	91	205	296	213	3.0	-	0.01	-	1,206		
Nov-20	417	78	187	315	184	3.0	-	0.01	-	1,180		
Dec-20	540	79	159	248	162	2.0	12.1	0.01	2.3	1,202		
Jan-21	501	100	222	332	189	4.0	-	0.02	-	1,344		
Feb-21	559	103	206	318	167	4.0	-	0.02	-	1,353		
Mar-21	431	79	188	304	182	3.0	-	0.02	-	1,184		
Apr-21	293	69	159	286	161	3.0	-	0.02	-	968		
May-21	506	100	205	300	179	3.0	-	0.02	-	1,290		
Jun-21	644	117	225	320	210	4.0	-	0.02	-	1,517		
KANSAS												
Date	<u>Res</u>	<u>Sml</u>	Med	Lrg	<u>StreetLaht</u>	TrafficLght	<u>AreaLght</u>	<u>OffSysLght</u>	KSRetail			
Jul-20	1,034	117	183	426	-	0.26	-	-	1,760			
Aug-20	935	113	178	408	-	0.26	-	-	1,634			
Sep-20	847	110	174	405	-	0.26	-	-	1,535			
Oct-20	494	84	138	347	-	0.26	-	-	1,062			
Nov-20	433	74	125	351	-	0.25	-	-	982			
Dec-20	645	77	114	315	0.1	0.25	0.5	7.8	1,159			
Jan-21	554	100	153	390	-	0.26	-	-	1,197			
Feb-21	634	96	145	369	-	0.26	-	-	1,246			
Mar-21	497	76	122	339	-	0.25	-	-	1,034			
Apr-21	341	69	108	313	-	0.25	-	-	832			
May-21	683	103	155	384	-	0.25	-	-	1,326			
Jun-21	804	118	171	406	-	0.22	-	-	1,500			
SYSTEM												
Date	Res	Sml	Med	Lrg	LrgPwr	Resale	StreetLght	AreaLght	OffSysLght	TrafficLght	Retail	System .
Jul-20	1,888	238	422	760	248	5.0	-	-	-	0.3	3,556	3,561
Aug-20	1,778	243	439	795	238	5.0	-	-	-	0.3	3,494	3,499
Sep-20	1,566	228	420	738	222	5.0	-	-	-	0.3	3,174	3,180
Oct-20	894	175	343	643	213	3.0	-	-	-	0.3	2,268	2,271
Nov-20	850	152	311	665	184	3.0	-	-	-	0.3	2,163	2,166
Dec-20	1,185	156	273	562	162	2.0	12.3	2.80	7.8	0.3	2,361	2,363
Jan-21	1,055	200	375	723	189	4.0	-	-	-	0.3	2,542	2,545
Feb-21	1,193	200	351	687	167	4.0	-	-	-	0.3	2,599	2,602
Mar-21	928	154	310	643	182	3.0	-	-	-	0.3	2,218	2,222
Apr-21	635	137	268	599	161	3.0	-	-	-	0.3	1,800	1,803
May-21	1,189	203	360	684	179	3.0	-	-	-	0.3	2,615	2,618
Jun-21	1,447	235	397	727	210	4.0	-	-	-	0.2	3,016	3,021

EVERGY METRO INC. JURISDICTIONAL DEMAND ALLOCATOR ANALYSIS

SYSTEM

	<u>Coin Retail</u>	Coin Retail		
Date	MO Peak	KS Peak	CoinResale	WNPeak
Jul-20	1,796	1,760	5.0	3,561
Aug-20	1,860	1,634	5.0	3,499
Sep-20	1,639	1,535	5.0	3,180
Oct-20	1,206	1,062	3.0	2,271
Nov-20	1,180	982	3.0	2,166
Dec-20	1,202	1,159	2.0	2,363
Jan-21	1,344	1,197	4.0	2,545
Feb-21	1,353	1,246	4.0	2,602
Mar-21	1,184	1,034	3.0	2,222
Apr-21	968	832	3.0	1,803
May-21	1,290	1,326	3.0	2,618
Jun-21	1,517	1,500	4.0	3,021

DEMAND ALLOCATOR (D1) Adjusted for Weather & Customer Growth

4CP BASED ON WN July20 - June21 CP							
	4CP Loads	D1 Allocator					
MO	1,703.0	51.3710%	4CP				
KS	1,607.3	48.4842%					
WHSL	4.8	0.1448%					
TOTAL	3,315.1	100.0000%					

DEMAND ALLOCATOR (D1) Adjusted for Weather & Customer Growth

12CP BAS	12CP BASED ON WN July20 - June21 CP							
	12CP Loads	D1 Allocator						
MO	1,378.3	51.9271%	12CP					
KS	1,272.3	47.9335%						
WHSL	3.7	0.1394%						
TOTAL	2,654.3	100.0000%						
	-							

AVG of the Factors 4CP & 12CP					
	D1 Allocator				
MO	51.6490%				
KS	48.2089%				
WHSL	0.1421%				
TOTAL	100.0000%				

<u>Notes</u> Metro Weather Normalized Coincident Peaks Jul 2020 - Jun 2021

Includes Losses

Includes Customer Growth - projected to May 2022 & Energy Efficiency Impacts

All Data in MW

Retail Does Not Include Resale

EVERGY METRO INC. JURISDICTIONAL DEMAND ALLOCATOR ANALYSIS

#	ltem		Total	Missouri	Kansas	Wholesale
1	Monthly CP	Demands MW				
2	4	L	0.545	4.044	4 407	4
3	1	Jan-21	2,545	1,344	1,197	4
4	2	Feb-21	2,603	1,353	1,246	4
5	3	Mar-21	2,221	1,184	1,034	3
6	4	Apr-21	1,803	968	832	3
7	5	May-21	2,619	1,290	1,326	3
8	6	Jun-21	3,021	1,517	1,500	4
9	7	Jul-20	3,561	1,796	1,760	5
10	8	Aug-20	3,499	1,860	1,634	5
11	9	Sep-20	3,179	1,639	1,535	5
12	10	Oct-20	2,271	1,206	1,062	3
13	11	Nov-20	2,165	1,180	982	3
14 15	12	Dec-20	2,363	1,202	1,159	2
16		Average	2 654	1 378	1 272	4
17		Minimum	1 803	968	832	2
18		Maximum	3 561	1 860	1 760	5
10		Maximum	5,501	1,000	1,700	5
20	Average Mo	nthly CP Demands				
21	<u></u>					
22	1CP	Julv	3.561	1.796	1.760	5
23	-	Other Months	2.572	1,340	1.228	4
24			_,	,	-,	
25	3CP (JJA)	Jun-Aua	3.360	1.724	1.631	5
26	()	Other Months	2,419	1.263	1,153	3
27			_,	,	.,	-
28	3CP (JAS)	Jul-Sep	3.413	1.765	1.643	5
29		Other Months	2.401	1,249	1,149	3
30		•	_,	.,	.,	C C
31	4CP	Jun-Sep	3.315	1,703	1.607	5
32		Other Months	2.324	1,216	1,105	3
33		•	_,=_	.,	.,	C C
34	6CP	Jun-Sen Jan-Feb	3 068	1 585	1 479	5
35	001	Other Months	2 240	1 172	1,066	3
36			2,210	.,	1,000	Ũ
37	8CP	Dec-Feb May-Sen	2 924	1 500	1 420	4
38	001	Other Months	2,024	1,000	978	3
39			2,110	1,100	570	5
40	10CP	All but Nov Apr	2 788	1 430	1 345	Δ
40 41	1001	Other Months	1 QR/	1 074	007	- - -
42			1,304	1,074	301	5
43	12CP	All	2 654	1 378	1 272	4
	1201	/ 111	2,004	1,010		- T

Test 1:	On and Off Peak Test	19% or Lower: 12 CP			
	100	270/	220/	400/	4
		37 %	33% 220/	42%	4
		35%	33%	38%	3
	3CP (JAS)	38%	37%	39%	4
	40P	37%	35%	39%	4
	6CP	31%	30%	32%	4
	8CP	30%	27%	35%	2
	10CP	30%	26%	34%	2
Test 2:	Low-to-Annual Peak Test		66% or Higher: 12 CP		
	All Months	51%	52%	47%	4
Test 3:	Average-to-Annual Peak Test	81% or Higher: 12 CP			
	All Months	75%	74%	72%	7
Jurisdictior	al CP Ratios				
	1CP	100 00%	50 44%	49 42%	0 1
		100.00%	51 31%	48 55%	0.1
	3CP (IAS)	100.00%	51 71%	40.00%	0.1
		100.00%	51 37%	40.14 %	0.1
		100.00%	51.66%	48.20%	0.1
	8CP	100.00%	51 31%	48 55%	0.1
		100.00%	51 61%	48.05%	0.1
	1001	100.00%	51 03%	40.20%	0.1

