BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Union Electric Company d/b/a Ameren Missouri's Tariffs to Decrease Its Revenues for Electric Service	)))	File No. ER-2019-0335

PUBLIC COUNSEL'S RESPONSE TO ORDER DIRECTING RESPONSES

The Office of the Public Counsel (OPC) responds to the Public Service Commission's Order Directing Responses as follows:

1. On March 5, 2020, the Commission issued an Order Directing Responses regarding the stipulation and agreement amongst the parties to the above captioned case. The Commission directed the parties to respond as to whether they are willing to provide an alternative stipulation and agreement including certain enumerated requests from the Commission.

2. Public Counsel responds to each of the Commission's requested items in the attached memorandum.

WHEREFORE, the OPC responds to the Commission's Order Directing Responses.

Respectfully,

OFFICE OF THE PUBLIC COUNSEL

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served, either electronically or by hand delivery or by First Class United States Mail, postage prepaid, on this 9th Day of March, 2020, with notice of the same being sent to all counsel of record.

/s/ Caleb Hall

MEMORANDUM

To: Missouri Public Service Commission Official Case File,
Case No. ER-2019-0335

From: Geoff Marke, Chief Economist
Missouri Office of the Public Counsel

Subject: Commission directed questions regarding rate design and willingness to provide an alternative stipulation and agreement

Date: March 9, 2020

Alternative Commission Stipulation Condition #1:

Allowing residential net-metering customers to select any rate options offered to other residential customers.

Response: No.

OPC is not strictly against opening up other rate options for net-metering customers, but several of the Company's proposed rate structures include charges that are against the interests of those customers. Further evaluation of tariff language would better serve the interest of all customers, and should not be changed hastily. OPC plans to explore the potential for different residential net-metering rate design options via AMI deployment in future rate cases.

Alternative Commission Stipulation Condition #2:

Enhancing the default time of use (TOU) rate so that the peak period is significantly shorter and has a much greater pricing differential relative to the off-peak period than the currently proposed default TOU rate.

Response: No.

The Commission asked a number of pointed questions to Ameren witnesses at the on-the-record. On more than one occasion, Ameren's witnesses cited "gradualism" and "settlement" as a response to why the stipulation and agreement was drafted the way it is. I would agree with those sentiments. For a further contextual basis for my position, I would direct the Commission to my filed rebuttal testimony which states:

> Second, even under a best-case scenario in Ameren's plan, ratepayers are at least five years removed from experiencing full implementation of "modern rate designs." Customers do not have AMI in placed yet and it will be well after the planned Smart Energy Plan is done before all customers will have AMI. It is also important to note that I have yet to see any plan on how the Company intends on implementing and educating its customer base on modern rates. Instead, the Company suggests pilots with no details on what is to be learned. On this point, I will have more to say later in my testimony under Rate Design.[1]

I would also point out that by electing PISA, Ameren Missouri's capital investment plan cannot include more than 6% of its annual capital budget on smart meters. This mean that any "Grand Opening" of modern rate design offerings for all customers will be well into the future. The specific statutory language states:

> For reach of the first five years that an electrical corporation is allowed to make the deferrals provided by subsection 2 of this section, <u>**the purchase and installation of smart meters shall constitute no more than six percent of the electrical corporation's total capital expenditures during any given year under the corporation's specific capital investment plan.**</u>[2]

Table 1 provides the cost breakdown and annual expenditures by various general category of Ameren Missouri's most recently updated filing its PISA Capital Investment Plan. Table 2 isolates the "Smart Meter Program" investments that were included in Table 1.

[1] Case No. ER-2019-0335, Rebuttal Testimony of Geoff Marke p. 3, 13-22.
[2] Mo. Rev. Stat. § 393.1400.4 (2018).

Table 1: Ameren Missouri 5-year Electric "Customer-Focused" Capital Investment Plan[3]

Category 1	2019 Actual	2020	2021	2022	2023	2024*	Grand Total
							$ - Thousands
Smart, Reliable Grid Operations	398,973	461,673	529,686	574,949	674,199	663,653	2,904,160
Smart Meter Program	48,330	55,494	60,902	64,357	55,209	43,315	279,277
Non-Nuclear Generation & Environmental	183,687	149,149	219,950	200,609	114,415	141,101	825,224
Nuclear Generation	74,049	71,007	80,176	95,310	91,064	66,926	404,483
Hydro Generation	36,342	26,161	37,653	37,091	34,414	25,523	160,842
Renewable & Gas Turbine Generation	12,258	24,127	30,838	25,345	24,718	16,955	121,983
Secure & Reliable Transmission	142,183	133,447	174,196	175,220	176,245	183,561	842,669
Cyber & Technology Upgrades	96,222	101,905	105,113	101,534	96,064	88,761	493,377
Operational & Customer Support Facilities	43,875	81,705	74,228	82,926	66,635	55,069	360,563
Innovative Opportunities	8,934	7,901	12,496	5,888	3,814	2,435	32,534
Grand Total - Capital	**1,044,853**	**1,112,569**	**1,325,238**	**1,363,229**	**1,336,777**	**1,287,299**	**6,425,112**
Wind Asset Acquisition (Two Sites)		1,203,000					1,203,000
Grand Total, Including Wind		**2,315,569**					**7,628,112**

Table 2: Ameren Missouri 5-year "Smart Meter Program" Investment Plan

Category	2019 Actual	2020	2021	2022	2023	2024*	Grand Total 2020-2024
Smart Meter Program	$48,330,000	$55,494,000	$60,902,000	$64,357,000	$55,209,000	$43,315,000	$279,277,000

It is doubtful that $279,277,000 in total costs will mean that AMI is fully deployed to all customers. On that note, I would again reference my rebuttal testimony that contains the following Q&A:

Q. What is your response to Mr. Wood highlighting future AMI investment as a customer-driven focus within Ameren Missouri's Smart Energy Plan?

A. I do not believe it is a foregone conclusion that AMI investment is a prudent investment. Based on the evidence in this case, it appears that ratepayers are going to be asked to start paying a return on and of hundreds of millions of dollars in AMI investment starting in the next case with no ability to realize the meaningful benefits for at least five years. This is because of both a staggered deployment and, to date, a nonexistent plan on how to educate customers on TOU rates. In effect, the only benefit that customers appear to be receiving is "the benefit" of being shut off quicker without a door-knock safeguard. A recent white paper from the American Council for an Energy-

[3] Case No. EO-2019-0044 Ameren Missouri's Five-Year Capital Investment Plan for 2020 through 2024 and Report on 2019 Expenditures. 20 02 26 exhibit 1 capital investment plan redacted__pdf. Page 1 Public.

Efficient Economy ("ACEEE") titled "Leveraging Advanced Metering Infrastructure To Save Energy" concludes the value-statement for AMI is questionable at best because utilities do not choose to maximize the benefits available from AMI.[4] In 2019, regulators in Virginia rejected Dominion Energy's proposed smart meter rollout, and utility commissions in New Mexico, Massachusetts and Kentucky all rejected utility proposals.[5] Based on those recent results, it would appear unwise to assume that this would be a prudent investment. Ameren Missouri has offered nothing to assuage those concerns. Again, I question the logic of investing hundreds of millions of dollars in AMI when:

- Multiple state Commissions have rejected AMI proposals;
- The Company has provided no demonstrable benefits or agreed-to performance metrics;
- The Company has provided no plan or commitment on how TOU rates will be rolled-out or at what scale; and
- The potential for rate-shock inducing costs hover over the future of the Company's coal power plants.

So, yes, I am skeptical of Mr. Wood's customer-driven focus testimony and have legitimate concerns for Ameren Missouri's ratepayers. My hope is that Ameren Missouri will do the proper analysis before making its investments and provide the empirical and objective justifications prior to seeking recovery. It is much more of a challenge for everyone involved and a greater risk to shareholders and ratepayers alike to raise prudency issues on an investment that is operational.

Just because Ameren Missouri was authorized to increase rates by 15% over 5 years doesn't mean that it should.[6]

My support for the Staff's default TOU rates is based, in part, on the premise that TOU needs to be utilized by all customers if the investment ever hopes to achieve benefits to justify the large costs. Staff made a similar argument for a default TOU design in Evergy Metro and Evergy West's

[4] York, D. (2020) Smart meters gain popularity, but most utilities don't optimize their potential to save energy. *ACEEE* https://acee.org/blog/2020/01/smart-meters-gain-popularity-most

[5] Walton R. (2020) Most utilities aren't getting full value from smart meters, report warns. *Utilitydive*. https://www.utilitydive.com/news/most-utilities-arent-getting-full-value-from-smart-meters-report-warns/570249/

[6] Case No. ER-2019-0335, Rebuttal Testimony of Geoff Marke p. 7 & p. 8, 1-10.

rate case that I incorrectly opposed. As such, customers are now paying a return on and of an investment (AMI meters and billing support software) that exceeds hundreds of millions of dollars without receiving any (or very few) benefits. In contrast to those two electric utilities Ameren Missouri has not deployed a single AMI to date and thus rate design, education, marketing and deployment can all still be managed to realize benefits for customers as they incur costs. Again, my rebuttal testimony stated:

> On this issue, I support Mr. Hyman's evaluation framework but I support all of Staff's recommendations as it pertains to TOU. Staff made a similar argument in the last KCPL/GMO rate case which I did not fully endorse. The issue never went to an evidentiary hearing as parties stipulated to a long, time-intensive pilot process instead. Based on my experience on the west-side of the state and very real possibility that ratepayers may not realize any material benefits from AMI for another five years under the best case scenario, I support Staff's proposal to begin the movement to a default TOU.
>
> I see little reason in moving forward with yet another TOU pilot. There are hundreds of TOU pilot studies publically available that can provide all of the information we would need. Putting off Staff's recommendation and reproducing another study would be an enormous waste. I have little doubt that Dr. Faruqui could verbally confirm this to Ameren management without having ratepayers pay for an additional round of written outside expert witness testimony.
>
> The fact is, I am already skeptical about the value proposition of AMI; however, I struggle to find a scenario where AMI could ever be justified if only 1 to 2% of customers are actually using TOU rates. As it stands, I strongly recommend that Staff's proposal be adopted.[7]

[7] Ibid, p. 19, 20-26 & p. 20, 1-9.

Commission-induced alternative stipulation #3:

Submitting to the Commission timely status reports after the monthly customer engagement meetings identified in Paragraph 27 of the Corrected Non-Unanimous Stipulation and Agreement. The status reports would detail the agreed to educational/communication programs. In addition, Ameren Missouri would present at Agenda in either June or July 2020, details of the customer outreach plans prior to their initiation.

Response: Yes

OPC does not object to this request. In fact, I encourage the Commission to ask for more information and rationale for all of Ameren Missouri's planned PISA investments. For example, request Ameren Missouri share its cost-benefit analysis and how these customer-driven investments will produce customer-driven benefits to match the $6 billion dollar plus customer-funded costs. Again, as stated in my rebuttal testimony:

> Q. What is your response to Mr. Wood highlighting future grid upgrades as a customer-driven focus within Ameren Missouri's Smart Energy Plan?
>
> A. What are the quantified benefits? Where are the cost-benefit ratios and analysis? What are the performance measures? Where is the risk-informed distribution project evaluation or prioritization?
>
> To date, there has not been a single performance measure offered. No reliability metrics, no O&M savings, no demand response savings, nothing. Instead, the Commission was given a filing that contained a list of projects and a seven-page "report" without any historic or accountable metrics.
>
> I have not seen one cost-benefit analysis on any of the projects. I would, for example, be very interested in how Ameren Missouri has determined it is cost-effective to underground over 300 miles of its distribution system after its most recent IRP said:
>
> 22% of the [distribution system] lines are underground which provide a more aesthetically pleasing experience and are less susceptible to weather but cost significantly more and take longer to fix. Or how 4kV substation replacement programs will deliver positive benefit-cost ratios or why the Plan omits any Conservation Voltage

Reduction when Ameren Illinois estimated a 1.5% drop in energy use from their investment.

Q. Could you provide some illustrative examples of metrics you would like to see?

A. Literally anything would be a good start.

Beyond what I referenced already, one illustrative example could be Ameren Missouri's historic and projected (2013 to 2023) distribution rate base dollar per customer amount against the Company's historic and projected energy sales and system peak and how those numbers compare with US IOU averages. These metrics could be cross referenced with SAIDI, SAIFI, and CAIDI scores to show whether previous distribution investments produced meaningful results.

In short, I would want to see some (or any) justification that ratepayers $5 billion + spend on "customer-driven focus" distribution investments will result in customer benefits and not just gold plating a utility's distribution system. Certainly, PISA accounting treatment can produce benefits beyond paperless billing.

The lack of transparent, robust quantitative data is especially disconcerting given the uncertainty surrounding Ameren Missouri's baseload coal plants, which, separate and aside from PISA, may induce billions of dollars in additional investments. Unfortunately, I have little assurance on that issue as well as the Company never modeled such a scenario in its IRP.[8]

[8] Ibid, p. 5, 12-23 & p. 6, 1-23.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

AFFIDAVIT OF GEOFF MARKE

STATE OF MISSOURI)
) 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 Response to Commission directed questions regarding rate design and willingness to provide an alternative stipulation and agreement* 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 9th day of March, 2020.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

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

Tiffany Hildebrand
Notary Public

My Commission expires August 8, 2023.