

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

In the Matter of Kansas City Power & Light            )  
Company’s Notice of Intent to File an                )  
Application for Authority to Establish a Demand-    )  
Side Programs Investment Mechanism                )                File No. EO-2019-0132

In the Matter of KCP&L Greater Missouri            )  
Operations Company’s Notice of Intent to File an    )  
Application for Authority to Establish a Demand-    )  
Side Programs Investment Mechanism                )                File No. EO-2019-0133

**EVERGY MISSOURI METRO AND EVERGY MISSOURI WEST  
RESPONSE TO STAFF CHANGE REQUEST**

**COMES NOW**, Evergy Metro, Inc. d/b/a Evergy Missouri Metro (“Evergy Missouri Metro”) and Evergy Missouri West, Inc. d/b/a Evergy Missouri West (“Evergy Missouri West”) (collectively, the “Company” or “Evergy”)<sup>1</sup> and, for their *Response* (“Response”) to Staff (“Staff”) for the Missouri Public Service Commission’s (“Commission”) *Change Request* (“Change Request”) filed in these dockets on July 22, 2022, states as follows:

1. The Company does not agree with Staff’s Change Request for the reasons in the attached Report.
2. A more detailed response and specific recommendations from the Company are attached hereto as **Exhibit A**.

**WHEREFORE**, the Company respectfully submits its Response to the Staff Change Request to the Commission.

---

<sup>1</sup> Effective October 7, 2019, Evergy Missouri Metro adopted the service territory and tariffs of Kanas City Power & Light Company (“KCP&L”) and Evergy Missouri West adopted the service territory and tariffs of KCP&L Greater Missouri Operations Company (“GMO”).

Respectfully submitted,

/s/ Roger W. Steiner

Roger W. Steiner, MBN 39586  
Evergy, Inc.  
1200 Main Street, 16<sup>th</sup> Floor  
Kansas City, MO 64105  
Telephone: (816) 556-2314  
Facsimile: (816) 556-2110  
E-Mail: [Roger.Steiner@evergy.com](mailto:Roger.Steiner@evergy.com)

James M. Fischer, MBN 27543  
Fischer & Dority, P.C.  
101 Madison, Suite 400  
Jefferson City, MO 65101  
Phone: (573) 636-6758  
Fax: (573) 636-0383  
E-mail: [jfischerpc@aol.com](mailto:jfischerpc@aol.com)

**Attorneys for Evergy Missouri Metro and  
Evergy Missouri West**

**CERTIFICATE OF SERVICE**

I do hereby certify that a true and correct copy of the foregoing document has been hand delivered, emailed or mailed, postage prepaid, to all counsel of record in this case on this 8<sup>th</sup> day of August 2022.

/s/ Roger W. Steiner

**Counsel for Evergy Missouri Metro and  
Evergy Missouri West**

**File No. EO-2019-0132 and EO-2019-0133**

**Staff Change Request – Evergy Response**

Evergy does not agree with the three principal items listed in the Staff's Change Request with reasons listed below for each of the items.

1. *For the Heating, Cooling, and Home Comfort (“HCHC”) program, change the non-participant spillover (“NPSO”) rate from 14 percent to 2 percent. This reduces net savings for this program by 1,159,725kWh (12%).*

Evergy does not agree that the non-participant spillover (“NPSO”) rate should be changed from 14 percent to 2 percent PY2021. The measures used for non-participant spillover (“NPSO”) savings (collected via the ESP general population survey) included all like-measures in the HCHC program, which included central AC, air source heat pump, ground source heat pump, ductless mini-split heat pump, attic insulation, air sealing, LED bulbs, faucet aerators, showerheads, smart power strips, and pipe insulation. Savings for all NPSO measures were calculated using the calculations and default assumptions in the IL TRM. The increase in NPSO spillover comes from the increase in the number of measures included in the general population survey in 2021 compared to 2020 (5 measures on survey in 2020 and 11 measures on survey in 2021). Specifically, ground source heat pumps, ductless mini-split heat pumps, low flow showerheads, pipe insulation, and smart power strips were not included in the 2020 survey. This is because ADM was only capturing “like spillover” program and there was an emphasis on implementation to reduce the survey length. The NPSO score also increased due to the percentage of people who claimed to install measures and the percentage of people who claimed to install HVAC measures.

Additionally, the Evergreen report appears to base the NPSO reduction to 2% from 14% in large part because this was the figure used in PY2020. The PY2020 NPSO figure was unusually low and is the anomaly (not PY2021). The NPSO figures going back to say PY2017 have been 14%, including even when Guidehouse was the EM&V evaluator in years prior to ADM (prior to PY2020), and the resulting NTG ratios for PY2021 were also among the lowest in the past five years. In conclusion we believe the PY2021 NPSO score of 14% is appropriate.

Further, Evergy believes that it is not bound by the *Staff's Change Request for Adjustments to the Cadmus Report of Program Year 2016 Annual Net Energy and Demand Savings from MEEIA Programs* filed on August 14, 2017, in Case No. EO-2015-0055. That Change Request was unique to Ameren's MEEIA programs and the related evaluation and Evergy was not a party to the case.

2. *For the Energy Products Program, change the participant spillover rate from 7 percent to 0 percent. This change reduces net savings for this program by 3,699,887 kWh.*

Spillover refers to sales of energy efficient equipment that occur because of program influences on customers but for which an incentive or rebate is not given. For example, in the context of a program for LED price markdowns, participant spillover may result from a customer who purchases program discounted bulbs and is influenced to install additional (non-rebated) energy efficiency measures or change their energy usage behavior because of their program experience.

ADM conducted a benchmarking study of 8 recent evaluations of upstream lighting programs to determine a participant spillover rate. The average participant spillover across the benchmarked studies was 7 percent, with a range from 2 percent to 11 percent. ADM used the average participant spillover from this benchmarking study for the evaluation of the Energy Saving Products program.

Evergreen's argument for a reduction to 0 percent participant spillover, while still accounting for free ridership in the Net Savings assumption, does not capture all channels of program influence on utility customers.

ADM proposes a revised participant spillover rate of 5.5% as shown in Table 1 below. Evergreen's arguments for reducing the participant spillover rate from 7 percent to 0 included that the reports referenced in the benchmarking study ADM used are all outdated, with half from the 2013-2021 era when CFLs were still a significant part of residential lighting programs. ADM actually reviewed 8 recent studies that ranged from 2 to 11 percent, with 7 percent the average, and removed some of the older data regarding Compact Fluorescent Light (CFLs). In other words, the 5.5% figure was calculated by essentially removing any of the benchmarked sources which had CFLs included in the spillover calculation, and by doing so fundamentally eliminated some of the older surveys. This approach ensures that:

- a) All included studies are properly cited and attainable;
- b) Included studies use spillover estimates specific to LEDs and do not include data applicable to CFLs; and
- c) No market effects are included in spillover estimates.

Table 1

List of References for Spillover Benchmarking and Support for Revised Participant Spillover Rate

Referenced Study	Program Year	Study Year	Method	Reported Spillover	CFLs Included	Include
Progress Energy Carolinas <sup>1,2</sup>	2012	2013	General population	7%	Yes	No
Xcel Energy Minnesota <sup>2</sup>	2012		Participant survey	10%	Yes	No
Public Service Company of NM <sup>2,3</sup>	2012	2013	Participant survey	11%	Yes	No
Xcel Energy Colorado <sup>4</sup>	2015	2016	Lighting saturation trend analysis	8% <sup>5</sup>	Yes	No
ComEd Illinois <sup>6</sup>	2015/16	2016	In-store intercept	5.6% <sup>7</sup>	No	Yes
Ameren Illinois <sup>8</sup>	2015/16	2017	In-store intercept	7%	No	Yes
Ameren Missouri Lighting Impact and Process Evaluation: PY2019 <sup>9</sup>	2019	2020	Participant survey	7.4%	No	Yes
ComEd Programs NTG Approach for CY2020 <sup>10</sup>	2020	2019	In-store intercept	2%	No	Yes
<b>Original Average</b>				<b>7.4%<sup>11</sup></b>		
<b>Proposed Revised Average</b>				<b>5.5%</b>		

<sup>1</sup>EM&V Report for the 2012 Energy Efficient Lighting Program for Duke Energy (previously Progress Energy Carolinas), completed by Navigant Consulting, page 24.

<https://dms.psc.sc.gov/Attachments/Matter/17A6EA48-155D-141F-237E958D1D5079F8>

<sup>2</sup> Energy Final Energy Efficiency Portfolio Evaluation Report 2015 Program Year, completed by Cadmus, page 50 (197 in pdf report).

<http://www.apscservices.info/EEInfo/EEReports/Entergy%202015.pdf>

<sup>3</sup> Evaluation of 2012 Public Service Company of New Mexico Energy Efficiency & Demand Response Portfolio, completed by ADM Associates, page 6-11.

<https://www.pnm.com/documents/396023/396157/ee-ar-12-mv.pdf/03cf1f66-af41-4c2b-b613-a99d9a090835>

<sup>4</sup> Evaluation of Xcel Energy’s Home Lighting and Recycling Program, completed by The Cadmus Group, page 62.

<https://www.xcelenergy.com/staticfiles/xcel/PDF/Regulatory/CO-DSM/CO-Regulatory-DSM-Home-Lighting-and-Recycling-Evaluation.pdf>

<sup>5</sup> This report includes market effect of 6 percent reported separately from the 8 percent spillover.

<sup>6</sup> ComEd Residential Lighting Discounts Program Evaluation Report, completed by Navigant, page 40.

[https://ilsag.s3.amazonaws.com/ComEd\\_Residential\\_Lighting\\_Discounts\\_PY8\\_Evaluation\\_Report\\_2016-11-10\\_Final.pdf](https://ilsag.s3.amazonaws.com/ComEd_Residential_Lighting_Discounts_PY8_Evaluation_Report_2016-11-10_Final.pdf)

<sup>7</sup> 5.6%= weighted average from PY2021 Evergy ESP gross verified kWh. (Standard LED spillover 7%, Specialty 3%)

<sup>8</sup> Impact and Process Evaluation of the 2015 Illinois Power Agency Residential Lighting Program, completed by Opinion Dynamics, page 46.

[https://ilsag.s3.amazonaws.com/AIC-IPA\\_PY8\\_Residential\\_Lighting\\_Evaluation\\_Report\\_REVISIED\\_FINAL\\_2017-09-12.pdf](https://ilsag.s3.amazonaws.com/AIC-IPA_PY8_Residential_Lighting_Evaluation_Report_REVISIED_FINAL_2017-09-12.pdf)

<sup>9</sup> Ameren Missouri Program Year 2019 Annual EM&V Report Volume 2: Residential Portfolio Report, completed by Opinion Dynamics, page 62.

<https://www.efis.psc.mo.gov/mpsc/commoncomponents/viewdocument.asp?DocId=936298055>

<sup>10</sup> COMED PROGRAMS NTG APPROACH FOR CY2020, page 20.

[https://ilsag.s3.amazonaws.com/ComEd\\_NTG\\_History\\_and\\_CY2020\\_Recs\\_2019-10-01.pdf](https://ilsag.s3.amazonaws.com/ComEd_NTG_History_and_CY2020_Recs_2019-10-01.pdf)

<sup>11</sup>Rounded to 7 percent when filed in original report.

3. *For the air sealing and insulation measures, change the baseline heating assumptions as discussed above to reflect a more accurate allocation of existing heating types between gas and electric. (95% gas/5% electric).*

ADM agrees with updating the allocation of existing heating types between gas and electric. However, the proposed allocation is based on heating fuel data as reported by the contractors and may be skewed toward gas as a heating source since the gas fuel type was set the default, pre-selected option in the drop-down menu of the data collection instrument and this contractor input has no impact on the rebate being received.

Accordingly, ADM proposes to use the percentages in Table 2 below to recalculate savings previously reported for the air sealing and insulation measures installed through the Heating Cooling and Home Comfort Program.

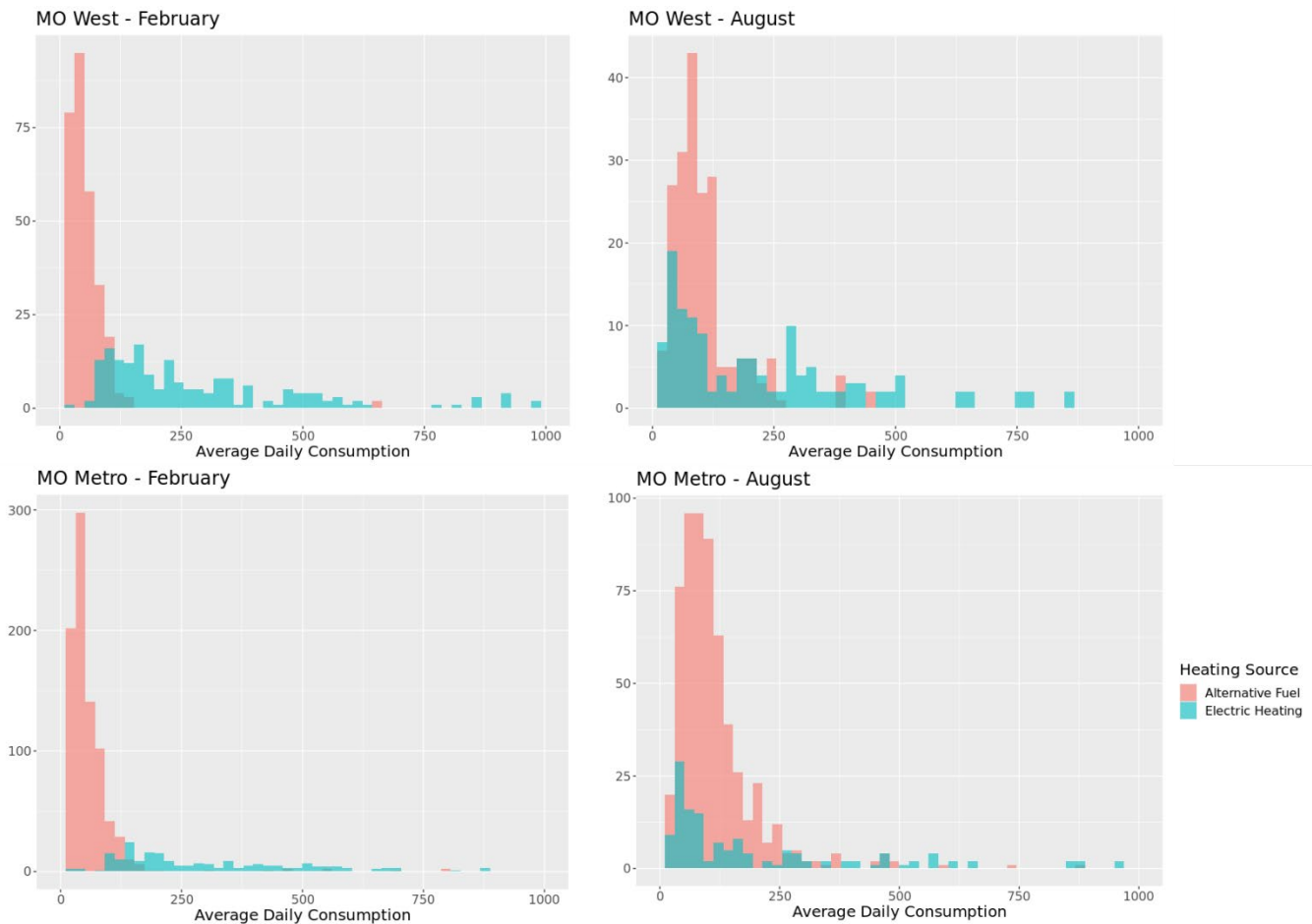
To verify the contractor data and determine an applicable split between electric versus alternative fuel heating sources, ADM performed an analysis utilizing billing data from customers who received air sealing and insulation measures through the program in 2021. First, ADM reviewed the consumption data for homes that program contractors recorded as having an electric heating source. ADM used the minimum average daily consumption in January from the electric heating customers as a threshold value to determine if customers had either electric heating (January mean average daily consumption for the home was above the threshold) or alternative fuel heating (January mean average daily consumption for the home was below the threshold). As shown in Figure 1, the two identified heating fuel groups show some overlap in household average daily consumption in the winter – as expected due to variables such as weather, home size, and dual-fuel heated homes – and complete overlap in the summer – which is also expected as heating fuel should play no role in summer energy consumption patterns.

Based on the disaggregated fuel type analysis, ADM determined the percentage of customers in each service territory that can be identified as having electric heating versus an alternative fuel source (see Table 2). Though ADM’s calculated percentage of electric heating homes is higher than the Staff change order proposed rate, it is aligned with U.S. Energy Information Administration’s estimate for the state of Missouri.<sup>12</sup>

---

<sup>12</sup> 37.1% of homes in Missouri use electric heating: *Missouri State Energy Profile*, U.S. Energy Information Administration. Accessible via: <https://www.eia.gov/state/print.php?sid=MO>

*Figure 1.  
Example Winter and Summer Month Distributions of Average Daily Consumption from Program  
Participant Homes*



*Table 2. Proposed Heating Fuel Splits*

<b>Territory</b>	<b>Sample Size</b>	<b>Electric Heating</b>	<b>Alternative Fuel Heating</b>
MO West	123	37%	63%
MO Metro	282	20%	80%