# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Rate Design Case of	)	Case No. EO-2021-0349	
Evergy Metro, Inc. d/b/a Evergy Missouri	)		
Metro	)		
In the Matter of the Rate Design Case of	)	G 37 TO 2024 0220	
Evergy Missouri West, Inc. d/b/a Evergy	,	Case No. EO-2021-0350	
Missouri West	)		

# PUBLIC COUNSEL'S COMMENTS ON EVERGY MISSOURI METRO & EVERGY MISSOURI WEST'S TIME-OF-USE RATE DESIGN REPORT

In response to Commission's August 18, 2021, order directing, "Any party who wishes to submit a response to Evergy's TOU report shall do so no later than September 7, 2021," the Office of Public Counsel (Public Counsel) submits its comments in the attached memorandum. There Public Counsel, for reasons given therein, recommends that the Commission inform Evergy Missouri Metro and Evergy Missouri West to propose in their upcoming general electric rate cases time-of-use rates for residential customers as default rates from which those customers may opt out or risk disallowance of their investments in automated meter infrastructure hardware and implementing software, as well as associated marketing and education expenses from their revenue requirements. Further, Public Counsel recommends that the Commission not only direct Evergy Missouri Metro and Evergy Missouri West to prepare rate design options that include an opt-out TOU default option for residential customers for those general electric rate cases, but also direct the Commission's Staff to do the same, and invite interested stakeholders to do so as well.

# Respectfully,

/s/ Nathan Williams

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Attorney for the Office of the Public Counsel

# **CERTIFICATE OF SERVICE**

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or electronically mailed to all counsel of record this 7<sup>th</sup> day of September 2021.

/s/ Nathan Williams

#### **MEMORANDUM**

To: Missouri Public Service Commission Official Case File,

Case Nos. EO-2021-0349 & EO-2021-0350

From: Geoff Marke, Chief Economist

Missouri Office of the Public Counsel

Re: Evergy Missouri Metro & Evergy Missouri West TOU Rate Design Report Comments

Date: 9/7/2021

#### **Prelude:**

# ER-2016-0156 On-the-Record on AMI (22 Sept. 2016)

"[Y]ou're spending a lot of money on AMI meters to get rid of meter readers, which is great. But if you're not going to use that technology, you could have went with the older AMR meters. And so if you're going to ask ratepayers to pay for that, then let's utilize the technology."

Scott Rupp, Commissioner Missouri Public Service Commission

"I could not agree with you more in terms of the amount of money that ratepayers will pay for this technology, if we're not getting something for that technology, if we're not getting something for that technology, then that's inefficient use of ratepayer dollars."<sup>2</sup>

Daniel Hall, Former Chairman Missouri Public Service Commission

## ER-2018-0145 & ER-2018-0146 On-the-Record on AMI (3 Oct. 2018)

"I think there's an argument that can be made that the ratepayers are paying for these AMI meters and it is the shiny new toy to put on the side of the house, but if you're not having time of use rates, you're not getting the value out of it so maybe the penalty for not hitting your goals is to remove the AMI meters from rate base because there's no reason to have the ratepayers pay for it, you know."<sup>3</sup>

Scott Rupp, Commissioner Missouri Public Service Commission

"I must say I would not be terribly shocked sitting somewhere else watching what happens here two years from now that there's some other reason why you're not going to get mandatory time of use rates on the books." <sup>4</sup>

Daniel Hall, Former Chairman Missouri Public Service Commission

1

<sup>&</sup>lt;sup>1</sup> Case No: ER-2016-0156 Transcript Volume 11 (On-The-Record Presentation - Jefferson City, MO – September 22, 2016). p. 95, 22-25 thru p. 96, 1-13.

<sup>&</sup>lt;sup>2</sup> Ibid. p. 96, 25 thru p. 97, 1-4.

<sup>&</sup>lt;sup>3</sup> Case Nos: ER-2018-0145 & ER-2018-0146. Transcript Volume 14 (On-The-Record Presentation - Jefferson City, MO - October 3, 2018).p. 203, 18-25.

<sup>&</sup>lt;sup>4</sup> Ibid. p. 191, 9-12.

#### **Introduction:**

I appreciate this opportunity to provide the Commission with comments regarding TOU rates for Evergy's customers. Our office shares the Commission's concerns demonstrated in the above quotes; concern that customers have been paying for a very expensive metering system for years with espoused benefits yet to be realized for customers, while Evergy has been benefiting for years from its return on those investments. With Evergy expected to file its rate case in early 2022, we are optimistic that one outcome of that case will be TOU rates available for all customers with AMI meters. However, we are also concerned with the history of delays in the development of TOU rates by Evergy. For that reason, my recommendation requests clear guidance from the Commission to Evergy regarding the Commission's expectations for TOU rates in Evergy's upcoming rate cases.

#### **Recommendation:**

I strongly recommend to the Commission that it inform both Evergy Missouri Metro and Evergy Missouri West (collectively "Evergy") to include a reasonable opt-out Time-of-Use ("TOU") default option for residential customers when they file their next Missouri general electric rate cases or potentially face major cost disallowances for their investment in automated meter infrastructure ("AMI") hardware and implementing software ("CAPEX"), as well as associated marketing and education expenses.

The Commission should also direct Evergy, and the Commission's Staff to prepare rate design options that include an opt-out TOU default option for residential customers for Evergy's next general electric rate cases currently anticipated early 2022, and invite other stakeholders to do the same.

This strong signal from the Commission is warranted to assure that the economic efficiencies Evergy has promised from its hundreds of millions of dollars of AMI investment in Missouri (upon which Evergy has earned a generous profit for over five years) will be realized.

Evergy should not be allowed to continue to "punt" the issue of TOU rates again. Commission guidance to Evergy at the on-the-record scheduled for later this month gives more than enough time for Evergy to prepare and educate customers about TOU rates before they take effect in late 2022.

## **Highlights of Evergy's 2021 TOU Rate Design Report:**

Evergy's 2021 Evergy Missouri Metro & Evergy Missouri West TOU Rate Design Report is at least the 11<sup>th</sup> iteration of ratepayer-funded TOU third-party study Evergy has conducted for Missouri to date (a 12<sup>th</sup> study, the Evergy TOU EM&V study is due at the end of this year).<sup>5</sup>

Highlights of this latest Evergy TOU study include the following:

- Roughly 1% of Evergy's customers were enrolled in this pilot at some point;<sup>6</sup>
- The pilot had the desired effect of reducing on-peak consumption (4-8pm) year round;
- Participating customers lowered their demand peak by 4 to 9% at the system coincidence peak
  - o General residential customers = 5 to 10% lowered their demand peak; and
  - Spacing heating residential customers = 3 to 6% lowered their demand peak;
- Based on positive participant feedback the "Wait Till Eight" campaign was a success;

<sup>&</sup>lt;sup>5</sup> Other specific third-party studies include the following (which does not include the many 3<sup>rd</sup> party customer surveys Evergy has charged to ratepayers):

<sup>1. &</sup>lt;u>Electric Power Research Institute (EPRI)-Matching Electric Service Plans to KCP&L's Strategic Objectives (EPRI-ESP)—EPRI Supplemental Research Project, 2012-2014;</u>

<sup>2.</sup> KCP&L SmartGrid Residential Time-of-Use Pilot (SGDP-TOU) – a component of the KCP&L Division of Energy SmartGrid Demonstration Project, 2010-2015;

<sup>3. &</sup>lt;u>EPRI-KCP&L Residential Time-of-Use Impact Study (EPRI-TOU)</u> – EPRI Smart Grid Demonstration Project Analysis, 2010-2015;

<sup>4. &</sup>lt;u>ERPI-Measuring Customer Preferences for Alternative Electricity Service Plans (EPRI-ESP)</u> – EPRI Supplemental Research Project, 2014-2015;

<sup>5.</sup> KCP&L 2016 Demand Side Management (DSM) Potential Study (DSM-TOU) – Applied Energy Group, 2016-2017;

<sup>6. &</sup>lt;u>BMcD-KCP&L and GMO Residential Rate Design Strategy Study (BMcD-TOU)</u>-Burns & McDonnell Engineering Company, 201718

<sup>7.</sup> KCP&L Greater Missouri Operations Company Seasonal Rate Structure Study December 12, 2017 per Commission Report and Order in Case No. ER-2016-0156;

<sup>8. &</sup>lt;u>KCP&L Block Rate Study</u> December 8, 2017 per Commission Report and Order in Case No. ER-2014-0370 and ER-2016-0156;

<sup>9.</sup> KCP&L Greater Missouri Operations Company Time of Use Rate Study Project No. 97119 Final Report 12/13/2017 per Commission Report and Order in Case No. ER-2016-0156

<sup>10.</sup> KCP&L 2020 Demand Side Management (DSM) Potential Study (DSM-TOU) -Applied Energy Group,

<sup>11.</sup> Evergy Missouri Metro & Evergy Missouri West: Time of Use Rate (TOU) Rate Design Case Report, June 15, 2021 Case No: EO-2021-0349 & EO-2021-0350

<sup>12.</sup> Guidehouse Evaluation, Measurement and Verification ("EM&V") of Evergy TOU Pilot December 31, 2021

<sup>&</sup>lt;sup>6</sup> 5,538 unique accounts out of a possible 554,652 combined residential customers (262,729 Evergy Missouri Metro residential customers and 291,923 Evergy Missouri West residential customers); however, approximately 1,400 customers unenrolled. Of that latter number (unenrolled), approximately ½ (700) unenrolled due to moving out of the premise.

- It is not clear how much the pilot cost;
  - o I estimate the pilot cost from \$725 to \$1,208 per (non-dropped-out) participant based on assertions put forward by the Company in its most recent rate case;<sup>7</sup>
- Annual bill savings per participant based on service territory and heating type are as follows:

TOU Residential Customer	Annual Bill Savings
Evergy Metro (General)	\$81.60
Evergy Metro (Space Heating)	\$27.60
Evergy West (General)	\$70.50
Evergy West (Space Heating)	\$73.20

- Evergy has put forward two "soft" TOU proposal options for their 2022 rate cases;
- Evergy has suggested that they may include in their 2022 rate cases at least three alternative rate design options (not dependent or connected to TOU rates) as well;
- A consistent theme throughout its report is that Evergy does not believe the Commission should require them to have op-out or mandatory TOU rates

# **Evergy's "soft" proposal for their 2022 rate case:**

#### Background

Evergy has offered up two opt-in TOU rate designs for Commission consideration:<sup>8</sup>

- Option 1
  - $\circ$  Align the summer seasons to June 1 Sep. 30
  - o Maintain On-Peak from 4pm to 8pm

moving." (Emphasis added) p. 204, 13-25 thru p. 205, 1-5.

- o Maintain summer pricing differentials, but reduce the non-summer price differentials
- Option 2
  - o Summer On-Peak and Off-Peak (On-peak aligned with the option1)
  - o Non-Summer Off-peak and Super Off-peak (Super Off-Peak aligned with option 1)

4

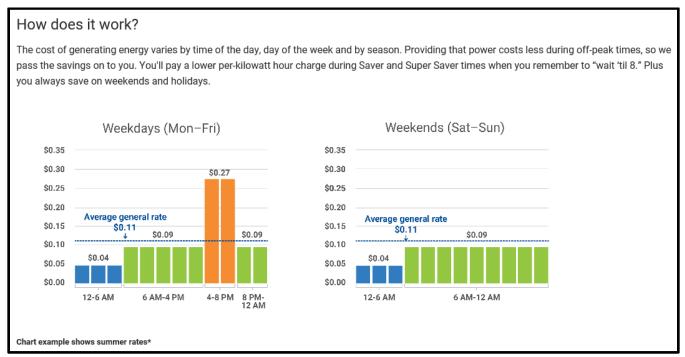
<sup>&</sup>lt;sup>7</sup> Case Nos: ER-2018-0145 & ER-2018-0146, October 3, 2018. On-the-Record:

<sup>&</sup>quot;CHAIRMAN SILVEY: So clearly there seems to be some concern about adoption or participation in this program. Do you guys have a ballpark figure of how much you are looking at spending on the marketing component? I mean not necessarily all the backend data stuff, but getting the message to people.

MR. IVES: I don't know that we have a great figure on that right now because we haven't done the research component. We've have done the segmentation. We haven't developed the plan, but -- CHAIRMAN SILVEY: Surely, you've got something, you know, penciled in for we will not spend more than X. MR. IVES: We really don't, but I think it would not be unreasonable to think that it will take three to 5,000,000 dollars to do the research, put the plan together and do the outreach to customers necessary to get this program

<sup>&</sup>lt;sup>8</sup> It is unclear whether Evergy would insist on a participant cap for these or the alternative rate options.

Figure 1 "How does it work?" Evergy's website graphical education of "Option 1" (which is their current pilot)



## Comments:

I do not necessarily take issue with Evergy's proposed design(s) and I support the Company's position on providing options to customers. Where I differ with the Company is that I support an opt-out default and Evergy appears to support TOU as a niche offering or at least a "slow" build-out.

#### **Education and Marketing efforts:**

#### Background

According to the Evergy "Wait Till 8" online commercial

"When you come home from work, you kick on the AC, put on a load of laundry, and start cooking dinner. And so do all of your neighbors. Around this time, energy usage goes up all over the region and so does the cost of generating energy. It's the peak time for energy use but now you can choose the time of use plan. This optional use plan rewards you for using less of your energy during the peak hours of 4 to 8pm Monday through Friday. Lower energy use at peak time means the cost of generating energy is lower and we can pass those saving onto you. If you can wait till eight to run the dishwasher and other large appliances you can really save money and we'll be able to provide

5

more of your power from renewable resources. That's good news for everyone." (Emphasis added)

Including this brief sales pitch, Evergy's education and marketing efforts for their TOU pilot were the followings:

## **Education Tools**

- 1. Pre-enrollment rate education reports
- 2. Pre-enrollment online rate analysis tool
- 3. Weekly rate coach reports
- 4. Post-enrollment rate coach report
- 5. Post-enrollment self-service hourly AMI data analytics

## Marketing Strategies and Targets

• Messaging "wait till 8" branding (e.g., kitchen magnets, commercials)

o Website o Social media

VideosDigital campaignsRadioEmail

Targeted Groups

Evergy Employees
 Auto savers (i.e., unique users who would

o Early adopters save by default)

EV driversMass awareness

o Early tech adopters

#### Comments:

In the short-term my concern centers on what the all-in costs for this endeavor were given the size of the pilot. My long-term concern centers on Evergy's hesitancy to expanding TOU rates to the rest of the residential customer class when "waiting till 8" to power your appliances results in lower energy costs and actual realized benefits from the hundred million dollar + under-utilized AMI capital assets in rate base.

It appears that Evergy has the tools and marketing in place to scale their program to encompass all of the residential customer classes; otherwise, their marketing and education is excessive.

## **Extracting Additional Benefits from AMI Hardware & Software**

#### Background

At various points in Evergy's last two sets of rate cases both Commissioners and stakeholders criticized Evergy's lack of clarity of their claimed "additional benefits" from AMI hardware and software beyond TOU rates. Evergy's 2021 TOU report does not shed much more light on this topic other than to state:

In confirming the expectation of extracting additional benefit from Evergy's recent upgrades in metering and billing systems, one should first consider the nature of these

6

GM-2

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<sup>&</sup>lt;sup>9</sup> Evergy. (2019) Evergy Time of Use Plan. YouTube. <a href="https://www.youtube.com/watch?v=YPjbLF4NPkw&t=12s">https://www.youtube.com/watch?v=YPjbLF4NPkw&t=12s</a>

upgrades. At the time of the 2018 Stipulation, the Company, specific to the KCP&L-MO and KCP&L-GMO jurisdictions, endeavored to replace its CIS, or billing system, and deploy an AMI system. The billing systems of both utilities and the Automated Meter Reading ("AMR") system used by KCP&L had reached end of life and replacement was needed. Sufficient benefit to justify the upgrade was expected to be received by bringing the jurisdictions together under a common billing system and AMI system. Important benefit was provided in the area of customer data. In deploying TOU rates, it was expected that these systems could enable further benefit. These expectations have been substantiated through review of customer surveys and the other customer interactions, as it has been demonstrated that TOU has been effective in raising the energy awareness of participating TOU customers. In addition, the Company has communicated comparison of TOU and standard rates in the Rate Education Reports to all customers – participating and non-participating. Among other activities, the Company specifically utilizes the AMI data to support education on the TOU rate plan.

In addition, most significant has been the transition to broader utilization of AMI data. Evergy has every indication that the capabilities of the new billing system and AMI upgrades are providing benefit consistent with the investment and that TOU allows for the extraction of additional benefits.<sup>10</sup>

To summarize, the additional benefits, beyond a TOU option, include the following:

1. Customer data

#### Comments:

This is not surprising. The primary benefit of deploying AMI hardware and software is the ability to price electricity closer to the true cost of service. We are approaching six years of Evergy earning a larger return on an expensive asset the benefits of which remain largely unrealized.<sup>11</sup>

## Possible alternative rate design Evergy proposals for 2022 rate case:

#### Background

Evergy has also provided three potential alternative rate design options for its upcoming 2022 rate cases including:

- 1. Subscription pricing: In which customers pay a fixed monthly bill for energy use with potentially additional incentives for customers to reduce usage through energy efficiency measures or bill credits;
- 2. Prepay: In which customers can be disconnected more easily; and
- 3. Low-Income Solar: In which "low-income" customers may or may not pay more to claim local solar usage.

#### Comments:

There is very little detail on any of these options. As an initial reaction, I would not support either the subscription or the prepay options. It appears as though the latter would encourage a "buffet

<sup>7</sup> GM-2

<sup>&</sup>lt;sup>10</sup> Evergy Missouri Metro & Evergy Missouri West: Time of Use Rate (TOU) Rate Design Case Report, June 15, 2021 Case Nos: EO-2021-0349 & EO-2021-0350, p. 36.

<sup>&</sup>lt;sup>11</sup> Six years as an approximate average. Evergy has staggered its AMI investments.

style" consumption incentive that Evergy hopes to offset with monetary or DSM awards. This seems like entirely too much work (for everyone) and I question how such a rate design would actually operate or why AMI is necessary for any of these options.

The former (prepay) can already happen today without customers surrendering their disconnection rights under the Commission's rules. Nothing is preventing customers from prepaying already.

As to the low-income solar program, I am eager to see this program as issues of equity have been a design challenge to date. There are many potential challenges in designing such a rate and no doubt, many stakeholders will be interested in its outcome.

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

## AFFIDAVIT OF GEOFF MARKE

STATEOFMISSOURI	)	SS.
COUNTY OF COLE	)	

**COMES NOW GEOFF MARKE** and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Public Counsel's Comments on Evergy Missouri Metro and Evergy Missouri West's Time-Of-Use Rate Design Report* and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Geoff Marke Chief Economist

#### JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 7<sup>th</sup> day of September, 2021.



TIFFANY HILDEBRAND My Commission Expires August 8, 2023 Cole County Commission #15637121

Tiffany Hildebrand

My Commission expires August 8, 2023.