

Exhibit No.: _____
Issue(s): Advanced Meter Infrastructure
("AMI") Installation
Witness/Type of Exhibit: Burdge/Surrebuttal
Sponsoring Party: Public Counsel
Case No.: ER-2016-0156

SURREBUTTAL TESTIMONY

OF

J. RICHMOND BURDGE

Submitted on Behalf of
The Office of the Public Counsel

KCP&L GREATER MISSOURI OPERATIONS COMPANY

Case No. ER-2016-0156

September 2, 2016

NP

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

In the Matter of KCP&L Greater)
Missouri Operations Company's)
Request for Authority to Implement) Case No. ER-2016-0156
a General Rate Increase for)
Electric Service)

AFFIDAVIT OF J. RICHMOND BURDGE

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

J. Richmond Burdge, of lawful age and being first duly sworn, deposes and states:

1. My name is J. Richmond Burdge. I am a Research Analyst for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

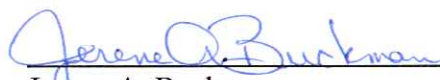


J. Richmond Burdge

Subscribed and sworn to me this 2nd day of September 2016.



JERENE A. BUCKMAN
My Commission Expires
August 23, 2017
Cole County
Commission #13754037



Jerene A. Buckman
Notary Public

My Commission expires August 23, 2017.

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SURREBUTTAL TESTIMONY

OF

J. RICHMOND BURDGE

KCP&L—GREATER MISSOURI OPERATIONS COMPANY

CASE NO. ER-2016-0156

1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is J. Richmond Burdge and my business address is P.O. Box 2230, Jefferson
4 City, Missouri 65102.

5 **Q. By whom are you employed and in what capacity?**

6 A. I am employed by the Missouri Office of the Public Counsel (“OPC”) as a Research
7 Analyst.

8 **Q. Are you the same J. Richmond Burdge who provided rebuttal testimony in this case?**

9 A. Yes, I am.

10 **Q. What is the purpose of this testimony?**

11 A. The purpose of this testimony is to respond to KCP&L Greater Missouri Operations
12 Company (“GMO”) witness Julie Dragoo’s testimony on Advanced Meter Infrastructure
13 (“AMI”) installation and opt-out provisions.

14 **Q. Please state OPC’s position.**

15 A. OPC opposes an opt-out program for AMI meters in the GMO service territory.

1 **II. ADVANCED METER INFRASTRUCTURE (“AMI”) INSTALLATION**

2 **Q. What are Staff’s and the Company’s position?**

3 A. Staff has proposed an AMI opt-out program for GMO residential customers with an initial
4 fee of \$75 and a monthly fee of \$10.¹

5 Ms. Dragoo states that an opt-out program for residential AMI installation is not justified
6 based on the number of complaints that GMO has received. If an opt-out option were
7 offered, she says it would be necessary for GMO to maintain “the same processes,
8 software, systems, and people it has in place today to manually read meters” while also
9 implementing new software and systems to read and analyze data from AMI meters.² She
10 testified the costs associated with such manual readings and associated software are
11 difficult to calculate and unlikely to be covered by the fees proposed by Staff’s opt-out
12 program.³

13 **Q. What is OPC’s position on this issue?**

14 A. Ms. Dragoo makes a strong argument that there is a great deal of uncertainty in the
15 potential financial and administrative burden an opt-out provision would impose on the
16 company. This would seem to be particularly true at the current rate of complaints. OPC
17 agrees an opt-out charge runs an unreasonable risk of allowing much of the cost of manual
18 meter readings to be borne by customers whose meters have been updated.

¹ ER-2016-015: Missouri Public Service Commission Staff Report Revenue Requirement Cost of Service, p. 200, lines 2-5.

² ER-2016-0156: Rebuttal Testimony of Julie Dragoo, p. 6, lines 9-11.

³ *Ibid.*, pp. 7-8, lines 23-8; p. 8, lines 19-24.

1 **Q. How many complaints have Kansas City Power & Light—Missouri (“KCP&L”) and**
2 **GMO received about AMI meters?**

3 A. As Ms. Dragoo testified, between the AMI installation programs of KCP&L and GMO,
4 one formal complaint and seven informal complaints have been received since 2014.⁴ The
5 formal complaint is still pending before the Commission.⁵ OPC has reviewed the informal
6 complaints that KCP&L and GMO have received.⁶ Of the seven complaints, one was for
7 supposed interference with television reception and one was actually a problem with
8 access to the old meter. Of the remaining five, one customer expressed health and safety-
9 related concerns, one expressed health and privacy-related concerns, and the other three
10 did not state any specific concerns that were recorded (See Attachment 2).

11 **Q. Assuming that participation in an opt-out program would roughly reflect the**
12 **number of complaints received, would the number of complaints justify an opt-out**
13 **program?**

14 A. It does not appear so. An instructive example comes from Texas, where five different
15 utilities had opt-out programs designed based on detailed cost studies using estimated
16 numbers of participants (See Attachment 3). None of the five programs reached their
17 estimated participation level and total participation was 17.6% of the total estimate.

18 **Q. Are there any other potential concerns with an opt-out program?**

19 A. Yes. It is not clear what the long-term alternative to an AMI meter for a residential
20 customer would be. The current meters are being replaced as they approach the end of

⁴ ER-2016-0156: Rebuttal Testimony of Julie Dragoo, p. 5, lines 12-24.

⁵ EC-2016-0230.

⁶ ER-2016-0156: OPC Burdge DR 3028_HC.

1 their useful life.⁷ My investigation into the current offerings of the major manufacturers of
2 residential electric meters for the American market found only one meter that was not
3 AMI-capable - the Elster Alpha Plus - and it is being discontinued at the end of 2016 (see
4 Attachment 1). Landis & Gyr (the supplier of meters for KCP&L and GMO) no longer
5 manufactures non-AMI meters.⁸ The only non-AMI residential meter EDM I manufactures
6 for the U.S. market is a pre-pay meter.⁹ Itron does manufacture non-AMI meters that may
7 be upgraded with AMI capabilities.¹⁰

8 If no alternative to an AMI meter is available in the future, or in the case of GMO's
9 current supplier the present, it is difficult to see how an opt-out program would be
10 implemented or at least carried out indefinitely.

11 **Q. Would it be equitable to begin offering an opt-out program now?**

12 A. No. KCP&L has already completed its transition to AMI meters and GMO has already
13 replaced a significant portion of its customers' meters with AMI. To offer the remainder
14 of GMO's customers an opportunity to forego AMI meters not offered so far would be
15 inequitable and possibly discriminatory unless GMO were to begin uninstalling AMI

⁷ ER-2016-0156: Response to OPC Burdge DR 3028_HC, Complaint #C201601066.

⁸ <http://www.landisgyr.com/products/electric-meters/residential-meters/>; ER-2016-0156: Response to OPC Burdge DR 3028_HC, Complaint #C201601066. The meters shown on the referenced webpage are among those GMO is using in its conversion process (Response to ER-2016-0156: OPC Burdge DR 3020). GE also manufactures electric meters, but information on its product line was not accessible. Schneider Electric does not appear to make meters for residential applications.

⁹ <https://www.edmi-meters.com/Country/America/Country/America/ProductList.aspx?L0=1>, (U.S. Market); <https://www.edmi-meters.com/ProdCat.aspx?L0=1&L1=1&L2=1>, (Residential Meters).

¹⁰ [http://www.itron.com/technology/product-services-catalog/product-search-results?category={36A759BC-C027-4375-B4EF-0C6D7FBD100F}&f:{b3202bce3-0be4-5f89-e11d-73dc99a6abc}=\[Electricity%20Meters%20%2B%20Modules\]&f:%7B2958d8a9-e9c6-48e0-a8ec-646b38fe2f14%7D=\[Standard%20Residential%20Metering\].](http://www.itron.com/technology/product-services-catalog/product-search-results?category={36A759BC-C027-4375-B4EF-0C6D7FBD100F}&f:{b3202bce3-0be4-5f89-e11d-73dc99a6abc}=[Electricity%20Meters%20%2B%20Modules]&f:%7B2958d8a9-e9c6-48e0-a8ec-646b38fe2f14%7D=[Standard%20Residential%20Metering].)

1 meters for participating customers. GMO currently projects that it will complete AMI
2 meter conversion for fifty-six percent of its customers by September 30, 2016.¹¹

3 **Q. How can the Commission ensure that GMO customers receive value from their new**
4 **AMI meters?**

5 A. By promptly enacting appropriate demand-side rates when AMI conversion in the GMO
6 territory is complete. Whether these ultimately take the form of time-of-use (“TOU”)
7 rates, demand response, or something else, there are several options made possible by
8 AMI technology that have the potential to allow residential customers to more effectively
9 manage their electricity usage and minimize their bills. Otherwise, AMI meters will only
10 be a burden to ratepayers and some customers will only see a source of concern.

11 **Q. What is your recommendation?**

12 A. OPC recommends that the Commission reject the proposal for a residential AMI opt-out
13 program in GMO on the grounds that such a program would only be temporary without a
14 continuing supply of non-AMI meter technology. It would be difficult for such a program
15 to completely recover its costs and would appear to be an inequitable arrangement given
16 that system-wide conversion is mostly complete.

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

18 A. Yes, it does.

¹¹ ER-2016-0156: Rebuttal Testimony of Julie Dragoo, p. 2, lines 20-21; Response to OPC Burdge DR 3018.

ER-2016-0156

Burdge Surrebuttal

Attachment 1

has been deemed

“Highly Confidential”

in its entirety

Burdge, James Rich

From: Gregg, Michele [Michele.Gregg@opuc.texas.gov]
Sent: Wednesday, August 31, 2016 12:24 PM
To: Burdge, James Rich
Subject: RE: AMI opt-out

Below are links to the dockets for each of the cases. That way, if you want to look at what was filed, comments, etc. you can do so. I have included links to the final order in each case and have outlined the number of customers each utility based its cost estimates on, the fees that were adopted in the final orders, and the latest information utilities have filed about the number of customers participating. For reference point, there are approximately 7.2 million advanced meters across these utilities' service territories. Let me know if you have additional questions or need more information.

AEP Texas Central and AEP Texas North:

Entire docket -

http://interchange.puc.texas.gov/WebApp/Interchange/application/dbapps/filings/pgControl.asp?TXT_UTILITY_TYPE=A&TXT_CNTRL_NO=41879&TXT_ITEM_MATCH=1&TXT_ITEM_NO=&TXT_N_UTILITY=&TXT_N_FILE_PARTY=&TXT_DOC_TYPE=ALL&TXT_D_FROM=&TXT_D_TO=&TXT_NEW=true

Final order: http://interchange.puc.state.tx.us/WebApp/Interchange/Documents/41879_102_790734.PDF

Charges were based on 800 in Texas Central Company (TCC) and 200 in Texas North Company (TNC) opting out.

Recurring monthly fee: \$19 for TCC and \$36 for TNC

\$1 of each of these is for amortized fixed costs and rate case expenses which will be removed once those are paid off.

Fees:

TCC One-time fees:

Existing Meter One-Time Fee = \$105.00;

New Analog Meter One-Time Fee = \$182.00;

Digital Non-Communicating Meter One-Time Fee = \$182.00 (self-contained);

and \$214.00 (CT/ Other); and

AMS Meter with two-way Communications Disabled One-Time Fee = \$146.00.

TNC one-time fees:

Existing Meter One-Time Fee = \$105.00;

New Analog Meter One-Time Fee = \$220.00;

Digital Non-Communicating Meter One-Time Fee = \$220.00 (self-contained);

and \$257.00 (CT/ Other); and

AMS Meter with two-way Communications Disabled One-Time Fee = \$164.00.

Oncor:

Entire docket -

http://interchange.puc.texas.gov/WebApp/Interchange/application/dbapps/filings/pgControl.asp?TXT_UTILITY_TYPE=A&TXT_CNTRL_NO=41890&TXT_ITEM_MATCH=1&TXT_ITEM_NO=&TXT_N_UTILITY=&TXT_N_FILE_PARTY=&TXT_DOC_TYPE=ALL&TXT_D_FROM=&TXT_D_TO=&TXT_NEW=true

Final order: http://interchange.puc.state.tx.us/WebApp/Interchange/Documents/41890_215_792620.PDF

Charges were based on the potential for 1,000 customers to opt out.

Recurring monthly fee: \$26.69 for an energy meter

Replace Existing Meter with a Digital Non-Communicating Meter \$473.29
Replace Existing Meter with an Adv. Meter with Communications Disabled.....\$475.91

Discretionary non-standard service charges:

Disconnect for non-pay (DNP)
At Meter: \$22.25
At Premium Location: \$46.05
Reconnect after DNP
At Meter: \$26.70 to \$100.80
At Premium Location: \$52.30 to \$153.90
Out-of-cycle Meter Read Charges
Meter reading found to be in error: \$00.00
Meter reading found to be accurate: \$22.25
Out-of-cycle meter read for the purpose of
a self-selected switch
Retail customer without a provisioned
advanced meter: \$22.25

TNMP:

Entire docket –

[http://interchange.puc.texas.gov/WebApp/Interchange/application/dbapps/filings/pgControl.asp?TXT_UTILITY_TYPE=A
&TXT_CNTRL_NO=41901&TXT_ITEM_MATCH=1&TXT_ITEM_NO=&TXT_N_UTILITY=&TXT_N_FILE_PARTY=&TXT_DOC_TY
PE=ALL&TXT_D_FROM=&TXT_D_TO=&TXT_NEW=true](http://interchange.puc.texas.gov/WebApp/Interchange/application/dbapps/filings/pgControl.asp?TXT_UTILITY_TYPE=A&TXT_CNTRL_NO=41901&TXT_ITEM_MATCH=1&TXT_ITEM_NO=&TXT_N_UTILITY=&TXT_N_FILE_PARTY=&TXT_DOC_TYPE=ALL&TXT_D_FROM=&TXT_D_TO=&TXT_NEW=true)

Final order: http://interchange.puc.state.tx.us/WebApp/Interchange/Documents/41901_122_796827.PDF

Charges were based on 1,081 customers opting out.

Recurring monthly fee: \$36.78

\$3.60 of this fee includes amortized one-time costs and rate case expenses associated with this proceeding. This will be reduced by that amount when the costs are paid off.

One-time fees:

Existing Analog Meter - \$63.97
New Analog Meter - \$141.55
Digital Non-Communicating Meter - \$168.61.

Discretionary charges for non-standard metering service:

Disconnect for Non-Pay (DNP):

\$28 (standard disconnect at meter)
\$53 (same day disconnect at meter)
\$91 (standard disconnect at premium location)
\$116 (same day disconnect at premium location)

Reconnect after DNP:

\$ 29 (standard reconnect at meter)
\$ 54 (same day reconnect at meter)
\$160 (weekend reconnect at meter)
\$238 (holiday reconnect at meter)
\$ 94 (standard or same day reconnect at premium location)
\$196 (weekend reconnect at premium location)
\$280 (holiday reconnect at premium location)

rich.burdge@ded.mo.gov
(573)526-1445

From: Gregg, Michele [mailto:Michele.Gregg@opuc.texas.gov]
Sent: Tuesday, August 30, 2016 10:45 AM
To: Burdge, James Rich
Subject: AMI opt-out

Tonya forwarded me your email. All of the utilities with AMS went through cases for opt-out provisions and costs. Do you want me to locate the specifics for each one? As far as the number of participants, I need to check with each utility to get those numbers. Only the individual utilities will be able answer whether the fees cover the costs and what it would take to cover costs if they do not currently. The programs are permanent. I am happy to help facilitate contacting the utilities and getting the information. Thanks

Michele Gregg | Director of External Relations
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Customer Satisfaction Bulletin

Date: June 26, 2015

CSB number: CSB1506-01

Subject: ALPHA Plus Meter end of availability

Overview

Elster is announcing the end of availability of the ALPHA Plus meter in 2016. The ALPHA Plus meter is also commonly referred to as A1+ or A2 ALPHA.

Description

Elster's ALPHA Plus meter has been a highly successful product since its introduction in 1997. It was one of the first meters to offer instrumentation, system service tests, and power quality monitoring, elevating the role of the meter from strictly a revenue billing device to a powerful diagnostic tool.

With the industry having moved toward AMI systems and meters based on the ANSI C12 standard protocols, Elster has decided to cease production of the ALPHA Plus meter by the end of 2016. Key dates are:

- September 30, 2016: meter orders must be received by Elster on or before this date
- December 31, 2016: meters must be delivered to the purchaser on or before this date

Customers may place orders in 2015 for 2016 delivery.

This announcement affects stand-alone ALPHA Plus meters only (i.e., meters without remote communications). A separate announcement is being issued jointly by Elster and Landis+Gyr regarding the ALPHA Plus meter with Landis+Gyr Cellnet communications. All other Elster-supplied communication options for the ALPHA Plus meter were discontinued in 2013.

Customer action

Customers who are still purchasing ALPHA Plus meters should:

- Work with their Elster representative to identify appropriate alternatives. For each stand-alone ALPHA Plus meter style that is currently in production, there is an A3 ALPHA meter available with equivalent or greater functionality. Other options may also be available, depending on the application.
- Identify whether any qualification work is required to transition to the alternative products.
- Place orders, before the last order dates above, for sufficient meter quantities to fill the needs for the time period required to complete the transition to the alternatives.

For more information, contact your local factory representative or call Elster at +1 800 338 5251.

Customer Satisfaction Bulletins (CSBs) are solely intended to inform Elster customers on our products and company. CSBs contain information that is proprietary to Elster. Transmission of a CSB or the information contained therein without the express, written permission of Elster is prohibited.

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