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| **Exhibit No.:** | _______________ |
| **Issue(s)** | Inefficient Management/ Residential Demand Response |
| **Witness/Type of Exhibit**: | Marke/Rebuttal |
| **Sponsoring Party**: | Public Counsel |
| **Case No**.: | EO-2020-0227 |

# REBUTTAL TESTIMONY

# OF

# GEOFF MARKE

Submitted on Behalf of the Office of the Public Counsel

# EVERGY METRO, INC. D/B/A EVERGY METRO AND EVERGY MISSOURI WEST, INC. D/B/A EVERGY MISSOURI WEST

CASE NO. EO-2020-0227

September 11, 2020

**BEFORE THE PUBLIC SERVICE COMMISSION**
**OF THE STATE OF MISSOURI**

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|---|---|---|
| In the Matter of the Second Prudence Review of the Missouri Energy Efficiency Investment Act (MEEIA) Cycle 2 Energy Efficiency Programs of Evergy Metro, Inc. d/b/a Evergy Missouri Metro | )<br>)<br>)<br>)<br>) | File No. EO-2020-0227 |

**VERIFICATION OF GEOFF MARKE**

Geoff Marke, under penalty of perjury, states:

1. Attached hereto and made a part hereof for all purposes is my rebuttal testimony in the above-captioned case.

2. My answer to each question in the attached rebuttal testimony is true and correct to the best of my knowledge, information, and belief.

Geoff Marke
Chief Economist

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**REBUTTAL TESTIMONY**

**OF**

**GEOFF MARKE**

**EVERGY METRO, INC. D/B/A EVERGY MISSOURI METRO AND EVERGY MISSOURI WEST, INC. D/B/A EVERGY MISSOURI WEST**

**CASE NO. EO-2020-0227**

## I. INTRODUCTION

**Q. Please state your name, title and business address.**

A. Geoff Marke, PhD, Chief Economist, Office of the Public Counsel (OPC or Public Counsel), P.O. Box 2230, Jefferson City, Missouri 65102.

**Q. What are your qualifications and experience?**

A. I have been in my present position with OPC since 2014 where I am responsible for economic analysis and policy research in electric, gas, and water utility operations.

**Q. Have you testified previously before the Missouri Public Service Commission?**

**A.** Yes. A listing of the Commission cases in which I have previously filed testimony and/or comments is attached in Schedule GM-1.

**Q. What is the purpose of your rebuttal testimony?**

A. My testimony responds with specific observations on the ratio of incentive costs to encourage energy efficiency relative to non-incentive administrative costs, and makes further recommendations to the Commission regarding the Missouri Public Service Commission Staff ("Staff") reports over the "Second Prudence Review of Cycle 2 Costs related to the Missouri Energy Efficiency Investment Act for Electric Operations of Evergy Metro, Inc. and Evergy Missouri West" filed as attachments in the direct testimony of Brad J. Fortson.

I also respond in support and provide additional context and rationale for the disallowance related to the residential demand side programs as recommended in the direct testimony of Staff witnesses J. Luebbert.

**Q. What is Staff's position?**

A. Staff recommends a disallowance of $2,134,986.29 for Evergy Missouri Metro ("Metro") and $2,363,761.45 for Evergy Missouri West ("West") for a total of $4,498,747.74 ("Evergy" and the "Company"). Over ninety-nine percent (99.28%) of this amount (or $4,466,141) is related to the residential demand response programs (programmable thermostats).

**Q. What is your recommendation?**

A. I support Staff's disallowance but I do not believe Staff went far enough in its recommendation concerning imprudent costs. I would recommend an additional $1,930,392 in disallowance for Evergy Missouri West for a total disallowance across Evergy of <u>$6,429,139.74</u>. I have no further cost reduction for Evergy Metro as Staff's recommended disallowance would reflect at least a 50/50 equivalent in non-incentive to incentive cost breakdown, or what I would consider the minimum amount of acceptable management inefficiency for this prudency period.[1]

This recommendation follows Staff's rationale articulated in its report, which states:

> In evaluating prudence, Staff reviews whether a reasonable person making the same decision would find both the information the decision-maker relied on and the process the decision-maker employed to be reasonable based on the circumstances and information known at the time the decision was made, i.e., without the benefit of hindsight. The decision actually made is disregarded; instead, the review evaluates the reasonableness of the information the decision-maker relied on and the decision-making process the decision-maker employed. If either the information relied upon or the decision-making process employed was imprudent, then Staff examines whether the imprudent decision caused any harm to ratepayers. Only if an imprudent decision resulted in harm to ratepayers, will Staff propose a disallowance.[2]

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[1] This assumes that Staff's cost disallowance is applied solely to non-incentive expenditures and further allows for costs associated with the Research and Pilot programs to be recovered. A further explanation of this rationale will follow within the testimony.

[2] Direct Testimony of Brad Fortson, Schedule BJF-d3, p. 7 of 49, EO-2020-0227, Mastrogiannis, Brooke, Second Prudence Review of Cycle 2 Costs Related to the Missouri Energy Efficiency Act for the Electric Operations of Missouri Metro, Inc. p. 5, 3-10.

Evergy's inefficient management hurt its ratepayers as Evergy's prudency period represents the greatest amount of expenditures for non-incentive administrative and overhead costs for any electric utility in any prudence review period on record in Missouri. Evergy's non-incentive based spending is also more than 10% greater than the national average. As such, I hope by bringing this to the attention to the Commission and other stakeholders that future expenditures will be, at a minimum, in line with the national average moving forward, and not result in further material harm to ratepayers. A disallowance may also, hopefully, compel the utilities that manage these programs to do better than this moving forward.

It's hard to argue against the idea that a utility's financial condition should depend on the value that its customers received from its services. If no value is received or unnecessary costs outweigh benefits than the Company's bottom line should reflect that reality just like it does when the benefits outweigh the costs. It should be obvious to the utilities administering energy efficiency programs that the majority of the approved budget get spent on… energy efficiency. Unfortunately, that fact has been lost on Evergy's management during this prudence period. This reality should not be lost by the Commission as the Company should be accountable for its imprudent management and inaction.

## II. INEFFICIENT MANAGEMENT

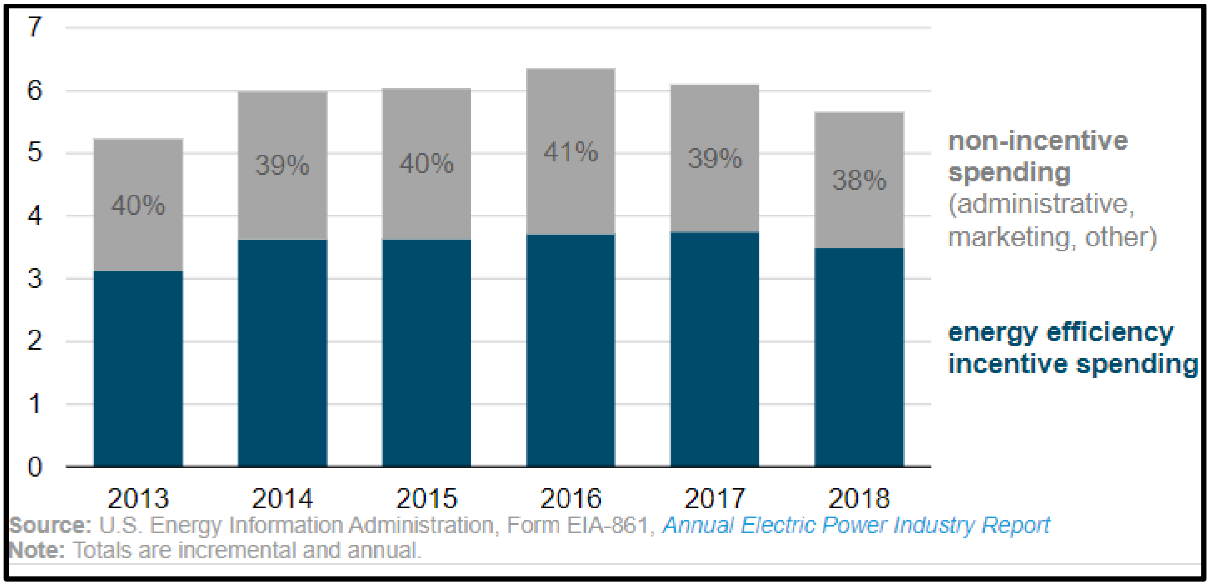
**Q. You stated that Staff's recommended disallowance did not go far enough. What did Staff's report fail to highlight?**

A. Staff did not highlight the issue of Evergy Metro and Evergy West's non-incentive spending compared to the national average.

**Q. What is the U.S. average breakdown in budget allocation for energy efficiency programs for incentives compared to non-incentives (program administration)?**

A. Figure 2 provides a breakdown of the U.S. Energy Information Administration's ("EIA") Form EIA-861 annual survey of more than 600 electric utilities and third-party manager's energy efficiency spending broken down between actual incentive and non-incentive spending. The six-year average for non-incentive spending is 39.5% of total budgets and the three-year average is 39.33%. This suggests that more than 60% of all ratepayer-funded energy efficiency dollars get spent on actual energy efficiency measures or demand-side events.

Figure 2: United States Energy Efficiency Spending (2013-2018), billions 2018 dollars




**Q. How do these national numbers compare to Missouri's electric Investor Owned Utilities (IOU's) during the same period?**

A. Based on publically available Form EIA-861 data, Missouri's IOUs have varied considerably during that same time period as seen in Figures 3-6.

Figure 3: Liberty Utilities (formerly Empire District Electric) Energy Efficiency Spending (2013-2018), millions 2018 dollars

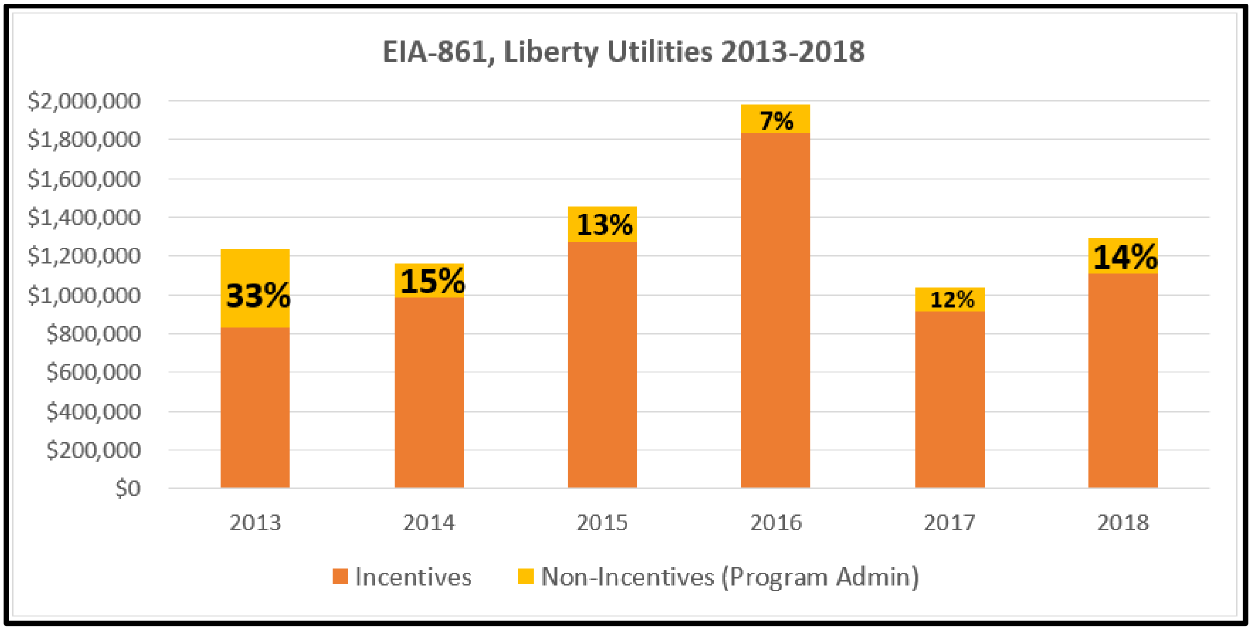



Figure 4: Ameren Missouri Energy Efficiency Spending (2013-2018), millions 2018 dollars

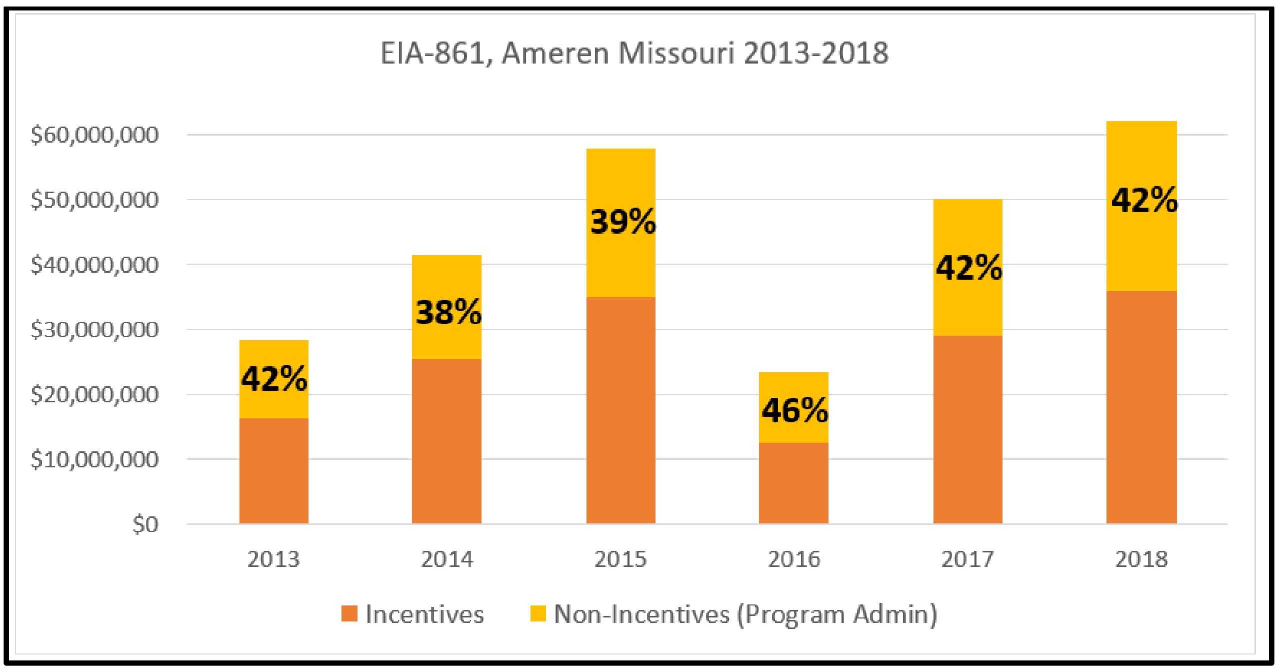


Figure 5: Evergy Metro (formerly KCPL-MO) Energy Efficiency Spending (2013-2018), millions 2018 dollars

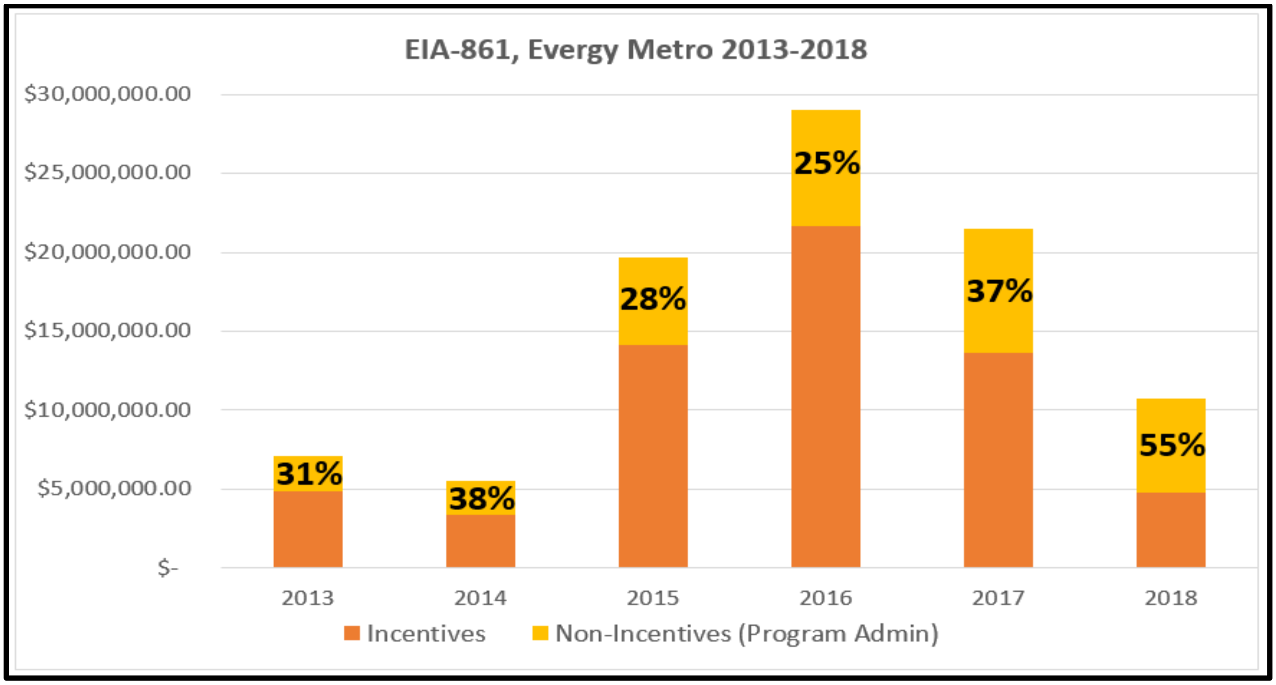
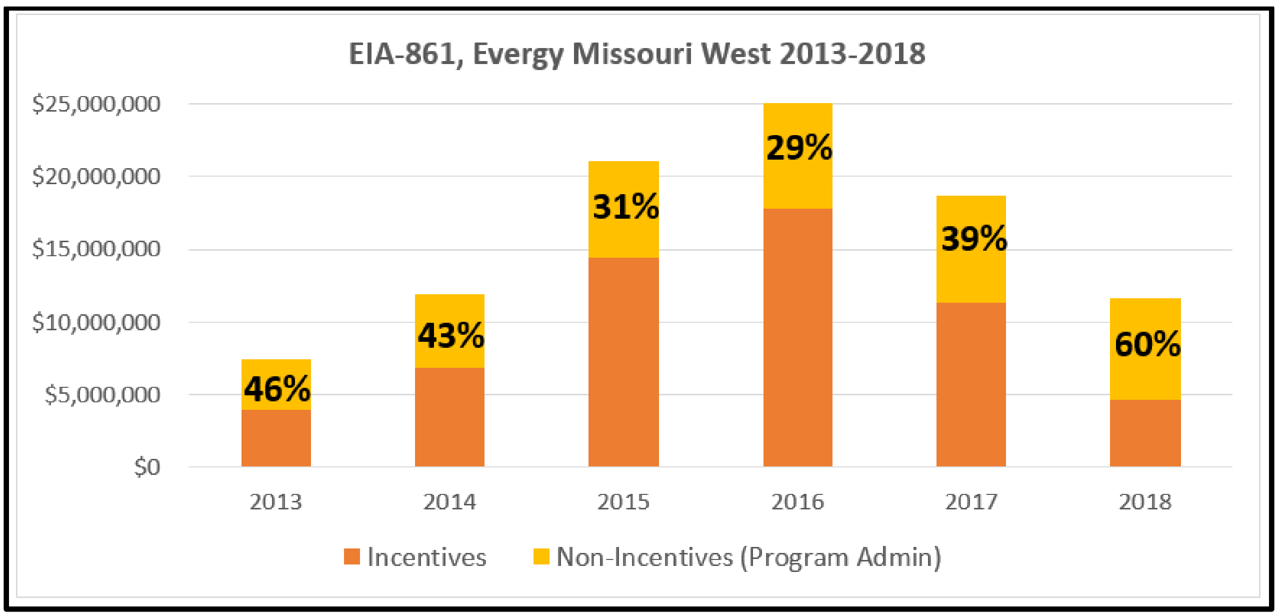



Figure 6: Evergy West (formerly KCPL-GMO) Energy Efficiency Spending (2013-2018), millions 2018 dollars



**Q. What should the Commission note from these figures?**

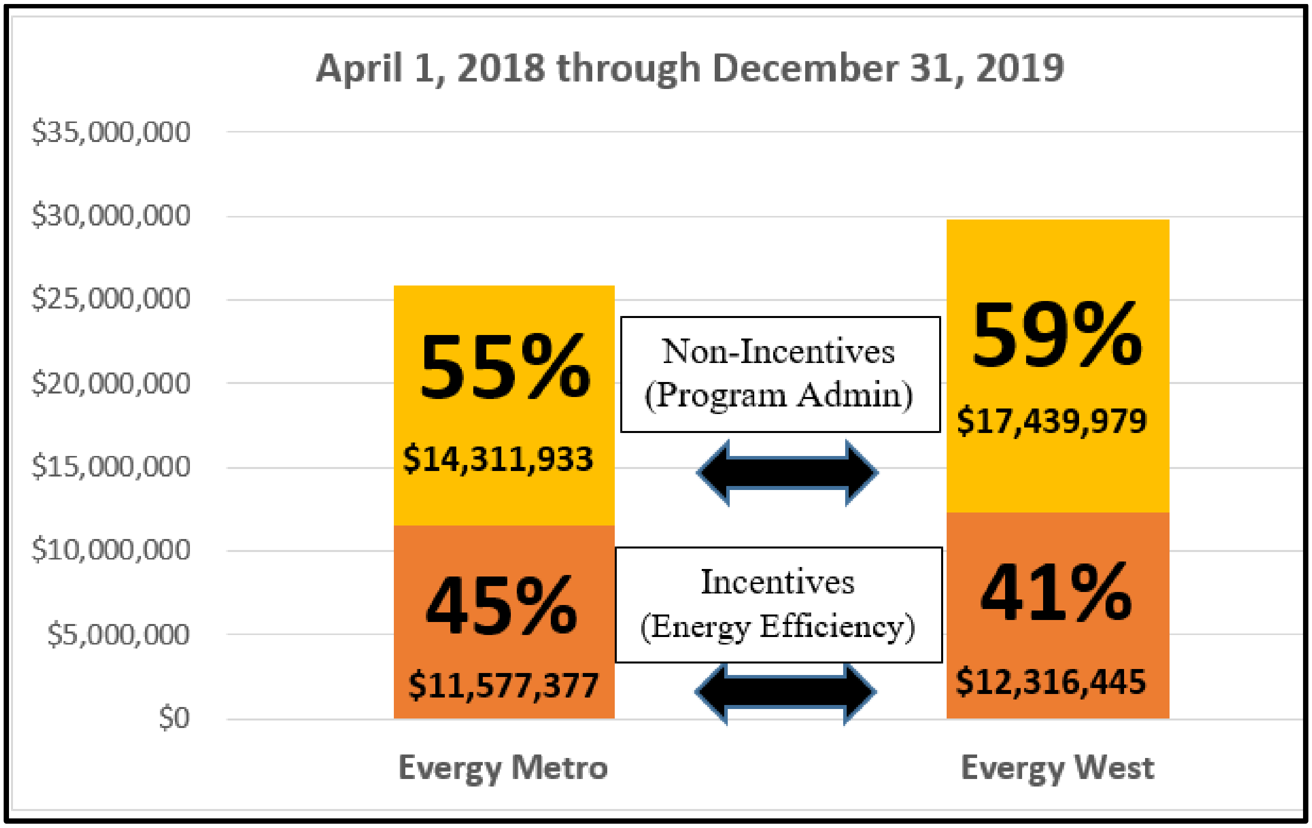
A. There are several conclusions that can be drawn from looking at the six-year historical breakdown of energy efficiency expenditures across electric IOUs in Missouri. Liberty utilities has a comparatively smaller program than the other utilities, but has been extremely efficient in having the vast majority of its ratepayer-funded budget actually go to energy efficiency measures. In contrast, Ameren Missouri has a much larger annual budget, but a greater percentage of funds being directed to non-incentive overhead. Ameren Missouri's 6-year average non-incentive budget breakdown is approximately 2% greater than the national average (41.5% to 39.3%). This is concerning, but this number should be reduced moving forward based on the agreed-to parameters of Ameren Missouri's recently approved one-year extension program. Ameren Missouri's MEEIA Cycle III extension went to great lengths to minimize non-incentive overhead with a focus on directing ratepayer dollars towards actual energy efficiency measures and demand-side event actions.

The Commission should note that Evergy West/Metro 2018 non-incentive measures are an outlier, with non-incentives costs exceeding incentive costs for both utilities. Non-incentive costs were 17% greater for Evergy Metro (55%) relative to the national average (38%) and 23% greater for Every West (60%). In fact, out of 515 utilities reporting with energy efficiency programs in 2018, Evergy Metro had the 23rd worst and Evergy West the 19th worse in terms of non-incentive costs relative to incentive cost expenditures. That is, approximately 500 utilities did a better job of making sure their energy efficiency budget went to energy efficiency.

**Q. That represents 2018. Do you have a breakdown for the prudency period being reviewed here?**

A. Yes. These numbers are emphasized in Figure 7 below.

Figure 7: Breakdown of incentive to non-incentive costs for the prudency period for Evergy Metro and Evergy West




**Q. Why is it important that non-incentive cost expenditures be as low as possible?**

A. When Evergy claims it has spent $56 million on energy efficiency during the review period, most people immediately believe at least the majority of those dollars went to tangible energy efficiency measures (e.g., light bulbs, etc…) as opposed to administrative overhead and promotional materials. Consider that non-profits are actually judged on how much donated money actual goes to those it is intended to help. For example, the United Nations Children's Fund ("UNICEF") boasts that less than 3% of every dollar spent goes to administrative costs and that this claim has been verified by Charity Navigator and GlobalGiving.[3]

[3] UNICEF (2020) About Us. Our Finances: Efficient and Verified. https://www.unicefusa.org/about/finances

We hold similar effiiciency standards for our ratepayer-funded Low Income Weatherization Assistance Program ("LIWAP") funding. Evergy Metro's Promotional Practice Income-eligible Weatherization, Revised Tariff Sheet No. 43 states:

> Program funds cannot be used for administrative costs except those incurred by the Social Service Agency that is directly related to qualifyitng and assissting customers under this program. The amount of reimburseable administrative costs per program year **shall not exceed 13%** of the total program funds. (emphasis added)

Utility management has enormous control over the efficiency (or lack thereof) of its budget. This is evident by Evergy's historical cost allocation. It is inexcusable to hold non-profit community action agencies that install energy efficiency measures to a 13% non-incentive standard, but allow a utility to spend 60% of its budget on non-incentive costs. This descrepnecy is solely a reflection of Evergy's inefficient managerial practices. Any company should do better than this.

**Q. How do these inefficiencies play out at the individual program level? Are some programs more inefficient than others?**

A. Yes, some programs are much more inefficient as others. Tables 1 and 2 provide a breakdown of Evergy Metro and Evergy West by program, including how much non-incentive funds needed to be expended to rebate $1 for each program.

Table 1: Evergy Metro program cost breakdown April 1, 2018 through December 31, 2019

| Program | Incentives EE Rebates | Non-Incent Admin | Total Costs | % of Admin | How much more $ to rebate $1.00 | Target Met Y/N |
|---|---|---|---|---|---|---|
| Low-Income Multi-Family | $941,035 | $1,528,247 | $2,469,282 | 62% | $1.62 | N |
| Res. Thermostat | $568,177 | $2,252,425 | $2,820,602 | 80% | $3.96 | N |
| Bus. On-Line Energy Audit | | $24,487 | $24,487 | 100% | | N |
| Res. On-Line Energy Audit | | $115,871 | $115,871 | 100% | | N |
| Home Energy Report | | $661,064 | $661,064 | 100% | | N |
| Low-Income Home Energy Reports | | $206,527 | $206,527 | 100% | | N |
| Block Bidding | $50,652 | $320,967 | $371,619 | 86% | $6.34 | N |
| Strategic Energy Management | $17,106 | $213,447 | $230,553 | 93% | $12.48 | N |
| Small Bus. Direct Install | $1,832 | $82,382 | $84,214 | 98% | $44.97 | N |
| Bus. Thermostat | $5,000 | $104,756 | $109,756 | 95% | $20.95 | N |
| Whole House Efficiency | $1,457,402 | $1,415,122 | $2,872,524 | 49% | $0.97 | Y |
| Home Lighting Rebate | $1,079,422 | $1,080,075 | $2,159,497 | 50% | $1.00 | Y |
| Bus. Standard | $2,356,752 | $2,411,686 | $4,768,438 | 51% | $1.02 | Y |
| Bus. Custom | $4,003,359 | $2,755,304 | $6,758,663 | 41% | $0.69 | Y |
| Bus. Demand Response | $1,076,639 | $411,811 | $1,488,450 | 28% | $0.38 | Y |
| Research and Pilot | | $727,767 | | 100% | | NA |
| Total | $11,557,376 | $14,311,933 | $25,869,309 | 55% | $1.24 | 5 of 15 |

Table 2: Evergy West program cost breakdown April 1, 2018 through December 31, 2019

| Program | Incentives EE Rebates | Non-Incent Admin | Total Costs | % of Admin | How much more $ to rebate $1.00 | Target Met Y/N |
|---|---|---|---|---|---|---|
| Low-Income Multi-Family | $608,167 | $1,228,747 | $1,836,915 | 67% | $2.02 | N |
| Res. Thermostat | $648,148 | $3,267,072 | $3,915,219 | 83% | $6.04 | N |
| Bus. On-Line Energy Audit | | $22,893 | $22,893 | 100% | | N |
| Res. On-Line Energy Audit | | $123,381 | $123,381 | 100% | | N |
| Home Energy Report | | $1,237,353 | $1,237,353 | 100% | | N |
| Block Bidding | $516,194 | $351,809 | $868,003 | 41% | $0.68 | N |
| Strategic Energy Management | $6,695 | $280,305 | $287,000 | 98% | $41.87 | N |
| Small Bus. Direct Install | $22,344 | $89,191 | $111,534 | 80% | $3.99 | N |
| Bus. Thermostat | $6,800 | $197,632 | $204,432 | 97% | $29.06 | Y |
| Whole House Efficiency | $2,029,897 | $2,820,581 | $4,850,477 | 58% | $1.39 | Y |
| Home Lighting Rebate | $1,122,242 | $1,039,252 | $2,161,495 | 48% | $0.93 | Y |
| Bus. Standard | $2,246,087 | $1,971,613 | $4,217,700 | 47% | $0.88 | Y |
| Bus. Custom | $2,173,584 | $2,141,581 | $4,315,166 | 50% | $0.99 | Y |
| Bus. Demand Response | $2,936,287 | $1,839,188 | $4,775,475 | 39% | $0.63 | N |
| Research and Pilot | | $829,382 | $829,382 | 100% | | NA |
| Total | $12,316,445 | $17,439,980 | $29,756,425 | 59% | $1.42 | 5 of 14 |

**Q. What should the Commission note from these tables?**

A. Many programs failed to meet their targets and are widely inefficient if judged solely on whether money spent actually results in energy efficiency realized. Consider that Evergy Metro spent $82,382 dollars in overhead to spend down $1,832 for its small business direct install program. Stated differently, to have $1.00 actually go to a tangible energy efficiency measure, ratepayers had to spend $44.97 in additional costs for that program.

If energy efficiency benefits everyone, it should not be too much to ask that the utility spend energy efficiency funding on… energy efficiency to maximize benefits. Yet Evergy management is seemingly not interested in maximizing efficiencies in program implementation.

**Q. What is your recommendation to the Commission based on this information?**

A. I do not expect UNICEF or LIWAP levels of efficiency.[4] But it is completely unacceptable to have a utility spend more funds on non-incentive costs than actual incentives. At a minimum Evergy should be in line with utilities across the country.

I recommend an additional $1,930,392 in disallowance for Evergy Missouri West in addition to the full disallowance identified by Staff. If my full recommendation is adopted it would result in a 50/50 split in non-incentive and incentive costs for the prudency review period for both utilities. A breakdown of that calculation is below; the bolded amounts denote a recommended disallowance:

<u>Evergy West breakdown:</u>

| | |
|---|---|
| Incentives | $12,316,445 |
| Non-Incentives | $17,439,980 |
| Incentive + Non-Incentive = Total | $29,756,425 |
| (Staff Disallowance) | **($2,363,761.45)** |
| (Research & Pilot funds) | ($829,382) |
| (Additional disallowance to reach 50/50) | **($1,930,392)** |
| Adjusted non-incentive total | $12,316,445 |

[4] Although it does beg the question why the local non-profit is so much better at its job than the for-profit implementer.

Evergy Metro breakdown:

| | |
|---|---|
| Incentives | $11,557,376 |
| Non-Incentives | $14,311,933 |
| Incentive + Non-Incentive = Total | $25,869,309 |
| (Staff Disallowance) | **($2,134,986.29)** |
| (Research & Pilot funds) | ($727,762) |
| (Additional disallowance to reach 50/50) | Not needed |
| Adjusted non-incentive total | $11,449,184.71 |

**Q. What should the Commission note from your calculations?**

A. First, this disallowance calculation is dependent on the Commission agreeing with the Staff's initial recommendation in full. Second, I have not penalized the Company for the Research and Pilot expenditures and I am assuming full disallowance of Staff's recommendation as an offset for non-incentive costs alone. Third, I have also stopped short of recommending a disallowance of non-incentive costs above 50%. This is a 10% greater inefficiency level than the national average. Fourth, I have also not made specific disallowance recommendations on inefficient programs. In short, my calculations are very favorable to the Company relative to its performance. The intent here is to prevent future inefficient behavior more than penalizing past inefficient and imprudent performance. I want the utility to do a better job in achieving what it claims to be doing.

**Q. Do you have any further recommendations to the Commission on this issue?**

A. I recommend that the Commission demand better from its utilities moving forward. Specifically, the Commission should order that utilities participating in ratepayer–funded energy efficiency programs have more than a 5% excess non-incentive budget expenditure deviation from the three-year national average. And any amount above that should be considered imprudent as a general framework for utilities and stakeholders to be aware of in the near future.

## III. RESIDENTIAL DEMAND RESPONSE

**Q. Staff recommended a large disallowance related to the two residential demand response programs. Did they provide any historical context for these programs?**

A. Not beyond the prudency period in question. The Commission should be cognizant that there are easily tens of thousands, probably hundreds of thousands of programmable thermostat's that have been rebated or given away free of charge over the years (since 2004 under "Energy Optimizer"). It is arguably one of the largest and oldest programs of its size in the United States. In fact, on June 7, 2017 *UtilityDive* headlined an article titled:

"KCP&L thermostat program shows how regulatory design can make or break DSM"

Within that article the following statement is made:

> KCP&L offers a tempting lineup of incentives to attract customers to the program. The thermostat is free, participation is worth an annual $25 bill credit, and then there are energy savings. And if customers can install the thermostat themselves, it's another $50.
>
> That may seem like a lot, but the program has been rolled out under the Missouri Energy Efficiency Investment Act (MEEIA) which allowed the utility to recover its investment by accounting for multiple value streams beginning in 2014.

The article is correct in that the Company's incentive design is "a lot." Interestingly, neither this article nor any of the other publically available articles I reviewed on the historical program ever mention how much energy or demand savings were achieved. The measure of success from the Company has always emphasized how many customers received a free, subsidized programmable thermostat and added bill credits. Never has the Company measured success by how many events were called, how much demand savings were achieved or how many customers actually participated.

**Q. But is not distributing the programmable thermostat a benefit for customers?**

A. Subsidizing programmable thermostats for demand-response programs does not benefit all customers if no actual demand response is called. The minimal energy savings associated with a programmable thermostat come nowhere close to offsetting the $250 retail value and additional credit allowances given away for free. In 2016, Evergy called eight curtailment events through its Residential Demand-Response program. In 2017 Evergy called only three, and by 2018, that number dropped to two curtailment events. Meanwhile, Evergy continued to spend ratepayer money on more and more programmable thermostats that would never be utilized to offset their costs.

Ratepayers have historically, and are continuing still, to pay millions of dollars to put out tens of thousands of programmable thermostats. However, the Company seemingly has zero intention of actually utilizing those thermostats to produce benefits for customers beyond "test events." Keep in mind that customers can always elect to override the Company-controlled event if they choose to with zero repercussions. There is literally a multi-million dollar residential demand response infrastructure in place that could shave off expensive peak demand during the year that goes unused.

**Q. What else should the Commission be aware of in considering this issue?**

A. Both Staff and OPC raised these concerns in Evergy's most recently approved MEEIA docket. However, these concerns were not addressed in the Report and Order and no subsequent changes were made to the residential programmablethermostat programs from what the Company filed initially. Until this issue is addressed by the Commission, ratepayers will continue to be harmed and will most likely continue subsidizing each subsequent generation of "smart" programmable thermostat based on a criteria (how many can we give away if we pay people to take it) that is inconsistent with the goal of realizing benefits for all customers regardless of participation. Until the Commission regulates this poor performance, the Company will continue to exploit this program for its personal gain.

**Q. Does this conclude your testimony?**

A. Yes.

CASE PARTICPATION OF
GEOFF MARKE, PH.D.

| Company Name | Employed Agency | Case Number | Issues |
|---|---|---|---|
| Evergy Missouri West & Evergy Missouri Metro | Office of Public Counsel (OPC) | EO-2020-0227 | **Rebuttal:** Inefficient Management / Residential Demand Response |
| Working Case: To consider best practices for recovery of past-due utility customer payments after the COVID-19 pandemic | OPC | AW-2020-0356 | **Memorandum:** Response to Staff Report on COVID-19 Past-Due Utility Customer Payments |
| Evergy Missouri West & Evergy Missouri Metro | OPC | EU-2020-0350 | **Rebuttal:** Authorized Accounting Order for: Lost Revenues /COVID-19 Expenses / Bad Debt Expense<br>**Surrebuttal:** Disconnection Moratorium / Arrearage Management Plans / Economic Relief Pilot Program / Outreach / Energy Efficiency / Administrative Procedures |
| Empire District Electric Company | OPC | EO-2020-0284 | **Memorandum:** Customer Savings Plan / Stateline Combined Cycle Upgrade / DSM / COVID-19 Impact on Modeling / Executive Order on Securing the US Bulk-Power System / SPP Effective Load Carrying Capability / All-Source RFP |
| Evergy Missouri West | OPC | EO-2020-0281 | **Memorandum:** Wind Power PPAs / DSM / COVID-19 Impact on Modeling / Executive Order on Securing the US Bulk-Power System / SPP Effective Load Carrying Capability / Utility-Scale Solar / All-Source RFP |
| Evergy Missouri Metro | OPC | EO-2020-0280 | **Memorandum:** Wind Power PPAs / DSM / COVID-19 Impact on Modeling / Executive Order on Securing the US Bulk-Power System / SPP Effective Load Carrying Capability / Utility-Scale Solar / All-Source RFP |
| Empire District Electric Company | OPC | ER-2019-0374 | **Direct:** Cost and Quality of Service, Stranded Asset, AMI/CIS deployment<br>**Rebuttal**: Customer Experience / Weather Normalization Rider / Energy Efficiency / Low-Income Pilot Program<br>**Rebuttal:** Class Cost of Service / Rate Design / Low Income Pilot Program |

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| | | | **Surrebuttal:** Cost and Quality of Service / Reliability Metrics / Asbury Power Plant / Rate Design & CCOS / DSM Programs |
| Union Electric Company d/b/a Ameren Missouri | OPC | EA-2019-0371 | **Rebuttal:** Solar + Storage |
| Union Electric Company d/b/a Ameren Missouri | OPC | ER-2019-0335 | **Direct:** Keeping Current Bill Assistance Program<br>**Rebuttal**: Smart Energy Plan, Keeping Current, Coal Power Plants, CCOS, Rate Design, Pure Power RECs<br>**Surrebuttal**: Coal Power Plants |
| Rule Making | OPC | AW-2020-0148 | **Memorandum:** Residential Customer Disconnections and Data Standardization |
| Empire District Electric Company /Kansas City Power & Light & KCP&L Greater Missouri Operations Company/Union Electric Company d/b/a Ameren Missouri | OPC | EO-2020-0047<br>EO-2020-0046<br>EO-2020-0045<br>EO-2020-0044 | **Memorandum:** Additive Manufacturing, Cement Block Battery Storage, Virtual Power Plant, Customer-Side Renewable Generation, Historical Review of energy forecasts (KCPL, GMO and Empire-Specific) and Rush Island and Labadie Power Plant Environmental Retrofits (Ameren specific) |
| Union Electric Company d/b/a Ameren Missouri | OPC | EA-2019-0309 | **Rebuttal:** Need for the Wind Project/ Economic Valuation / Pre-Site Energy Assessment Omissions |
| KCP&L Greater Missouri Operations Company & Kansas City Power and Light Company | OPC | EO-2019-0132 | **Rebuttal:** Response to KCPL's MEEIA application, Equitable Energy Efficiency Baseline, WattTime: Automated Emissions Reduction, PAYS, Urban Heat Island Mitigation<br>**Surrebuttal**: Market Potential Study, Single Family Low-Income |
| KCP&L Greater Missouri Operations Company | OPC | EC-2019-0200 | **Surrebuttal:** Deferral Accounting and Stranded Assets |
| Union Electric Company d/b/a Ameren Missouri | OPC | ED-2019-0309 | **Memorandum:** on the "Aluminum Smelter Rate" |
| KCP&L Greater Missouri Operations Company | OPC | EO-2019-0067 | **Rebuttal:** Renewable Energy Credits |
| Union Electric Company d/b/a Ameren Missouri | OPC | EO-2019-0314 | **Memorandum:** Notice of Deficiency to Annual IRP Update |
| Rule Making | OPC | WX-2019-0380 | **Memorandum:** on Affiliate Transaction Rules for Water Corporations |
| Working Case: Evaluate Potential Mechanisms for Facilitating Installation of Electric Vehicle Charging Stations | OPC | EW-2019-0229 | **Memorandum:** on Policy Surrounding Electric Vehicles and Electric Vehicle Charging Stations |
| Rule Making | OPC | EX-2019-0050 | **Memorandum** on Solar Rebates and Low Income Customers |

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|---|---|---|---|
| Union Electric Company d/b/a Ameren Missouri | OPC | GR-2019-0077 | **Direct:** Billing Practices<br>**Rebuttal**: Rate Design, Decoupling, Energy Efficiency, Weatherization, CHP |
| Empire District Electric Company | OPC | EA-2019-0010 | **Rebuttal:** Levelized Cost of Energy, Wind in the Southwest Power Pool<br>**Surrebuttal**: SPP Market Conditions, Property Taxes, Customer Protections |
| Empire District Electric Company /Kansas City Power & Light & KCP&L Greater Missouri Operations Company/Union Electric Company d/b/a Ameren Missouri | OPC | EO-2019-0066<br>EO-2019-0065<br>EO-2019-0064<br>EO-2019-0063 | **Memorandum:** Additive Manufacturing and Cement Block Battery Storage (IRP: Special Contemporary Topics) |
| Working Case: Allocation of Solar Rebates from SB 564 | OPC | EW-2019-0002 | **Memorandum** on Solar Rebates and Low Income Customers |
| Rule Making Workshop | OPC | AW-2018-0393 | **Memorandum:** Supplemental Response to Staff Questions pertaining to Rules Governing the Use of Customer Information |
| Union Electric Company d/b/a Ameren Missouri | OPC | ET-2018-0132 | **Rebuttal:** Line Extension / Charge Ahead – Business Solutions / Charge Ahead – Electric Vehicle Infrastructure<br>**Supplemental Rebuttal:** EV Adoption Performance Base Metric |
| Union Electric Company d/b/a Ameren Missouri | OPC | EO-2018-0211 | **Rebuttal:** MEEIA Cycle III Application<br>**Surrebuttal:** Cost Effectiveness Tests / Equitable Energy Efficiency Baseline |
| Union Electric Company d/b/a Ameren Missouri | OPC | EA-2018-0202 | **Rebuttal:** Renewable Energy Standard Rate Adjustment Mechanism/Conservation<br>**Surrebuttal:** Endangered and Protected Species |
| Kansas City Power & Light & KCP&L Greater Missouri Operations Company | OPC | ER-2018-0145<br>ER-2018-0146 | **Direct:** Smart Grid Data Privacy Protections<br>**Rebuttal:** Clean Charge Network / Community Solar / Low Income Community Solar / PAYS/ Weatherization/Economic Relief Pilot Program/Economic Development Rider/Customer Information System and Billing<br>**Rebuttal:** TOU Rates / IBR Rates / Customer Charge / Restoration Charge<br>**Surrebuttal:** KCPL-GMO Consolidation / Demand Response / Clean Charge Network / One CIS: Privacy, TOU Rates, Billing & Customer Experience |

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| Union Electric Company d/b/a Ameren Missouri | OPC | ET-2018-0063 | **Rebuttal:** Green Tariff |
| Liberty Utilities | OPC | GR-2018-0013 | **Surrebuttal:** Decoupling |
| Empire District Electric Company | OPC | EO-2018-0092 | **Rebuttal:** Overview of proposal/ MO PSC regulatory activity / Federal Regulatory Activity / SPP Activity and Modeling / Ancillary Considerations<br>**Surrebuttal** Response to parties<br>**Affidavit** in opposition to the non-unanimous stipulation and agreement |
| Great Plains Energy Incorporated, Kansas City Power & Light Company, KCP&L Greater Missouri Operations Company, and Westar Energy, Inc. | OPC | EM-2018-0012 | **Rebuttal:** Merger Commitments and Conditions / Outstanding Concerns |
| Missouri American Water | OPC | WR-2017-0285 | **Direct:** Future Test Year/ Cost Allocation Manual and Affiliate Transaction Rules for Large Water Utilities / Lead Line Replacement<br>**Direct:** Rate Design / Cost Allocation of Lead Line Replacement<br>**Rebuttal**: Lead Line Replacment / Future Test Year/ Decoupling / Residential Usage / Public-Private Coordination<br>**Rebuttal**: Rate Design<br>**Surrebuttal**: Affiliate Transaction Rules / Decoupling / Inclining Block Rates / Future Test Year / Single Tariff Pricing / Lead Line Replacement |
| Missouri Gas Energy / Laclede Gas Company | OPC | GR-2017-0216<br>GR-2017-0215 | **Rebuttal:** Decoupling / Rate Design / Customer Confidentiality / Line Extension in Unserved and Underserved Areas / Economic Development Rider & Special Contracts<br>**Surrebuttal:** Pay for Performance / Alagasco & EnergySouth Savings / Decoupling / Rate Design / Energy Efficiency / Economic Development Rider: Combined Heat & Power |
| Indian Hills Utility | OPC | WR-2017-0259 | **Direct:** Rate Design |
| Rule Making | OPC | EW-2018-0078 | **Memorandum:** Cogeneration and net metering - Disclaimer Language regarding rooftop solar |
| Empire District Electric Company | OPC | EO-2018-0048 | **Memorandum:** Integrated Resource Planning: Special Contemporary Topics Comments |
| Kansas City Power & Light | OPC | EO-2018-0046 | **Memorandum:** Integrated Resource Planning: Special Contemporary Topics Comments |
| KCP&L Greater Missouri Operations Company | OPC | EO-2018-0045 | **Memorandum:** Integrated Resource Planning: Special Contemporary Topics Comments |

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| Missouri American Water | OPC | WU-2017-0296 | **Direct:** Lead line replacement pilot program<br>**Rebuttal:** Lead line replacement pilot program<br>**Surrebuttal:** Lead line replacement pilot program |
| KCP&L Greater Missouri Operations Company | OPC | EO-2017-0230 | **Memorandum** on Integrated Resource Plan, preferred plan update |
| Working Case: Emerging Issues in Utility Regulation | OPC | EW-2017-0245 | **Memorandum** on Emerging Issues in Utility Regulation /<br>**Presentation**: Inclining Block Rate Design Considerations<br>**Presentation**: Missouri Integrated Resource Planning: And the search for the "preferred plan."<br>**Memorandum**: Draft Rule 4 CSR 240-22.055 DER Resource Planning |
| Rule Making | OPC | EX-2016-0334 | **Memorandum** on Missouri Energy Efficiency Investment Act Rule Revisions |
| Great Plains Energy Incorporated, Kansas City Power & Light Company, KCP&L Greater Missouri Operations Company, and Westar Energy, Inc. | OPC | EE-2017-0113 / EM-2017-0226 | **Direct**: Employment within Missouri / Independent Third Party Management Audits / Corporate Social Responsibility |
| Union Electric Company d/b/a Ameren Missouri | OPC | ET-2016-0246 | **Rebuttal**: EV Charging Station Policy<br>**Surrebuttal**: EV Charging Station Policy |
| Kansas City Power & Light | | ER-2016-0156 | **Direct:** Consumer Disclaimer<br>**Direct:** Response to Commission Directed Questions<br>**Rebuttal:** Customer Experience / Greenwood Solar Facility / Dues and Donations / Electric Vehicle Charging Stations<br>**Rebuttal:** Class Cost of Service / Rate Design<br>**Surrebuttal:** Clean Charge Network / Economic Relief Pilot Program / EEI Dues / EPRI Dues |
| Union Electric Company d/b/a Ameren Missouri | OPC | ER-2016-0179 | **Direct:** Consumer Disclaimer / Transparent Billing Practices / MEEIA Low-Income Exemption<br>**Direct**: Rate Design<br>**Rebuttal:** Low-Income Programs / Advertising / EEI Dues<br>**Rebuttal:** Grid-Access Charge / Inclining Block Rates /Economic Development Riders |
| KCP&L Greater Missouri Operations Company | OPC | ER-2016-0156 | **Direct:** Consumer Disclaimer<br>**Rebuttal:** Regulatory Policy / Customer Experience / Historical & Projected Customer Usage / Rate Design / Low-Income Programs |

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| Empire District Electric Company, Empire District Gas Company, Liberty Utilities (Central) Company, Liberty Sub-Corp. | OPC | EM-2016-0213 | **Rebuttal:** Response to Merger Impact<br>**Surrebuttal:** Resource Portfolio / Transition Plan |
| Working Case: Polices to Improve Electric Regulation | OPC | EW-2016-0313 | **Memorandum** on Performance-Based and Formula Rate Design |
| Working Case: Electric Vehicle Charging Facilities | OPC | EW-2016-0123 | **Memorandum** on Policy Considerations of EV stations in rate base |
| Empire District Electric Company | OPC | ER-2016-0023 | **Rebuttal:** Rate Design, Demand-Side Management, Low-Income Weatherization<br>**Surrebuttal:** Demand-Side Management, Low-Income Weatherization, Monthly Bill Average |
| Missouri American Water | OPC | WR-2015-0301 | **Direct:** Consolidated Tariff Pricing / Rate Design Study<br>**Rebuttal:** District Consolidation/Rate Design/Residential Usage/Decoupling<br>**Rebuttal**: Demand-Side Management (DSM)/ Supply-Side Management (SSM)<br>**Surrebuttal:** District Consolidation/Decoupling Mechanism/Residential Usage/SSM/DSM/Special Contracts |
| Working Case: Decoupling Mechanism | OPC | AW-2015-0282 | **Memorandum:** Response to Comments |
| Rule Making | OPC | EW-2015-0105 | Missouri Energy Efficiency Investment Act Rule Revisions, Comments |
| Union Electric Company d/b/a Ameren Missouri | OPC | EO-2015-0084 | Triennial Integrated Resource Planning Comments |
| Union Electric Company d/b/a Ameren Missouri | OPC | EO-2015-0055 | **Rebuttal**: Demand-Side Investment Mechanism / MEEIA Cycle II Application<br>**Surrebuttal**: Potential Study / Overearnings / Program Design<br>**Supplemental Direct:** Third-party mediator (Delphi Panel) / Performance Incentive<br>**Supplemental Rebuttal:** Select Differences between Stipulations |

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| The Empire District Electric Company | OPC | EO-2015-0042 | Integrated Resource Planning: Special Contemporary Topics Comments |
| KCP&L Greater Missouri Operations Company | OPC | EO-2015-0041 | Integrated Resource Planning: Special Contemporary Topics Comments |
| Kansas City Power & Light | OPC | EO-2015-0040 | Integrated Resource Planning: Special Contemporary Topics Comments |
| Union Electric Company d/b/a Ameren Missouri | OPC | EO-2015-0039 | Integrated Resource Planning: Special Contemporary Topics Comments |
| Kansas City Power & Light | OPC | ER-2014-0370 | **Direct** (Revenue Requirement): Solar Rebates<br>**Rebuttal:** Rate Design / Low-Income Weatherization / Solar Rebates<br>**Surrebuttal:** Economic Considerations / Rate Design / Cyber Security Tracker |
| Rule Making | OPC | EX-2014-0352 | **Memorandum** Net Metering and Renewable Energy Standard Rule Revisions, |
| The Empire District Electric Company | OPC | ER-2014-0351 | **Rebuttal:** Rate Design/Energy Efficiency and Low-Income Considerations |
| Rule Making | OPC | AW-2014-0329 | Utility Pay Stations and Loan Companies, Rule Drafting, Comments |
| Union Electric Company d/b/a Ameren Missouri | OPC | ER-2014-0258 | **Direct:** Rate Design/Cost of Service Study/Economic Development Rider<br>**Rebuttal:** Rate Design/ Cost of Service/ Low Income Considerations<br>**Surrebuttal:** Rate Design/ Cost-of-Service/ Economic Development Rider |
| KCP&L Greater Missouri Operations Company | OPC | EO-2014-0189 | **Rebuttal:** Sufficiency of Filing<br>**Surrrebuttal:** Sufficiency of Filing |
| KCP&L Greater Missouri Operations Company | OPC | EO-2014-0151 | Renewable Energy Standard Rate Adjustment Mechanism (RESRAM) Comments |
| Liberty Natural Gas | OPC | GR-2014-0152 | **Surrebuttal:** Energy Efficiency |
| Summit Natural Gas | OPC | GR-2014-0086 | **Rebuttal:** Energy Efficiency<br>**Surrrebuttal:** Energy Efficiency |
| Union Electric Company d/b/a Ameren Missouri | OPC | ER-2012-0142 | **Direct:** PY2013 EM&V results / Rebound Effect<br>**Rebuttal:** PY2013 EM&V results<br>**Surebuttal:** PY2013 EM&V results<br>**Direct:** Cycle I Performance Incentive<br>**Rebuttal:** Cycle I Performance Incentive |
| Kansas City Power & Light | Missouri Public Service Commission Staff | EO-2014-0095 | **Rebuttal:** MEEIA Cycle I Application testimony adopted |
| KCP&L Greater Missouri Operations Company | Missouri Division of Energy (DE) | EO-2014-0065 | Integrated Resource Planning: Special Contemporary Topics Comments |

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| Kansas City Power & Light | DE | EO-2014-0064 | Integrated Resource Planning: Special Contemporary Topics Comments |
| The Empire District Electric Company | DE | EO-2014-0063 | Integrated Resource Planning: Special Contemporary Topics Comments |
| Union Electric Company d/b/a Ameren Missouri | DE | EO-2014-0062 | Integrated Resource Planning: Special Contemporary Topics Comments |
| The Empire District Electric Company | DE | EO-2013-0547 | Triennial Integrated Resource Planning Comments |
| Working Case: State-Wide Advisory Collaborative | OPC | EW-2013-0519 | **Presentation:** Does Better Information Lead to Better Choices? Evidence from Energy-Efficiency Labels<br>**Presentation:** Customer Education & Demand-Side Management<br>**Presentation:** MEEIA: Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis |
| Independence-Missouri | OPC | Indy Energy Forum 2014 | **Presentation:** Energy Efficiency |
| Independence-Missouri | OPC | Indy Energy Forum2015 | **Presentation:** Rate Design |
| NARUC – 2017 Winter, Washington D.C. | OPC | Committee on Consumer Affairs | **Presentation:** PAYS Tariff On-Bill Financing |
| NASUCA – 2017 Mid-Year, Denver | OPC | Committee on Water Regulation | **Presentation:** Regulatory Issues Related to Lead-Line Replacement of Water Systems |
| NASUCA – 2017 Annual Baltimore, | OPC | Committee on Utility Accounting | **Presentation:** Lead Line Replacement Accounting and Cost Allocation |
| NARUC – 2018 Annual, Orlando | OPC | Committee on Consumer Affairs | **Presentation:** PAYS Tariff On-Bill Financing Opportunities & Challenges |
| Critical Consumer Issues Forum (CCIF)—New Orleans | OPC | Examining Polices for Delivering Smart Mobility | **Presentation:** Missouri EV Charging Station Policy in 4 Acts: Missouri Office of the Public Counsel Perspective |
| Michigan State, Institute of Public Utilities, 2019 | OPC | Camp NARUC: Fundamentals | **Presentation:** Revenue Requirement |
| NARUC/US AID, Republic of North Macedonia, Skopje 2019 | OPC | NARUC /US AID: Cybersecurity | **Presentation:** Case Study: The Missouri Experience, Cybersecurity and Data Privacy |
| Kansas, Clean Energy Business Council ("CEBC"), 2020 | OPC | Climate and Energy Project | **Presentation:** Energy Efficiency and Pay as You Save (PAYS) |
| Michigan State, Institute of Public Utilities, 2020 | OPC | Camp NARUC: Fundamentals | **Presentation:** Fundamentals of Economic Regulation / Performance Base Regulation |