

Exhibit No.:  
Issues: Flex Pay Pilot Program  
Witness: William (Bill) R. Davis  
Type of Exhibit: Direct Testimony  
Sponsoring Party: Union Electric Company  
File No.: EO-2015-0055  
Date Testimony Prepared: November 30, 2017

**MISSOURI PUBLIC SERVICE COMMISSION**

**FILE NO. EO-2015-0055**

**DIRECT TESTIMONY**

**OF**

**WILLIAM (BILL) R. DAVIS**

**ON**

**BEHALF OF**

**UNION ELECTRIC COMPANY**

**d/b/a Ameren Missouri**

**St. Louis, Missouri  
November, 2017**

## TABLE OF CONTENTS

I. INTRODUCTION .....	1
II. FLEX PAY PILOT SPECIFICS .....	3
III. FLEX PAY ENERGY SAVINGS .....	17
IV. CONSUMER PROTECTIONS .....	23
V. CUSTOMER DEMAND .....	24
VI. PILOT LEARNING OBJECTIVES .....	27

**DIRECT TESTIMONY**  
**OF**  
**WILLIAM (BILL) R. DAVIS**  
**FILE NO. EO-2015-0055**

**I. INTRODUCTION**

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19

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

A. My name is William (“Bill”) R. Davis and my business address is One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri 63103.

**Q. By whom are you employed and what is your position?**

A. I am employed by Union Electric Company d/b/a Ameren Missouri (“Ameren Missouri” or “Company”) as Director Energy Efficiency & Renewables.

**Q. Please describe your educational background and employment history.**

A. I received a Bachelor of Science in Economics from Illinois State University in 2002. I subsequently received a Master of Science in Economics with an emphasis in regulatory economics from Illinois State University in 2003. I completed several internships during my college career, including an internship with Illinois Power Company. Upon completion of my master’s degree, I began working full time for Caterpillar, Inc., at its corporate headquarters in Peoria, Illinois, as an Advanced Quantitative Analyst in the Business Intelligence Group, with the primary duties of performing economic and sales analyses.

In May 2005, I joined Ameren Services Company as a Load Research and Forecasting Specialist in the Corporate Planning Department. My duties included electricity and natural gas sales forecasting, load research, weather normalization, and

1 various other sales analyses. In September 2007, I became a Senior Load Research  
2 Specialist and then moved to the Resource Planning Group in March of 2009. In October  
3 2011, I became a Senior Corporate Planning Analyst. In that position, I was responsible  
4 for Ameren Missouri's 2011 Integrated Resource Plan and the 2012 Missouri Energy  
5 Efficiency Investment Act ("MEEIA") filing. In March 2013, I was promoted to Manager  
6 of Economic Analysis and Pricing, where I was responsible for the Company's rate design,  
7 class cost of service, and various other regulatory matters. I was promoted to my current  
8 position in September 2016, where I am responsible for planning and operating the  
9 Company's energy efficiency programs.

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

11 A. The purpose of my testimony is to provide support for approval of a  
12 voluntary Flex Pay energy efficiency pilot program ("Flex Pay Pilot" or "Pilot"). The Flex  
13 Pay Pilot is a behavioral energy efficiency program that offers enhanced communications  
14 and payment flexibility to help participating customers reduce their energy usage. The Flex  
15 Pay Pilot promotes energy efficiency by raising awareness through dramatically enhanced  
16 communications that deliver proactive, actionable, and timely information and guidance  
17 that will drive positive behavior in a manner that encourages participants to reduce their  
18 energy consumption.

19 **Q. Are you sponsoring any Schedules as part of your Direct Testimony?**

20 A. Yes, I am sponsoring the following Schedules in support of the Flex Pay  
21 Program Pilot:

22 Schedule WRD-DIR-1 - Residential Flex Pay Program Pilot Description

23 Schedule WRD-DIR-2 – Exemplar Flex Pay Program Pilot Tariff

1 Schedule WRD-DIR-3 – Exemplar Additional Tariff Revisions<sup>1</sup>

2 **II. FLEX PAY PILOT SPECIFICS**

3 **Q. Please describe how the Flex Pay Pilot will operate.**

4 A. At a high level, the Flex Pay Pilot is a voluntary behavioral energy  
5 efficiency program that combines ongoing communications and transactions. The idea is  
6 that information and education provided to the customer, as well as tangible interactions  
7 with electric service payments, will help participating customers make informed energy  
8 usage decisions. The transactional interactions are an important partner for the information  
9 stream provided to customers in what is effectively a 3-step cycle, as follows:

- 10 • In Step 1, participating customers will be able to add money to their accounts.  
11 • In Step 2, participating customers will manage energy usage for the associated  
12 premises.  
13 • In Step 3, participating customers will view or monitor the account balances  
14 and review communications with actionable usage advice as they manage their  
15 electric usage, and then determine when it is appropriate to start the cycle again  
16 at Step 1.

17 **Q. Please describe each step in more detail.**

18 A. In Step 1, customers will have multiple, secure payment processing options  
19 that will allow customers to fund their accounts in the way that is most convenient for  
20 them—anytime, anywhere. Customers may fund their accounts using any of the following  
21 methods:

- 22 • web portal;

---

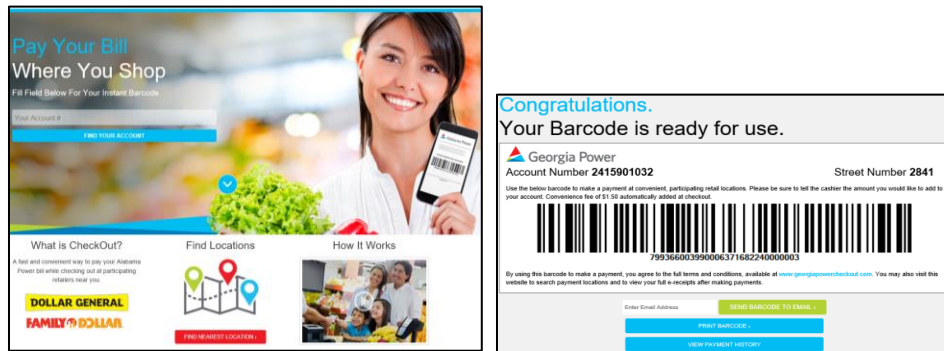
<sup>1</sup> Schedules WRD-DIR-2 and WRD-DIR-3 have also been submitted as tariffs to be effective October 1, 2018.

Direct Testimony of  
Bill Davis

- 1           • mobile app;
- 2           • phone with a credit or debit card;
- 3           • eChecks;
- 4           • cash at an authorized payment station; and
- 5           • mobile wallets using a smartphone.

6 We are especially focused on ensuring that Ameren Missouri’s unbanked customers have  
7 ready access to a broad array of retail locations that accept cash. Participants have the  
8 option to use a barcode to automatically link their utility account to the retailer's cash  
9 register for use at a checkout line to make a payment at participating retailers, including  
10 Walmart, CVS, Dollar General, and more. The barcode can be printed out on paper or  
11 scanned from a mobile device. An example is shown below:

**Figure 1: In-Person Payment Options (PayGo Example)**



12 Customer payments are posted to the supplier's platform in real-time and a remittance file  
13 is sent to the Ameren Missouri Customer Service System ("CSS") each night.

14 In Step 2, customers will have access to monitor electric energy usage with the  
15 mobile app, website, or voice automated phone calls at any time day or night. When  
16 customers begin receiving timely, relevant information and encouragement, their interest  
17 and engagement in better managing their energy usage will increase, leading to energy

1 savings. For example, as customers make the connection between their daily behavior and  
2 their daily energy consumption, they will begin making wiser choices to reduce energy  
3 consumption and improve energy efficiency, all with an eye on lowering their utility costs.  
4 When participants make a payment, they will receive an automatic payment confirmation  
5 and energy efficiency tips for stretching their balance. If usage exceeds a pre-established  
6 threshold, high usage notifications will be sent in an effort to raise awareness related to  
7 high consumption which will provide the customers an opportunity to adjust their behavior  
8 quickly by reducing their energy consumption.

9 Customers will also always have access to their complete payment history with a  
10 few simple clicks. More importantly, they will be able to monitor their balance, see goals,  
11 and track progress independently. Examples of monitoring capabilities via the website are  
12 shown below:

**Figure 2: Example 1 - Energy Monitoring Capabilities (Exceleron)**



**Figure 3: Example 2 - Energy Monitoring Capabilities (Excleron)**



1 In Step 3, customers will be empowered to make payments based on their  
2 preferences. Customers will receive notifications regarding their account details based in  
3 part on their preferences. Each customer will create alert preferences that specify which  
4 types of alerts the customer wishes to receive, the desired low balance threshold used to  
5 generate low balance alerts, the time of day when the customer wants to receive the alert,  
6 and language preferences (English or Spanish).

7 Alerts may be sent to multiple phone numbers and email addresses to help ensure  
8 that all persons responsible for an account receive adequate information. The customer may  
9 choose any of the following available delivery methods by alert type:

- 10 • Scripted interactive voice calls;
- 11 • Text messages;



- 1                   • Email; and  
2                   • Push notifications (via the mobile app).

3           During the account creation process, program representatives will assist the  
4 customer in selecting the desired alerts, delivery methods, and delivery times. Customers  
5 will be educated regarding how to maintain their own alert preferences, but an authorized  
6 representative may do it for them if desired.

7           Customers may receive daily communication about their account balance and their  
8 energy consumption. They will not only see the remaining balance, but also an estimate of  
9 how many days remain based on their weather-normalized usage patterns. If their account  
10 balance falls below a pre-established threshold, a low balance notification reminding them  
11 to deposit additional funds into their account will be triggered.

12           **Q.       Since this is a pilot program, will the Company be limiting customer**  
13 **participation?**

14           A.       Yes. The pilot phase will have no more than 1,000 participants, who  
15 voluntarily enroll, at any one time. We plan to enroll 750 non-low income participants and  
16 in order to ensure there is not a disproportionate representation of low income participants,  
17 the pilot is limiting low income participation to 250. Flex Pay will not be available to  
18 customers who are gas-only, who are Ameren Missouri combination gas and electric, who  
19 are net-metered, who have been charged with theft of service, or who cannot be  
20 disconnected for medical reasons. While customers who currently are on budget billing  
21 will be able to participate, they will need to remove themselves from budget billing to do  
22 so.

1           **Q.     Why is the Pilot group separated into low income and non-low income**  
2 **participants?**

3           A.     Ameren Missouri has specifically designed the Pilot so that its results will  
4 reflect the experience and lessons from all eligible customer groups. Ameren Missouri is  
5 aware there are perceived concerns about programs like the Flex Pay Pilot being marketed  
6 directly to low income customers or customers with a history of credit problems, the  
7 concern being that such programs may exacerbate problems for those customers. Designing  
8 the Pilot to include both low income and non-low income customers allows the Company  
9 to obtain firsthand experience about each group's participation and experiences with the  
10 Pilot. This kind of objective information will be critical in determining the future design  
11 and implementation of a possible permanent Flex Pay program, including how it can best  
12 be designed to meet the needs of all interested customers.

13           **Q.     Ameren Missouri is offering a \$0.25 per day incentive to low income**  
14 **customers. Please explain why.**

15           A.     As mentioned earlier, the Company is aware of concerns regarding low  
16 income participation in a program like the Flex Pay Pilot. The low income customers will  
17 not be subject to disconnections while participating in the Flex Pay Pilot. Therefore, to test  
18 low income customer engagement with the Flex Pay technology, Ameren Missouri is  
19 proposing a \$0.25 per day incentive (up to \$91.50 annually) be paid to low income  
20 participants for each day they maintain an account balance above \$0. Although we are  
21 proposing this incentive for the Pilot, in the longer term we anticipate that the inherent  
22 benefits customers experience through personalized communication, usage transparency,

1 and budgetary control will drive program adoption and loyalty without the need for  
2 financial incentives.

3 **Q. What happens when a participant's account reaches a \$0 balance? Will**  
4 **they be disconnected?**

5 A. As previously noted, low income customers will not be disconnected, but  
6 may be transferred back to traditional billing if non-payment persists beyond an eight  
7 calendar day-grace period. Non-low income customers may be disconnected; however in  
8 that event the Flex Pay Pilot is designed to get them reconnected as quickly as possible, as  
9 is typical of such programs. For example, Oklahoma Energy Cooperative ("OEC") reports  
10 that 43% of its prepay participants experienced a disconnection in 2013, with 94% of its  
11 disconnected participants being reconnected on the same day, and more than one half of  
12 those participants being reconnected in 1–4 hours.

13 To provide adequate time for non-low income customers to make a payment in  
14 advance of being disconnected, those customers will receive notifications via their  
15 preferred communication channel at two days and one day before it is anticipated their  
16 account approaches a \$0 balance, again when it reaches a \$0 balance, and yet again when  
17 it has been approved for disconnection. In the event the account balance reaches \$0, the  
18 day of disconnection the customer will receive a final disconnect notice at 8 a.m. stating  
19 that if no payment is made, then disconnection will begin at 11 a.m. If a disconnection is  
20 scheduled and the trigger for that action changes (e.g., a payment is made to replenish the  
21 balance), the pending disconnection will be canceled.

22 Pending disconnect orders will be created based strictly on the customer exhausting  
23 his or her credit balance. Communications are bidirectional and the Pilot's systems will

1 receive an error if there is a notification delivery issue. Program personnel will review  
2 reports on notification delivery status and determine which notifications, if any, were not  
3 delivered. Program personnel will then follow up with the customer to determine why the  
4 communication failed (e.g., a disconnected telephone or an email inbox exceeding the  
5 memory quota).

6 If a customer is disconnected, the customer will be able to make a payment any  
7 time to reinstate service. When a customer makes a payment adding money to their  
8 account, the funds will post immediately and power should be reconnected within an hour.  
9 Disconnections will not occur after business hours, on weekends or holidays, or during  
10 weather-related moratoria.

11 **Q. Will customers participating in the Flex Pay Pilot receive a bill?**

12 A. No, because due to the unique nature of a prepaid service, a physically  
13 rendered monthly bill for a residential customer does not make sense. The customers will,  
14 however, have extensive access to their account details on an ongoing basis. Rather than  
15 seeing charges on a monthly bill, customers will see their usage and charges (for energy,  
16 taxes, etc.) prorated into daily amounts. Customers will always have access to their  
17 complete payment history with a few simple clicks. More importantly, they can monitor  
18 their balance, see goals, and track progress independently via multiple platforms, including  
19 an online portal, mobile app, interactive voice response ("IVR"), text messaging, and email,  
20 and there is no limit to the frequency a customer can add money to their account. As I noted  
21 previously, customers will also be able to personalize when and how notifications and  
22 alerts are sent to them.

1           **Q.     Does this mean that customers will not have a due date for payments?**

2           A.     Correct. Since customers will be paying in advance for their energy use,  
3 there is no need for a bill due date.

4           **Q.     What kind of alerts or notifications will be available for the customer?**

5           A.     Customers will be able to receive customized alerts including, but not  
6 limited to:

- 7           • Daily balance – informs customers of their current balance;
- 8           • Daily usage – informs customers of their daily electric consumption;
- 9           • Disconnection - notifies customers when they have been disconnected;
- 10          • High usage – notifies customers when usage is unusually high based on a  
11 threshold;
- 12          • Low balance – notifies customers when their balance reaches a predetermined  
13 amount established by the customer;
- 14          • Pending disconnect – notifies customers when their account is subject to  
15 disconnect;
- 16          • Recharge – notifies customers of successful posting of a payment;
- 17          • Reconnect – notifies customers when service has been reconnected; and
- 18          • Energy Efficiency information including:
  - 19           – tips and encouragement related to increasing energy efficiency,
  - 20           – past usage comparisons for the same time periods, and
  - 21           – promotion of existing rebate programs.

- 1 An example of how a customer can personalize alerts is shown below:

**Figure 4: Example of Notification Preferences (PayGo)**

The screenshot shows a web interface for managing notification preferences. At the top is a navigation bar with links: Home, Reports, Usage, Notification (highlighted), Payment, AutoPay, Balance, Password, Support, and CSR Portal. Below the navigation bar is a note: "Note: Data and messaging carrier charges may apply".

The main content area is divided into three sections for different notification types:

- Voice:** Includes radio buttons for "Any time of day or night" and "Only between". The "Only between" option is selected, with dropdown menus for "8:00 AM", "8:00 PM", and "Eastern Standard Time".
- Text Msg:** Includes radio buttons for "Any time of day or night" and "Only between". The "Only between" option is selected, with dropdown menus for "8:00 PM", "1:00 AM", and "Eastern Standard Time".
- Email:** Includes radio buttons for "Any time of day or night" and "Only between". The "Any time of day or night" option is selected, with dropdown menus for "12:00 AM", "12:00 AM", and "Eastern Standard Time".

Below these sections is a section titled "Which 'Low Balance Notification' days do you wish to receive?". It shows a row of checkboxes for days 1 through 10. Checkmarks are present for days 1, 3, 5, 7, and 9.

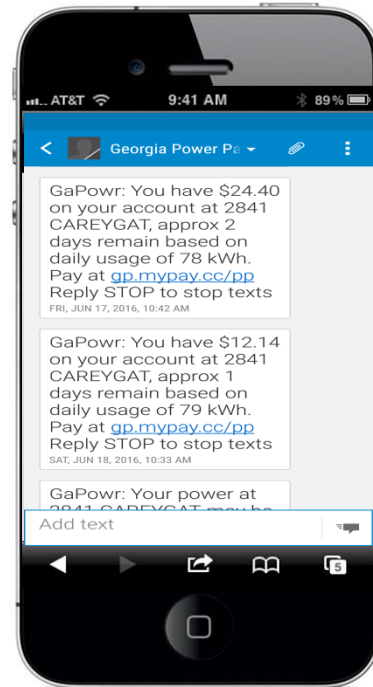
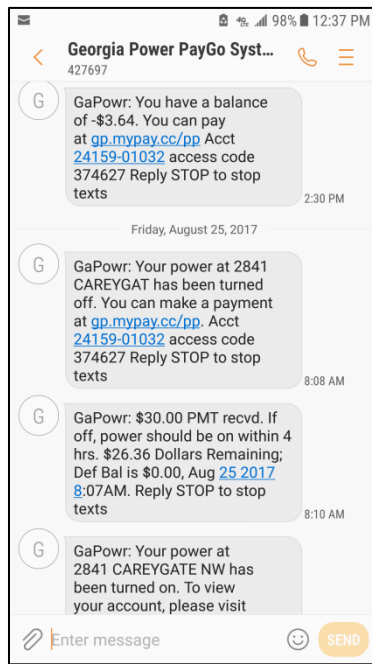
At the bottom, there are three input fields for adding custom notification numbers, each with a limit of 2 and an "Add" button:

- Voice (Limit 2)
- Text Msg (Limit 2)
- Email (Limit 2)

The email address "tvann@paygoutilities.com" is visible at the bottom right of the page.

- 2 Examples of the notifications received via text message are shown below:

**Figure 5: Example of Text Notifications (PayGo)**



1           **Q.    You've mentioned how customers can receive notices and**  
2 **communications. What if the customer needs to reach the Company to discuss an**  
3 **account issue?**

4           A.    The customer will be able to contact the Company regarding account  
5 inquiries via phone, email, or the Flex Pay web portal.

6           **Q.    Will the Company provide any incentives for participating in the Pilot?**

7           A.    Each time a customer makes a payment with a credit card, debit card, or  
8 over the phone, there is an associated payment processing fee that is incremental to the  
9 payment amount. These fees are charged by a third party and, as such, Ameren Missouri  
10 does not receive the monies collected from these fees. The Company will waive up to two  
11 payment processing fees each month for each account enrolled in the Flex Pay Pilot.

12           Also, as noted low income participants will receive the \$0.25 incentive for each day  
13 their account balance is above \$0.

14           **Q.    Will there be any change to the participating customers' rates as a**  
15 **result of participating in the Flex Pay Pilot?**

16           A.    No, the current rate structure will continue to be applicable.

17           **Q.    How will the disconnection process work since Ameren Missouri's**  
18 **current metering infrastructure does not have remote disconnect/reconnect**  
19 **functionality?**

20           A.    During the Pilot, a cellular-based communication collar will be installed in  
21 tandem with existing meters which will enable remote disconnect/reconnect capabilities.  
22 Future upgrades in metering infrastructure will be necessary to support a cost effective full-  
23 scale roll out of a Flex Pay program.

1           **Q.     Do other utilities offer similar programs?**

2           A.     Yes. More than 100 utilities are offering pre-paid energy programs. A  
3 growing number of investor-owned utilities are examining the option, running pilots, or in  
4 various stages of program deployment. These include Arizona Public Service, Consumers  
5 Energy, Direct Energy, DTE Energy, Exelon, Duke Energy, Georgia Power, NV Energy,  
6 and Westar Energy. An example of a long-running program is Salt River Project's ("SRP")  
7 M-Power Pre-Pay service, which has been in effect since 1993.

8           **Q.     What is the proposed program cost budget for the Flex Pay Pilot?**

9           A.     The Company is budgeting \$964,782 to administer and implement the Flex  
10 Pay Pilot from 2018 through 2020, \$173,969 of which is for incentives offered to  
11 participants while the remaining \$790,813 is for administrative costs, including installation  
12 of meter technology, IT integration, training, marketing, and evaluation.

13          **Q.     How does the Company propose to recover these program costs?**

14          A.     By including them in the program costs component of Rider EEIC.

15          **Q.     How long will the Flex Pay pilot run?**

16          A.     The Company seeks approval of a 27-month trial period, from October 2018  
17 to December 31, 2020.

18          **Q.     What will happen at the end of the Flex Pay pilot?**

19          A.     Throughout the effective period, the Flex Pay Pilot will be evaluated by a  
20 third party evaluation, measurement and verification ("EM&V") contractor; during  
21 implementation, some interim assessments will be available. At the end of the Pilot,  
22 however, the Company will file a comprehensive evaluation with the Commission. The  
23 evaluation will include the impact and process assessments traditionally performed for



1 energy efficiency programs. In addition, the report will document the learning objectives  
2 for the Pilot which are listed later in my testimony. Finally, as we near completion of the  
3 Pilot, decisions will need to be made about how to best manage the program for  
4 participating customers based on experience up to that point. For example, if the general  
5 view is that the Pilot is performing well based on interim information, then it may be  
6 worthwhile to extend the Pilot for the participants while the final overall evaluation is being  
7 reviewed.

8 **Q. Is the Company seeking to change its approved budget for MEEIA**  
9 **Cycle 2?**

10 A. No. The Commission's rules require the Company to seek approval if the  
11 expected costs of the MEEIA portfolio will exceed 20% over the approved amounts. At  
12 this time, the Company is not forecasting exceeding its approved budget even with the  
13 addition of the nearly \$1 million budget of this Pilot. In addition, due to implementation  
14 barriers and challenges associated with on-bill financing, the Company forecasts that  
15 approximately \$1.24 million of Research and Development funds remain that could be  
16 directed toward this pilot.

17 **Q. Is the Company seeking a change the approved Earnings Opportunity**  
18 **component of its demand-side management investment mechanism?**

19 A. No. The primary purpose of the Flex Pay Pilot is to achieve the necessary  
20 learnings to decide whether the program should be offered and expanded in the future.

21 **Q. Are tariff revisions necessary to support the Flex Pay pilot?**

22 A. Yes. In addition to the Pilot program tariff itself, Schedule WRD-DIR-3  
23 shows changes to existing tariffs to support the Pilot. Most of the tariff changes mirror the

1 changes recently approved for long-lead time projects which essentially allows the pilot to  
2 continue under the operating terms of MEEIA Cycle 2 while the other Cycle 2 programs  
3 expire on February 28, 2019.

4 **Q. Is the Company seeking any Commission rule variances for the pilot?**

5 A. Yes, the Company is seeking several variances in order to implement the  
6 Flex Pay Pilot. The variances reflect the inherently different interactions between  
7 customers and the utility necessary for this type of program. However, the Company has  
8 taken care to ensure customers will continue to receive consumer protections through the  
9 program design. Consider the following examples:

- 10 1) Because there will no longer be a monthly bill, Commission rules around  
11 billing requirements would no longer be applicable.
- 12 2) Regarding notifications for disconnection, because the Flex Pay pilot is  
13 built on a whole new communications and transactional platform, the  
14 traditional communication protocols and waiting periods do not apply.

15 In all of these cases, the Pilot includes alternatives to the rules. For instance:

- 16 1) A customer is not sent a monthly bill and in exchange the customer receives  
17 frequent communications about their balance with information that is near  
18 real-time.
- 19 2) In the case of disconnections, there will not be the traditional waiting  
20 periods and in exchange a customer will be receiving frequent  
21 communications about their account balance, warnings about the account  
22 balance reaching zero, warnings about impending disconnection,

1                    convenient payment options to prevent disconnection, no reconnection fees,  
2                    the ability to reconnect at any time, etc.

3                    In short, while the Company is seeking several variances for the Pilot, the  
4                    protections inherent in the rules are respected through program features that provide  
5                    appropriate alternatives. In addition, because the Pilot is voluntary, a customer can revert  
6                    to traditional billing at any time. It was also recognized by the Company that customers  
7                    who try the Pilot and are returned or decide to return to traditional billing should be restored  
8                    to a similar account status under traditional billing as before participating. Consequently,  
9                    some variances were identified to ensure customers are not negatively affected as a result  
10                    of their participation if they return to traditional billing.

11                    **III. FLEX PAY ENERGY SAVINGS**

12                    **Q.     How does the Flex Pay Pilot encourage participants to reduce energy**  
13                    **consumption?**

14                    A.     It encourages customers to change their behavior in a manner that results in  
15                    reduced energy usage. According to the DEFG<sup>2</sup> report, *Ripening Market for Prepay Energy*  
16                    *in North America, Current State Summary*, October 2017: "Once consumers begin using  
17                    prepay energy, they tend to reduce their energy consumption resulting in dollar savings  
18                    without negatively impacting their lifestyle." The Flex Pay Pilot alters energy usage  
19                    behaviors with enhanced communications and interaction to monitor energy use and costs  
20                    in the following ways:

- 21                    •     Consumers understand dollars and cents more readily than kWh.

---

<sup>2</sup> DEFG, LLC is a management consulting firm formed in 2003 and specializing in energy. They also lead several consortia including the Prepaid Energy Working Group.

- 1           • A daily “conversation” about the bill can increase customer understanding of  
2           daily costs.
- 3           • A move toward mobile platforms is consistent with other consumer trends and  
4           preferences; offering a mobile app, text, email and voice message options that  
5           a consumer can receive via mobile phone.
- 6           • Customer selection and control of communications is empowering.
- 7           • A prepayment account balance increases commitment; a household budget  
8           and/or savings goals increases consumer engagement and commitment.  
9           Typically, customers can manage their usage more efficiently and make better  
10          decisions with access to appropriate information.<sup>3</sup>

11          **Q.     Please elaborate.**

12          A.     Under the traditional pay model, the customer receives a bill that covers the  
13          previous month’s energy usage, but it is difficult at best for a customer to make a  
14          connection between that bill and specific behaviors over that historical period. This means  
15          it is difficult for customers to take action even if there is a desire to reduce consumption.  
16          In contrast, in the Flex Pay Pilot, customers are provided frequent information broken down  
17          by day and expressed in dollars. This model makes it much easier for participants to link  
18          specific actions to drivers of cost. Once those connections are made, it is much more likely  
19          that customers will change behavior. In addition, the effort to keep a positive balance on  
20          the account acts as a motivator for participants to remain engaged.

---

<sup>3</sup> Behavior, Energy and Climate Change Conference; Prepayment, Conservation and Behavior, Nat Treadway, DEFG, December 8, 2014 p.16.

1           **Q.     How much energy can participants in the Flex Pay pilot expect to save?**

2           A.     Prepaid programs have resulted in 10-15% energy reductions for  
3 participants as documented by Zarnikau, J. et al. in *How Do Prepay Electricity Programs*  
4 *Impact Consumer Behavior?* (published January 2014). This is much higher compared to  
5 behavioral efficiency programs that focus on energy usage reports, which result in a 1.5%–  
6 3% reduction.

7           **Q.     Do those energy savings estimates include energy savings associated**  
8 **with disconnection of customer's electric service?**

9           A.     No, and the evaluation of the Flex Pay Pilot energy savings will explicitly  
10 exclude the energy impacts associated with other energy efficiency programs and  
11 disconnections. When utilities were first exploring flexible payment options, many  
12 consumer advocate groups had concerns about this issue; however today there is credible  
13 evidence from various pilots and programs that show this is not the case. For example,  
14 Arizona Public Service Electric Company's ("APS") pilot has been a source of cost-  
15 effective savings and customer satisfaction. APS hired Navigant to perform an evaluation  
16 of energy savings estimates. The study estimated average behavior-based savings at 7.2  
17 percent, after removing the savings attributed to disconnects and other demand-side  
18 management programs. Further, despite concerns that prepay might cause dissatisfaction  
19 among customers, APS's evaluation of its 2015 pilot found that fewer people have felt a  
20 need to "sacrifice comfort or necessities"<sup>4</sup> to pay energy bills when using prepay than  
21 before enrolling.

---

<sup>4</sup> Arizona Public Service Company; Demand Side Management Residential Prepaid Energy Conservation Pilot Program; *End of Pilot Report* (February 13, 2015), p.16.

1           **Q.     How does that level of savings compare to other measures AmerenQ.**  
2                   **How does that level of savings compare to other measures Ameren**  
3 **Missouri offers in its energy efficiency programs?**

4           A.     The Company anticipates participants will reduce energy usage by 10% on  
5 average, which equates to 1,218 kWh savings per participant. For perspective, the  
6 Company's 2016 evaluated gross savings for installing a 10 watt LED (60 watt  
7 incandescent equivalent) saves 34 kWh, so 10% savings from Flex Pay is like each  
8 customer installing thirty-five LED bulbs.

9           For further context, DEFG's Prepay Energy Working Group<sup>5</sup> found that customers  
10 saved on average 11% energy in a study of OEC's program, with a 95% confidence interval  
11 going from savings of 10.2% to 13.0%.<sup>6</sup> DEFG engaged economist Michael Ozog, Ph.D.  
12 to apply statistical techniques accepted in the evaluation of utility sponsored energy  
13 efficiency programs to measure the effect of prepayment on energy use.<sup>7</sup> The table below  
14 shows how significant the savings are compared to other efficiency measures:

---

<sup>5</sup> Members of the Prepay Energy Working Group include representative from utilities, energy retailers, regulators, consumer advocates, and metering and software vendors. Currently in its sixth year, the Prepay Energy Working Group conducts research around both the challenges and opportunities presented by prepaid service

<sup>6</sup> *The Effect of Prepayment on Energy Use*, a report of the Prepay Energy Working Group, DEFG LLC, Washington DC, March 2013.

<sup>7</sup> *Id.*

**Figure 6: Measure Savings Comparison**

Measure	Annual Savings	
	kWh	Percent
Duct Sealing	32	0.2%
CFL	62	0.3%
Water Heater Wrap	79	0.4%
Insulation retrofit	96	0.5%
HVAC tune-up	118	0.6%
Low-Flow Showerhead	130	0.6%
Pipe Insulation	133	0.6%
Energy Star Refrig	142	0.7%
Energy Star Cloths washer	200	1.0%
Normative report	300	1.5%
Heat Pump Water Heater	500	2.4%
CAC early replacement	700	3.4%
Refrig. Early replacement	1,376	6.7%
<b>Prepay</b>	<b>1,690</b>	<b>11.0%</b>
Ground Source Heat Pump	2,744	13.4%

1           **Q.    Typical energy efficiency measures require additional up-front**  
 2 **investment by customers. Is the same true under the Flex Pay Pilot?**

3           A.    No. The Flex Pay account needs to start with at least a \$25 positive balance<sup>8</sup>  
 4 but 100% of that money goes to cover the cost of electricity so no additional up-front  
 5 investment is necessary. Participants can engage in a variety of low/no cost behaviors to  
 6 save money immediately and much of those savings are driven by simply being more aware  
 7 of and interacting with their energy costs differently.

8           **Q.    Is the Company seeking recovery of the throughput disincentive**  
 9 **associated with the Flex Pay Pilot?**

10          A.    Yes. Based upon our projected average energy savings of 1,218 kWh per  
 11 participant, the estimated throughput disincentive would total \$56,133.

---

<sup>8</sup> The starting balance must be at least \$25 but customers will be allowed to carryover arrearages from traditional pay into the program.

1           **Q.     Is the Flex Pay Pilot cost effective?**

2           A.     While the Pilot is not expected to be cost effective according to the Total  
3 Resource Cost ("TRC") test, a fully implemented Flex Pay program is expected to be. The  
4 Company has calculated a TRC of 0.17 for the Pilot, and a TRC of 1.41 for a fully launched  
5 program. Assumptions for the Pilot include:

- 6           • starting in October 2018 and ending the last day of 2020;
- 7           • energy savings of 1,218 kWh per year per participant; and
- 8           • starting with 400 customers enrolled by the last day of 2018 and ramping up to  
9           1,000 participants in 2019.

10          The major drivers negatively impacting the cost effectiveness of the Pilot are:  
11 1) up-front fixed development and platform costs that are spread to a small participant  
12 group; and 2) the current need to install remote reconnect/disconnect collars. However, the  
13 evaluation results will significantly aid in a more accurate assessment of the program's cost  
14 effectiveness since there is still uncertainty about the magnitude of ongoing payment  
15 processing fees costs associated with the higher number of payments and the benefits that  
16 may offset those costs.

17          Based on other markets with prepaid offerings, it would be reasonable for a fully  
18 launched program to reach 10% of customers, which combined with a ubiquitous smart  
19 meter deployment, would support long-term program that is cost effective.

20          **Q.     Does the cost effectiveness analysis include cost savings to Ameren**  
21 **Missouri other than energy savings?**



1 A. Yes. The Flex Pay Pilot is expected to result in direct reductions in utility  
2 costs associated with billing/postage, bad debt write-offs, disconnection costs, and carrying  
3 costs.

4 **IV. CONSUMER PROTECTIONS**

5 **Q. Please summarize the Pilot's consumer protections.**

6 A. As described above:

- 7 • There are no additional fees for participation in the Pilot, but it creates benefits  
8 by helping customers save energy. In fact, transaction costs are waived for the  
9 first two payments each month and low income participants will receive \$0.25  
10 for each day their account balance stays above zero;
- 11 • Customers can return to traditional pay service at any time without incurring  
12 any fees (but must wait six months before they are eligible to return to  
13 participation in the Pilot and there must be an open spot under the participation  
14 limits);
- 15 • The Pilot has been designed so that customers exiting the Pilot are, to the extent  
16 possible, put in the same traditional pay position they were before they engaged  
17 in the Pilot;
- 18 • Customers will continue to have full access to their account information, and  
19 will actually have enhanced information about their accounts as compared to  
20 customers utilizing traditional bill payment.
- 21 • Low income participants who reach a \$0 account balance will be provided an  
22 eight-day grace period, and as soon as a payment is made following their \$0  
23 account balance, the negative amount will automatically move into the debt

1 recovery stage and a minimum 25% of that payment and future payments will  
2 go toward paying any arrearage amounts the customer may have accumulated  
3 during the grace period;<sup>9</sup>

- 4 • The Pilot complies with weather moratoriums which prevent disconnection  
5 when temperatures are expected to cross certain thresholds during November  
6 1<sup>st</sup> through March 31<sup>st</sup> per the Cold Weather Rule and June 1<sup>st</sup> through  
7 September 30th per the Hot Weather statute;
- 8 • Participants will continue to have the same access to energy assistance  
9 payments;
- 10 • The Pilot includes a built-in payment agreement system. For participating  
11 customers, any arrearage brought into the Pilot or accrued while participating,  
12 25% of future payments will go toward paying those arrearage amounts until  
13 they are eliminated; and
- 14 • For non-low income customers who are subject to disconnection, there will be  
15 numerous communications before any disconnection occurs as outlined above,  
16 with no reconnection fees.

## 17 V. CUSTOMER DEMAND

18 **Q. Are customers familiar with programs like Flex Pay?**

19 A. Yes. Customers are familiar with several examples of prepaid services such  
20 as prepaid cell phone plans, prepaid gift cards, and paying for fuel in an automobile before

---

<sup>9</sup> Customers who don't make any payment are transferred back to traditional pay on the 9th day and cannot participate in the Pilot again for at least six months, and even then, only if the program is not fully subscribed with 250 low income participants.

1 the fuel is consumed. Simply put, Flex Pay works like putting gas in a car, using the gas  
2 for transportation and monitoring the gauge to assess when to put more gas in the tank.

3 **Q. Are customers interested in a program like Flex Pay?**

4 A. Yes. Ameren Missouri engaged our customer survey panel to gain customer  
5 insights concerning their interest in a prepaid electric program. The online panel is  
6 comprised of 3,300 Ameren Missouri residential customers. Data collection occurred  
7 between June 6 through 12, 2017. A total of 886 customers participated. In response to the  
8 question: "If Ameren Missouri were to offer a Prepaid payment option for customers, how  
9 interested would you be to enroll in this payment option?" Twenty-eight percent of  
10 customers responded they were extremely interested, very interested or somewhat  
11 interested, and three percent had no opinion.

12 EcoPinion Consumer Survey Report No. 30. Titled "Prepay Energy: Power to the  
13 People!" November 17, 2017, also reports significant national interest among utility  
14 customers. The following was posed to survey respondents:

15 A growing number of local utilities (electric and gas) or service  
16 providers are offering voluntary prepaid energy service to  
17 consumers. Under this option, you would choose to pay upfront  
18 anytime you wanted before you used the energy rather than paying  
19 your bill at the end of the month after you used the service. Reasons  
20 for possibly using prepaid energy would include to help manage  
21 your utility bill or managing property that you may own. You would  
22 always be able to check the balance remaining in your prepaid  
23 account. If your local utility or provider were to offer a voluntary  
24 prepaid option for consumers, how interested would you be?

25 The question received 1,058 responses. Overall, 17% of these consumers would be  
26 extremely or very interested if their utility company were to offer a voluntary prepaid  
27 option. Interest was significantly higher among younger adults (21% of those 18-54 v. 7%  
28 of older adults) and renters (22% v. 16% of home owners).

1           **Q.     Is Flex Pay for everyone?**

2           A.     No. That is why the Company will offer this as a voluntary program.  
3     However, programs like the Flex Pay Pilot are being successfully implemented nationally  
4     and across many customer segments. Segments who are often interested in this type of  
5     energy programs include:

- 6           •     Low income: Customers who are credit/debt challenged and/or have trouble  
7                 paying their bills;
- 8           •     Millennials: Customers who combine personal benefit with social mission;
- 9           •     Immigrant Communities: Customers who grew up with prepay, have probably  
10                already been on prepay;
- 11          •     Wealthy: Customers managing second properties and the accounts of children  
12                in college;
- 13          •     Rental Unit Owners: Interested in including prepay in lease; and
- 14          •     Small Commercial: Use prepay to manage cash flow.<sup>10</sup>

15           The Company anticipates the benefits will resonate with many customers who are  
16     more comfortable with mobile-optimized services or who want to stay informed and have  
17     more control over how they pay for their energy use. Ultimately participation is a reflection  
18     of consumer preferences and based on the ubiquitous availability of other prepay programs  
19     it is apparent that a portion of customers will prefer this option.

---

<sup>10</sup> Ripening Market for Prepay Energy in North America, Current State Summary, October 2017, Jamie Wimberly, DEFG CEO

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23

**VI. PILOT LEARNING OBJECTIVES**

**Q. What are the primary learning objectives of the Flex Pay pilot?**

A. Running a pilot like this for 27 months will provide significant opportunities for learning. In addition, because the interaction with the utility will be mostly automated, there will be rich sources of data to understand consumer preferences and behavior. Finally, it will be important to perform a comprehensive assessment because many of the interactions under the Pilot are different than current utility practices. To document the learning opportunities of the Pilot, an evaluation contractor will measure the primary learning objectives including:

- Quantifying energy savings;
- Determining if the option of viewing electric usage in dollars and days changes behavior;
- Determining if there is a significant difference in the duration and frequency of disconnects between traditional pay and Flex Pay customers;
- Determining if customers alter managing their electric use without compromising comfort;
- Determining the impact of customer awareness of energy costs;
- Determining if education affects customer budgets;
- Understanding how often customers want to receive notifications;
- Quantifying how often customers are disconnected;
- Quantifying how long customers are disconnected;
- Determining if customers participate in other energy efficiency programs due to information received from Flex Pay Pilot and the associated uplift in savings;

- 1           • Quantifying how often customers choose to add money to their Flex Pay  
2           account;
- 3           • Quantifying payment amounts customers choose to add to their Flex Pay  
4           account; and
- 5           • Determining the impact(s) of shorter times to reconnect power remotely.

6           **Q. Does the Company have additional learning objectives for the low**  
7 **income participants?**

8           A. Yes. Many of the aforementioned learning objectives apply to all  
9 participants; however, there are a few additional objectives to understand unique aspects  
10 of the low income group. Those additional learning objectives include:

- 11           • Assessing the impact of low income participants being eligible to receive a daily  
12           incentive of \$0.25 added to their account for all days they have a positive  
13           balance in their account;
- 14           • Determining if there is a significant difference in the frequency and number of  
15           times a participant's account reaches a \$0 balance between low income and  
16           non-low income participants;
- 17           • Determining the effects of community partnerships with regard to  
18           communicating about the Flex Pay Pilot; and
- 19           • Determining the impact of the process for Flex Pay customers to receive energy  
20           assistance if applicable.

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

22           A. Yes, it does.

PROGRAM	<b>Residential Flex Pay Pilot</b>
<b>Objective</b>	<p>The objective of the Flex Pay Pilot Program is to incent energy efficient behavior by increasing customer awareness of electric energy usage and spending habits/trends. The means to be used to incent energy efficient behavior include using enhanced communication and proactive interaction with customers regarding alternative payment options, providing energy efficiency (EE) recommendations/tips, and encouraging greater utilization of other available EE programs.</p>
<b>Target Market</b>	<p>The Flex Pay Pilot targets a limited market of no more than 1,000 total residential electric customers within the Ameren Missouri service territory, including no more than 250 low-income customers.</p> <p>The Flex Pay Pilot Program is only available to customers with an Ameren Missouri electric-only account. Customers with the following account types cannot participate:</p> <ul style="list-style-type: none"> <li>• gas-only;</li> <li>• Ameren Missouri combination gas and electric; or</li> <li>• net-metered.</li> </ul> <p>Additionally, customers cannot participate in the pilot program if:</p> <ul style="list-style-type: none"> <li>• they cannot be disconnected for medical reasons; or</li> <li>• they have a charge(s) associated with theft of service.</li> </ul> <p>Customers on budget billing may participate, but must withdraw from budget billing to do so.</p>
<b>Program Duration</b>	October 2018 through December 2020

<b>Program Description</b>	<p>The Flex Pay Pilot Program is a voluntary program providing participants with the opportunity to make payments in advance for their electric use into an account for any amount (after an initial first time payment of at least \$25) and at any time, rather than paying a monthly bill after the end of a billing cycle.</p> <p>The pilot program will be run by a Program Administrator with significant experience implementing a program where utility customers can pay in advance for electric usage. Enhanced communication with participants will include notifications regarding account details, subject to a customized profile designed by each participant. Enhanced communication also includes alerts such as daily balance, daily usage, disconnection status, unusually high usage, low balance, energy efficiency tips, and posted payment details. Participants will choose their two preferred channels of communication: mobile app, email, text message, voice automation, or push notification. In particular, notices of potential disconnection will occur two days before, one day before, and the day of an anticipated zero balance, and an additional final disconnection notice will be made at 8 am the day of disconnection. At that time, customers will be made aware that disconnection will not occur until after 11 am that day. Participants (excluding the low-income participants) can be remotely disconnected if the participant's account reaches a \$0 balance. Customers will not be disconnected on weekends, after business hours, holidays and during weather moratoria except in accordance with those rules. Importantly, upon receipt of a payment 365 days a year and at any time, service will be reconnected (under normal circumstances) within an hour with no associated fee(s). Low income participants will never be disconnected for non-payment, however on the 9<sup>th</sup> day of non-payment they will be removed from the pilot and returned to post-pay status. Participants are allowed to return to post-pay at any time, but may not return to the pilot for at least 6 months and only if the program is not fully subscribed.</p> <p>The pilot program will offer incentives for up to two payment processing fees each month to offset the costs associated with multiple payments, as appropriate. The pilot program will also offer an incentive for low-income customers to maintain a positive balance.</p> <p>Participants in the pilot program will have a built-in repayment option for any potential arrearages: 25% of subsequent pre-payments will be applied to the arrearage to assist the customer in reducing any past due balances.</p>
<b>Eligible Measures &amp; Incentive Strategy</b>	<p>The pilot program focuses on electric energy consumption behavior changes that result in reduced energy usage. Because behavioral EE programs rely on motivation for the customer to reduce energy consumption without purchasing new equipment, there are no specific energy efficiency measures required for participation in the Flex Pay Pilot.</p> <p>The incentive strategy for all participants is to waive up to two non-free payment processing fees each month for each account enrolled in Flex Pay.</p> <p>For low income participants, the Program will add \$0.25 to each low-income participant Flex Pay account for each day their account balance is above \$0.</p>



<b>Implementation Strategy</b>	<p>Ameren Missouri will hire a Program Administrator to implement this pilot program. The contractor will provide the necessary services to effectively implement the pilot program and achieve energy consumption reductions while adhering to the budget. Key implementation aspects include:</p> <ul style="list-style-type: none"> <li>• Identifying customers for participation;</li> <li>• Ensuring ease of customer enrollment;</li> <li>• Offering a payment solution allowing customers to make a payment at any time via participating retailers, phone, mobile app, or website;</li> <li>• Tracking payment data such as amount, frequency, and platform;</li> <li>• Developing reports to display the program’s progress in relation to meeting budgets and savings goals on a regular basis; and</li> <li>• Hiring, training, and developing representatives, if necessary, to educate and/or assist the customer during account enrollment, account customization, or account support;</li> </ul>
<b>Program Response to Evolving Markets</b>	<p>Due to the unpredictable nature of the market place, Ameren Missouri and its contractors will maintain flexibility within the program. Various market factors including new codes and standards, energy legislation, and consumer attitudinal shifts will affect program delivery strategy. If through changing market conditions, it is determined that the pilot program will no longer provide appropriate learning opportunities, Ameren Missouri will take the necessary steps to discontinue or modify the pilot as required.</p>
<b>Marketing Strategy</b>	<p>The primary marketing efforts will be separated into those for low-income (250) customers and non low-income (750) customers. Various marketing strategies will be applied to customers who may find the Flex Pay Pilot Program appealing. Research shows prepaid utility services have a wide appeal due to the ability to have daily engagement, increased payment flexibility and use of technology. Ameren Missouri anticipates the Flex Pay Pilot Program will be seen as beneficial to those customers who want to better manage their energy use and those who manage their finances better with the opportunity to pay more frequently than once a month.</p> <p>To the extent possible, Ameren Missouri will seek to leverage opportunities with Community Action Agencies (CAA) for client recommendations.</p>
<b>EM&amp;V Requirements</b>	<p>A process and impact evaluation will be conducted to verify savings and identify strategies that have been successful and also identify improvement opportunities. The evaluation contractors will use best practice methodologies when conducting process and impact evaluations including, but not limited to, stakeholder interviews, customer surveys, and database, program logic model, and marketing reviews.</p>

<b>Pilot Learning Objectives</b>	<ul style="list-style-type: none"> <li>▪ Determine level of energy savings if customers are provided with usage and billing updates on a near real-time basis.</li> <li>▪ Effect on customer engagement due to offering additional flexible payment options and increased communication.</li> <li>▪ Determine changes in business processes as a result of adding this payment option. <ul style="list-style-type: none"> <li>– Impact on call volume.</li> <li>– Impact on disconnects – frequency vs. duration.</li> <li>– Impact on customer payments.</li> </ul> </li> <li>▪ Assess the ability to provide better information and increased awareness about how to manage energy and energy costs to customers and assess customer acceptance of the technologies used.</li> <li>▪ Assess ease of program opt-in/opt-out.</li> <li>▪ Effectiveness with low income customers. <ul style="list-style-type: none"> <li>– Assess communication challenges across various technologies.</li> <li>– Assess customer understanding of the program as it was presented for enrollment.</li> </ul> </li> </ul>																									
<b>Program Design Flexibility</b>	<p>The 11-step process will allow stakeholder input and at the same time facilitate successful implementation of necessary changes. This level of flexibility at the implementation team level is important to make appropriate modifications to respond to program and market condition changes.</p>																									
<b>Estimated Participation</b>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="4" style="background-color: #e0f0e0;"><b>Residential Flex Pay Pilot - Estimated Participants</b></th> </tr> <tr> <th style="background-color: #e0e0e0;">End-use</th> <th style="background-color: #e0e0e0;">2018</th> <th style="background-color: #e0e0e0;">2019</th> <th style="background-color: #e0e0e0;">2020</th> </tr> </thead> <tbody> <tr> <td style="background-color: #e0e0e0;">Building Shell RES</td> <td>400</td> <td>1,000</td> <td>1,000</td> </tr> </tbody> </table>	<b>Residential Flex Pay Pilot - Estimated Participants</b>				End-use	2018	2019	2020	Building Shell RES	400	1,000	1,000													
<b>Residential Flex Pay Pilot - Estimated Participants</b>																										
End-use	2018	2019	2020																							
Building Shell RES	400	1,000	1,000																							
<b>Estimated Budget</b>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="5" style="background-color: #e0f0e0;"><b>Residential Flex Pay Pilot - Estimated Budget</b></th> </tr> <tr> <th style="background-color: #e0e0e0;"></th> <th style="background-color: #e0e0e0;">2018</th> <th style="background-color: #e0e0e0;">2019</th> <th style="background-color: #e0e0e0;">2020</th> <th style="background-color: #e0e0e0;">3 Year Total</th> </tr> </thead> <tbody> <tr> <td style="background-color: #e0e0e0;"><b>Incentive*</b></td> <td>\$8,281</td> <td>\$82,813</td> <td>\$82,875</td> <td><b>\$173,969</b></td> </tr> <tr> <td style="background-color: #e0e0e0;"><b>Admin Costs</b></td> <td>\$399,871</td> <td>\$240,528</td> <td>\$150,414</td> <td><b>\$790,813</b></td> </tr> <tr> <td style="background-color: #e0e0e0;"><b>Total Costs</b></td> <td><b>\$408,153</b></td> <td><b>\$323,340</b></td> <td><b>\$233,289</b></td> <td><b>\$964,782</b></td> </tr> </tbody> </table> <p style="font-size: small; margin-top: 5px;">*Incentive received by customer</p>	<b>Residential Flex Pay Pilot - Estimated Budget</b>						2018	2019	2020	3 Year Total	<b>Incentive*</b>	\$8,281	\$82,813	\$82,875	<b>\$173,969</b>	<b>Admin Costs</b>	\$399,871	\$240,528	\$150,414	<b>\$790,813</b>	<b>Total Costs</b>	<b>\$408,153</b>	<b>\$323,340</b>	<b>\$233,289</b>	<b>\$964,782</b>
<b>Residential Flex Pay Pilot - Estimated Budget</b>																										
	2018	2019	2020	3 Year Total																						
<b>Incentive*</b>	\$8,281	\$82,813	\$82,875	<b>\$173,969</b>																						
<b>Admin Costs</b>	\$399,871	\$240,528	\$150,414	<b>\$790,813</b>																						
<b>Total Costs</b>	<b>\$408,153</b>	<b>\$323,340</b>	<b>\$233,289</b>	<b>\$964,782</b>																						
<b>Savings Targets</b>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="4" style="background-color: #e0f0e0;"><b>Residential Flex Pay Pilot - Estimated Net Savings at Meter</b></th> </tr> <tr> <th style="background-color: #e0e0e0;">Year</th> <th style="background-color: #e0e0e0;">2018</th> <th style="background-color: #e0e0e0;">2019</th> <th style="background-color: #e0e0e0;">2020</th> </tr> </thead> <tbody> <tr> <td style="background-color: #e0e0e0;"><b>kWh Savings</b></td> <td>487,040</td> <td>1,217,600</td> <td>1,217,600</td> </tr> <tr> <td style="background-color: #e0e0e0;"><b>kW Savings</b></td> <td>227</td> <td>567</td> <td>567</td> </tr> </tbody> </table>	<b>Residential Flex Pay Pilot - Estimated Net Savings at Meter</b>				Year	2018	2019	2020	<b>kWh Savings</b>	487,040	1,217,600	1,217,600	<b>kW Savings</b>	227	567	567									
<b>Residential Flex Pay Pilot - Estimated Net Savings at Meter</b>																										
Year	2018	2019	2020																							
<b>kWh Savings</b>	487,040	1,217,600	1,217,600																							
<b>kW Savings</b>	227	567	567																							
<b>Estimated Cost-effectiveness</b>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="3" style="background-color: #e0f0e0;"><b>3 Year Program Cost-Effectiveness (2018-2020)</b></th> </tr> <tr> <th style="background-color: #e0e0e0;">Program</th> <th style="background-color: #e0e0e0;">TRC</th> <th style="background-color: #e0e0e0;">UCT</th> </tr> </thead> <tbody> <tr> <td style="background-color: #e0e0e0;">Residential Flex Pay Pilot</td> <td>0.17</td> <td>0.17</td> </tr> </tbody> </table>	<b>3 Year Program Cost-Effectiveness (2018-2020)</b>			Program	TRC	UCT	Residential Flex Pay Pilot	0.17	0.17																
<b>3 Year Program Cost-Effectiveness (2018-2020)</b>																										
Program	TRC	UCT																								
Residential Flex Pay Pilot	0.17	0.17																								

**RESIDENTIAL ENERGY EFFICIENCY MEEIA 2016-18**

**Flex Pay Pilot Program**

**PURPOSE**

The purpose of the Flex Pay Pilot Program (hereafter "Program") is to deliver energy savings and the resulting bill reductions to eligible Ameren Missouri residential customers through an alternative payment option. Energy savings and bill reductions will be achieved through impacts associated with the advance purchase of electricity.

**AVAILABILITY**

October 1, 2018 through December 31, 2020.

The Program will be available on a voluntary basis to customers who receive electric only service from Ameren Missouri and who are billed on Service Classification No. 1(M), except for:

- Customers who are identified as using electric dependent medical equipment at the service address.
- Customers who receive natural gas only or both natural gas and electric service from the Company.
- Customers who are enrolled in Company's Electric Power Purchases from Qualified Net Metering Facilities tariff (net metering).
- Customers who are charged with or convicted of unauthorized use, interference, or diversion of their electric service.

Customers on budget billing must cease budget billing to participate in this Program.

The Program will have no more than one thousand (1,000) participants at any one time, and has two (2) categories of participants, as follows:

- a) Low-Income Participants -  
This Program category shall be limited to 250 eligible electric residential customers who are eligible for the low-income exemption under Rider EEIC.
- b) Non Low-Income Participants -  
This Program category shall be limited to 750 eligible electric residential customers who are not eligible for the low-income exemption under Rider EEIC.

At all times during Program participation, the participant must have access to at least two of the following: telephone, text messaging capabilities, a device supporting internet websites, a device supporting mobile applications, or email.

**RESIDENTIAL ENERGY EFFICIENCY MEEIA 2016-18**

**Flex Pay Pilot Program (Cont'd.)**

**PROGRAM DESCRIPTION**

The Company will hire a Program Administrator to implement this Program. The Program is a behavioral energy efficiency program that promotes energy savings by providing daily updates and communication about electricity usage and costs and by changing the way participants use electricity. The Program allows eligible residential electric customers to opt-in and prepay into an account. As electricity is used, the funds in the account are deducted for the actual use. In lieu of receiving a monthly bill, participants will be able to access details regarding their Flex Pay account anytime via at least two of the following means: web portal, mobile app, inbound interactive voice response (IVR), and two-way text messaging.

Ameren Missouri will provide participating customers with access to tips and information about energy efficiency, as well as the ability to customize alerts for high and low electric use days to encourage them to manage their electric usage and reduce their consumption. During the account creation process, Program representatives will assist the customer in selecting the desired alerts, delivery methods, and delivery times.

The customer can replenish their account at any time 24 hours a day and seven days a week with any amount, to maintain a balance above \$0. Participants are only able to make payments via channels approved by the Program Administrator, which include: web portal, mobile app, by phone with a credit or debit card, an eCheck, and cash. Customers will have ready access to retail locations that accept cash through a bar code system that can be used via a smartphone or printout to automatically link the customer's utility account to the retailers' cash register.

**PROGRAM PROVISIONS**

Each participating customer shall opt-in to participate in the Program in accordance with the Program's terms reflected herein. Customers will be required to provide a \$25(minimum) credit balance to participate in the Program.

Participants will continue to pay the rates provided for in Service Classification 1(M). Because all charges will be divided into daily amounts for Flex Pay customers to ensure consistent and accurate collection of payments and balance calculations for participants, payments will be reconciled with the Company's Customer Service System on a monthly basis to ensure no overpayment or underpayment has occurred.

Deposits and credit checks will not be required for participation in this Program.

No late payment fees or reconnect fees shall be applied under this Program.

This Program will accept payment assistance from the Low Income Home Energy Assistance Program and other payment assistance organizations accepted by the Company.

**RESIDENTIAL ENERGY EFFICIENCY MEEIA 2016-18**

**Flex Pay Pilot Program (Cont'd.)**

**PROGRAM PROVISIONS (Cont'd.)**

Participation by a non low-income participant in the Program constitutes the participant's grant of access to install an enabling device on the participant's meter to allow remote disconnect/reconnect capabilities as approved and determined by the Company. The enabling device will be installed upon the first incidence of disconnection. The participant must not tamper with the metering or switching device. The participant shall allow the utility access to service or maintain adequate metering capabilities.

All energy use shall be paid by the participant. Any usage that occurs after account funding has been depleted shall be recorded as arrearages. If a participant is not disconnected due to achieving a \$0 balance during a non-disconnect period or if a participant opts-in to the Program with existing arrears, any past due balance will be paid using 25% of every subsequent prepayment, starting with the participant's first payment after the \$0 balance occurs until the arrearage is repaid, which will replace any existing delinquent payment arrangements the customer may have had before switching to Flex Pay.

Customers who have a deposit with the Company and opt-in to the Program must elect to have their deposit (and any accrued interest) applied either to their outstanding arrearages, or to an initial flex payment on their Flex Pay account. Customers who are new, opt-out, or are removed from the Program within 6 months of opt-in will be required to provide a deposit upon return to traditional pay if a deposit would have had been required had the customer not participated in the Program. Customers who return to traditional pay will be eligible for delinquent payment arrangements to the same extent as if they had not participated in the Program.

**DISCONNECTIONS**

a) Low-Income Participants-

Low-income participants who reach a \$0 balance and have a negative balance for eight (8) consecutive days or fewer will have the negative amount automatically moved into arrearages. When such a participant makes a subsequent payment, a minimum 25% of that payment and future payments will go towards paying any arrearage amounts. Any low income customer with a \$0 or negative balance for more than eight (8) consecutive days will be removed from the Program and resume traditional pay billing. Low-income participants are not subject to remote disconnection while participating in the Program.

b) Non Low-Income Participants-

Non low-income customers will be subject to remote disconnection if their account reaches a \$0 balance.

MO.P.S.C. SCHEDULE NO. 6 Original SHEET NO. 218.3

CANCELLING MO.P.S.C. SCHEDULE NO. \_\_\_\_\_ SHEET NO. \_\_\_\_\_

APPLYING TO MISSOURI SERVICE AREA**RESIDENTIAL ENERGY EFFICIENCY MEEIA 2016-18****Flex Pay Pilot Program (Cont'd.)****DISCONNECTIONS (Cont'd.)**

Pending disconnect orders are created based strictly on the customer exhausting the customer's credit balance in their Flex Pay account. To provide opportunity to make a payment in advance of disconnection, customers will receive alerts and notifications via their preferred communication channel when their account approaches a \$0 balance, reaches a \$0 balance, and has been approved for disconnection. The participant will receive a final notification for disconnection at 8 a.m. the day the disconnection is to occur. The notice shall state that if no payment is made, then disconnection may begin at 11 a.m. that day.

Under normal circumstances, service will be reconnected within an hour of receipt of a payment.

**NON-DISCONNECT TIMES**

All energy use shall be paid by the participant. Any usage that occurs after a customer's Flex Pay account balance has been depleted shall be recorded as an arrearage. No service disconnections will be implemented during the following:

- After business hours
- On weekends
- During holidays
- When prohibited by 4 CSR 240-13.055 or by Section 393.108, RSMo.

**INCENTIVES**

The Company will waive the cost of the first two (2) payment processing fees each calendar month for each Flex Pay account.

The Company will add twenty five cents (\$0.25 USD) to each low-income participant Flex Pay account for each day their account balance is above \$0.

**TERM OF SERVICE**

A customer can request participation in the Program at any time, and will be able to participate if there are available spots and if the customer is eligible for the Program under the terms herein. A customer who becomes a participant is not required to stay in the Program and may return to traditional pay at any time. However, if the customer leaves or is removed from the Program, the customer will not be eligible to participate in the Program again for a minimum of six (6) months, and only then if space is available.

**GENERAL RULES AND REGULATIONS**

If the provisions of the Program tariff sheets conflict with any provision of the Company's General Rules and Regulations (Tariff Sheet Nos. 95 through 145), the Program tariff sheets shall control.

DATE OF ISSUE November 30, 2017 DATE EFFECTIVE October 1, 2018ISSUED BY Michael Moehn President St. Louis, Missouri  
NAME OF OFFICER TITLE ADDRESS

MO.P.S.C. SCHEDULE NO. 6 2nd Revised SHEET NO. 91.1  
 CANCELLING MO.P.S.C. SCHEDULE NO. 6 1st Revised SHEET NO. 91.1

APPLYING TO MISSOURI SERVICE AREA

**RIDER EEIC**  
**ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)**  
**For MEEIA Cycle 2 Plan**

**\*APPLICABILITY (Cont'd.)**

- 1) Program Costs, Company's Throughput Disincentive (TD) and Earnings Opportunity (EO) Award (if any) for each Effective Period (EP).
- 2) Reconciliations, with interest, to true-up for differences between the revenues billed under this Rider EEIC and total actual monthly amounts for:
  - i) Program Costs incurred in the MEEIA 2016-18 Plan, including those related to Long-Lead Projects and the Flex Pay Pilot, and/or remaining unrecovered Program balances for MEEIA 2013-15,
  - ii) Company's TD incurred in the MEEIA 2016-18 Plan, including those related to Long-Lead Projects and the Flex Pay Pilot, and/or remaining TD-NSB Share balances for MEEIA 2013-15,
  - iii) Amortization of Earnings Opportunity ordered by the Missouri Public Service Commission (Commission), including those related to Long-Lead Projects, and/or remaining balances for the MEEIA 2013-15 Performance Incentive.
- 3) Any Ordered Adjustments.

Charges under this Rider EEIC shall continue after the anticipated February 28, 2019 end of the MEEIA 2016-18 Plan until such time as the charges described in items 1), 2), and 3) above have been billed.

Charges arising from the MEEIA 2016-18 Plan that are the subject of this Rider EEIC shall be reflected in one "Energy Efficiency Invest Chg" on customers' bills in combination with any charges arising from a rider that is applicable to the MEEIA 2013-15 Plan demand-side management programs.

**DEFINITIONS**

As used in this Rider EEIC, the following definitions shall apply:

"AFUDC" means the Allowance for Funds Used During Construction rate computed in accordance with the formula prescribed in the Code of Federal Regulations Title 18 Part 101.

"Company's Throughput Disincentive" (TD) means to represent the utility's lost margins associated with the successful implementation of MEEIA programs. The detailed method for calculating the TD is described in Tariff Sheets 91.6 - 91.8.

"Earnings Opportunity" (EO) means the amount ordered by the Commission based on actual performance verified through Evaluation Measurement & Verification (EM&V) against planned targets. The details of determining EO are described herein.

"Effective Period" (EP) means the twelve (12) billing months beginning with the February billing month and ending with the January billing month. Where an additional Rider EEIC filing is made to change the EEIR components during a calendar year, the EP for such a filing shall begin with the June or October billing month and end with the subsequent January billing month.

"End Use Category" means the unique summary category of end-use load shapes. The list of End Use Categories is included in Appendix E to the Stipulation.

\*Indicates Change.

DATE OF ISSUE November 30, 2017 DATE EFFECTIVE October 1, 2018  
 ISSUED BY Michael Moehn President St. Louis, Missouri  
NAME OF OFFICER TITLE ADDRESS

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC

ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)

For MEEIA Cycle 2 Plan

DEFINITIONS (Cont'd.)

"Evaluation Measurement & Verification" (EM&V) means the performance of studies and activities intended to evaluate the process of the Company's program delivery and oversight and to estimate and/or verify the estimated actual energy and demand savings, cost effectiveness, and other effects from demand-side programs.

\* "Flex Pay Pilot" means Company's pilot program detailed in Residential Energy Efficiency MEEIA 2016-2018 program tariffs.

\* "Flex Pay Pilot Program Costs" means expenditures, including pilot planning, pilot design, contract payments made to a program administrator, incentive payments made to customers, advertising expense, and costs to conduct EM&V. There will be no portfolio-level costs allocated to the pilot.

"Impact Measurement & Verification" (IM&V) means the determination of ex-post net energy and demand savings for Long-Lead Projects through application of a net-to-gross ratio, but does not include a cost-effectiveness analysis.

"Incentive" means any consideration provided by the Company, including, but not limited to, buy downs, markdowns, rebates, bill credits, payments to third parties, direct installation, giveaways, and education, which encourages the adoption of program measures.

"Long-Lead Program Costs" means incentive payments made to customers, contract payments made to program administrators, and costs for IM&V. There will be no portfolio-level costs allocated to long-lead projects.

"Long-Lead Project" means a project committed by a Customer, accepted by the Company, and submitted a signed commitment offer to the program administrator by January 31, 2019, according to the terms and implementation of the MEEIA 2016-2018 Energy Efficiency Plan that will require until a date after February 28, 2019, but no later than January 31, 2021, to certify completion.

"Low-Income" customers means those Service Classification 1(M)-Residential customers eligible for the low income exemption provisions contained in Section 393.1075.6, RSMo. As approved in File No. ER-2014-0258, customers eligible under this definition will be exempt from Rider EEIC charges for 12 billing months following assistance received from either Missouri Energy Assistance (a.k.a. Low Income Home Energy Assistance Program or LIHEAP), Winter Energy Crisis Intervention Program, Summer Energy Crisis Intervention Program, the Company's Keeping Current Low Income Pilot Program, and/or the Company's Keeping Cool Low Income Pilot Program.

"Measure" means energy efficiency measures described for each program attached as Appendix B to the Stipulation.

"MEEIA 2013-15 Plan" means Company's "2013-15 Energy Efficiency Plan" submitted in File No. EO-2012-0142 and its corresponding tariff sheets.

\*\* "MEEIA 2016-18 Plan" means Company's "2016-18 Energy Efficiency Plan" submitted in File No. EO-2015-0055 and modified by the Stipulation, and includes the Flex Pay Pilot.

"Programs" means MEEIA 2016-18 programs listed in tariff sheet no. 174.

"Program Costs" means any prudently incurred program expenditures, including such items as program planning, program design, administration, delivery, end-use

\*Indicates Addition.

\*\*Indicates Change.

DATE OF ISSUE November 30, 2017

DATE EFFECTIVE October 1, 2018

ISSUED BY Michael Moehn
NAME OF OFFICER

President
TITLE

St. Louis, Missouri
ADDRESS



APPLYING TO MISSOURI SERVICE AREA

**RIDER EEIC**

**ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)**

**For MEEIA Cycle 2 Plan**

**\*DEFINITIONS (Cont'd.)**

measures and incentive payments, advertising expense, evaluation, measurement and verification, market potential studies and work on a utility and/or statewide Technical Resource Manual (TRM).

"TRM" means the Company's Technical Resource Manual (attached as Appendix F to the Stipulation) and updated based on EM&V ex-post gross adjustments determined for Year 1 no later than twenty-four (24) months after commencement of MEEIA 2016-18.

"Stipulation" means the Stipulation and Agreement approved by the Commission in File No. EO-2015-0055, as it may be amended further by subsequent Commission orders.

**ENERGY EFFICIENCY INVESTMENT RATE (EEIR) DETERMINATION**

The EEIR during each applicable EP is a dollar per kWh rate for each applicable Service Classification calculated as follows:

$$EEIR = [NPC + NTD + NEO + NOA] / PE$$

Where:

NPC = Net Program Costs for the applicable EP as defined below,

$$NPC = PPC + PCR$$

PPC = Projected Program Costs is an amount equal to Program Costs projected by the Company to be incurred during the applicable EP.

PCR = Program Costs Reconciliation is equal to the cumulative difference, if any, between the PPC revenues billed resulting from the application of the NPC component of the EEIR and the actual Program Costs incurred through the end of the previous EP (which will reflect projections through the end of the previous EP due to timing of adjustments). Such amounts shall include monthly interest charged at the Company's monthly short-term borrowing rate. Any remaining PCR balance from MEEIA Cycle 1 shall be rolled into the PCR calculation starting February 2017.

NTD = Net Throughput Disincentive for the applicable EP as defined below,

$$NTD = PTD + TDR$$

PTD = Projected Throughput Disincentive is the Company's TD projected by the Company to be incurred during the applicable EP. For the detailed method for calculating the TD, see Sheet 91.6.

TDR = Throughput Disincentive Reconciliation is equal to the cumulative difference, if any, between the PTD revenues billed during the previous EP resulting from the application of the NTD component of the EEIR and the Company's TD through the end of the previous EP (which will reflect projections through the end of the previous EP due to timing of adjustments). Such amounts shall include monthly interest charged at the Company's monthly short-term borrowing rate. Any remaining TDR balance from MEEIA Cycle 1 shall be rolled into the TDR calculation starting February 2017.

\*Indicates Reissue

DATE OF ISSUE November 30, 2017

DATE EFFECTIVE October 1, 2018

ISSUED BY Michael Moehn  
NAME OF OFFICER

President  
TITLE

St. Louis, Missouri  
ADDRESS

APPLYING TO MISSOURI SERVICE AREA

**RIDER EEIC**  
**ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)**  
**For MEEIA Cycle 2 Plan**

**\*EEIR DETERMINATION (Cont'd.)**

NEO = Net Earnings Opportunity for the applicable EP as defined below,

NEO = EO + EOR

EO = Earnings Opportunity is equal to the Earnings Opportunity Award monthly amortization multiplied by the number of billing months in the applicable EP.

The monthly amortization shall be determined by dividing the Earnings Opportunity Award by the number of available billing months between the first billing month of the first EEIR filing after the determination of the Earnings Opportunity Award and 24 calendar months following the end of the annual period in which the Earnings Opportunity Award is determined.

The number of applicable billing months in the EP shall be the number of applicable billing months less the number of months including Earnings Opportunity Award amortization from previous EPs.

EOR = Earnings Opportunity Reconciliation is equal to the cumulative difference, if any, between the EO revenues billed resulting from the application of the NEO+NPI component of the EEIR and the monthly amortization of the Performance Incentive Award through the end of the previous EP (which will reflect projections through the end of the previous EP due to timing of adjustments). Such amounts shall include monthly interest charged at the Company's monthly short-term borrowing rate. Any remaining PIR balance from MEEIA Cycle 1 shall be rolled into the EOR calculation starting February 2019.

NOA = Net Ordered Adjustment for the applicable EP as defined below,

NOA = OA + OAR

OA = Ordered Adjustment is the amount of any adjustment to the Rider EEIC ordered by the Commission as a result of prudence reviews and/or corrections under this Rider EEIC. Such amounts shall include monthly interest at the Company's monthly short-term borrowing rate.

OAR = Ordered Adjustment Reconciliation is equal to the cumulative difference, if any, between the OA revenues billed resulting from the application of the EEIR and the actual OA ordered by the Commission through the end of the previous EP (which will reflect projections through the end of the previous EP due to timing of adjustments). Such amounts shall include monthly interest charged at the Company's monthly short-term borrowing rate.

PE = Projected Energy, in kWh, forecasted to be delivered to the customers to which the Rider EEIC applies during the applicable EP.

\*Indicates Reissue

DATE OF ISSUE November 30, 2017

DATE EFFECTIVE October 1, 2018

ISSUED BY Michael Moehn  
NAME OF OFFICER

President  
TITLE

St. Louis, Missouri  
ADDRESS

MO.P.S.C. SCHEDULE NO. 6 1st Revised SHEET NO. 91.6

CANCELLING MO.P.S.C. SCHEDULE NO. 6 Original SHEET NO. 91.6

APPLYING TO MISSOURI SERVICE AREA

**RIDER EEIC**  
**ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)**  
**For MEEIA Cycle 2 Plan**

**TD DETERMINATION**

Monthly TD is the sum of the TD calculation for all End Use Categories applicable to Service Classifications as set out in the Availability section herein.

The TD for each End Use Category shall be determined by the following formula:

$$TD = MS \times NMR \times NTGF$$

Where:

- TD = Throughput Disincentive, in dollars, to be collected for a given month, for a given Service Classification.
- MS = Monthly Savings, is the sum of all programs' monthly savings, in kWh, for a given month, for a given Service Classification. The MS for each End Use Category shall be determined by the following formula:

$$MS = ((MAS_{CM} / 2) + CAS_{PM} - RB) \times LS$$

Where:

$MAS_{CM}$  = The sum of (MC x ME) for all measures in a program in the current calendar month.

\* MC = Measure Count. MC for a given month, for a given Service Classification, for each measure, is the number of each measure installed in the current calendar month. For the Home Energy Report program, the number of reports mailed during the current calendar month shall be used as the Measure Count. For the Flex Pay Pilot, the number of participants for each billing month shall be used as the Measure Count.

ME = Measure Energy. ME will be determined as follows, for each Measure:

- a. Prior to finalization of EM&V for MEEIA 2016-18 Plan, Year 1 programs, for Measures not listed under those programs listed in (c) below, the ME is the annual total of normalized savings for each measure at customer meter per measure defined in the Company's Technical Resource Manual (TRM).
- b. After finalization of EM&V for MEEIA 2016-18 Plan, Year 1 programs, for Measures not listed under those programs listed in (c) below, the ME is the annual total of normalized savings for each measure at customer meter per measure defined in the updated TRM (which will be updated based on EM&V ex-post gross adjustments determined for Year 1 no later than 24 months after the commencement of MEEIA 2016-18 Plan).

\*Indicates Change

DATE OF ISSUE November 30, 2017 DATE EFFECTIVE October 1, 2018

ISSUED BY Michael Moehn President St. Louis, Missouri  
 NAME OF OFFICER TITLE ADDRESS

MO.P.S.C. SCHEDULE NO. 6 2nd Revised SHEET NO. 91.8

CANCELLING MO.P.S.C. SCHEDULE NO. 6 1st Revised SHEET NO. 91.8

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC

ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)

For MEEIA Cycle 2 Plan

TD DETERMINATION (Cont'd.)

The Company shall file an update to NMR rates by month by Service Classification contemporaneous with filing any compliance tariff sheets in any general electric rate case reflecting the rates set in that case, and the billing determinants used in setting rates in such case. Updates to the NMR values shall be calculated following the same process described on pages 32-35 of the Company's filed December 22, 2014 2016-18 Energy Efficiency Plan.

NTGF = Net To Gross Factor. The initial NTGF is 0.85. Upon completion of the three year cycle, the final portfolio Net To Gross factor applied for the Earnings Opportunity shall be used as the NTGF prospectively starting with the month in which the Earnings Opportunity is determined.

Annual kWh savings per measure will be updated prospectively in the Company's TRM no later than twenty-four (24) months after the commencement of the plan based on EM&V ex-post gross adjustments determined for Year 1.

\* The Company shall file a general electric rate case at some point before February 28, 2021 to make a Rebasing Adjustment to rebase the TD arising from the MEEIA 2016-18 plan in its entirety, except as described below concerning Long-Lead Projects and the Flex Pay Pilot, and if Company fails to do so, the accrual and collection of the TD terminates beginning March 1, 2021. The filing of a general electric rate case utilizing an update or true-up period that ends between thirty (30) months and sixty (60) months after the effective date of the electric tariff sheets implementing MEEIA 2016-18 satisfies this requirement. For the rate case used to rebase the TD arising from the MEEIA 2016-18 plan in its entirety, the MEEIA normalization shall reach forward as far as the effective date of new rates in that rate case.

\* The Flex Pay Pilot and projects designated as Long-Lead Projects shall continue to incur TD until a rate case rebases all such projects or until February 28, 2023, whichever occurs first.

\*Indicates Change.

DATE OF ISSUE November 30, 2017 DATE EFFECTIVE October 1, 2018

ISSUED BY Michael Moehn President St. Louis, Missouri  
NAME OF OFFICER TITLE ADDRESS

APPLYING TO MISSOURI SERVICE AREA

**RIDER EEIC**  
**ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)**  
**For MEEIA Cycle 2 Plan**

**\*EO DETERMINATION**

EO shall be calculated using the matrix below. EO will not go below zero dollars (\$0). The EO at 100% is \$27,801,935. Before adjustments reflecting TD EM&V including NTG, the EO cannot go above \$39,212,516. The EO including adjustments reflecting TD EM&V including NTG cannot go above \$54,212,516. The cap is based on current program levels. If Commission approved new programs are added in years 2017 and 2018, the Company may seek Commission approval to have the targets and the cap of the EO matrix scale adjusted. EO shall be adjusted for the difference, with carrying cost at the Company's monthly Allowance for Funds Used During Construction (AFUDC) rate compounded semi-annually, between TD billed and what TD billed would have been if:

- (1) The ME used in the calculation were the normalized savings for each measure at customer meter per measure determined through EM&V ex-post gross analysis for each program year, and
- (2) The NTGF used in the calculation was the net-to-gross values determined through EM&V, except that if the NTGF value determined through EM&V is less than 0.80, the recalculation shall use 0.80 and if the NTG value determined through EM&V is greater than 1.0, the recalculation shall use 1.0.

**\*EARNINGS OPPORTUNITY MATRIX**

Performance Metric	Ameren Missouri						
	Payout Rate	Payout Unit	% of Target EO	100% payout	Target @ 100%	Cap/100% Multiplier	Cap
Home Energy Report criteria will be effective, prudent spend of budget	n/a		7.19%	\$ 2,000,000			\$ 2,000,000
EE MWh (Excl. Home Energy Report, Tstat, LIMF, and Flex Pay Pilot): criteria will be the cumulative of the 1st yr incremental MWh during the 3 year plan	\$ 7.50	\$/MWh	15.11%	\$ 4,201,935	560,258	130%	\$ 5,462,516
EE Coincident MW (Excl. Home Energy Report, Tstat, LIMF, and Flex Pay Pilot): criteria will be cumulative of the 2023 MW reduction, coincident with system peak	\$ 141,428.57	\$/MW	71.22%	\$ 19,800,000	140	150%	\$ 29,700,000
Number of Learning Thermostats Installed	\$ 30.62	\$/Unit	1.80%	\$ 500,000	16,331	150%	\$ 750,000
Low Income Multi-Family (LIMF) and Low Income Assistance Program: criteria will be effective, prudent spend of budget	n/a		4.68%	\$ 1,300,000			\$ 1,300,000
				<b>\$ 27,801,935</b>			<b>\$ 39,212,516</b>
Total Cap Including TD Adjustments							\$ 54,212,516

\*Indicates Change

DATE OF ISSUE November 30, 2017

DATE EFFECTIVE October 1, 2018

ISSUED BY Michael Moehn  
NAME OF OFFICER

President  
TITLE

St. Louis, Missouri  
ADDRESS

MO.P.S.C. SCHEDULE NO. 6 2nd Revised SHEET NO. 174  
 CANCELLING MO.P.S.C. SCHEDULE NO. 6 1st Revised SHEET NO. 174

APPLYING TO MISSOURI SERVICE AREA

**TABLE OF CONTENTS**

**ENERGY EFFICIENCY AND DEMAND SIDE MANAGEMENT PROGRAMS**

	<b><u>SHEET NO.</u></b>
<b><u>WEATHERIZATION PROGRAM</u></b>	175
<b><u>BUSINESS ENERGY EFFICIENCY (Programs Effective 2013-15)</u></b>	181
Standard Incentive Program	182
Custom Incentive Program	183
Retro-Commissioning Program	184
New Construction Incentive Program	185
<b><u>RESIDENTIAL ENERGY EFFICIENCY (Programs Effective 2013-15)</u></b>	191
Lighting Program	192
Energy Efficient Products Program	193
HVAC	194
Refrigerator Recycling Program	195
Home Energy Performance Pilot	196
Energy Star® New Homes	197
Multifamily Low Income Program	198
<b><u>BUSINESS ENERGY EFFICIENCY MEEIA 2016-18</u></b>	201
Standard Incentive Program	202
Custom Incentive Program	203
Retro-Commissioning Program	204
New Construction Incentive Program	205
Small Business Direct Install Incentive Program	206
<b><u>RESIDENTIAL ENERGY EFFICIENCY MEEIA 2016-18</u></b>	211
Lighting Program	212
Energy Efficient Products Program	213
HVAC Program	214
Home Energy Reports Program	215
Multi-Family Low Income Program	216
Energy Efficiency Kits Program	217
* Flex Pay Pilot	218

\*Indicates Addition

DATE OF ISSUE November 30, 2017 DATE EFFECTIVE October 1, 2018  
 ISSUED BY Michael Moehn President St. Louis, Missouri  
NAME OF OFFICER TITLE ADDRESS

MO.P.S.C. SCHEDULE NO. 6 1st Revised SHEET NO. 211  
CANCELLING MO.P.S.C. SCHEDULE NO. 6 Original SHEET NO. 211

APPLYING TO MISSOURI SERVICE AREA

**RESIDENTIAL ENERGY EFFICIENCY MEEIA 2016-18**

**PURPOSE**

The purpose of the Residential Energy Efficiency Program, which consists of several programs, is to proactively impact residential customer energy use in such a way as to reduce consumption of electricity. With the exception of the Low Income program, the programs included in this tariff are cost effective having a Total Resource Cost Test ratio of greater than 1.0.

**DEFINITIONS**

Capitalized terms not otherwise defined in Tariff Sheet Nos. 211 through 217 have the following meanings:

DSIM (Demand-Side Programs Investment Mechanism)

A mechanism approved by the Commission in a utility's filing for demand-side program approval in File No. EO-2015-0055.

\*Flex Pay Pilot

The Company's pilot program detailed in Residential Energy Efficiency MEEIA 2016-2018 program tariffs.

Incentive

Any consideration provided by the Company, through the Program Administrator and Program Partners, including buydowns, markdowns, rebates, bill credits, payments to third parties, direct installation, giveaways, and education, which encourages the adoption of Measures.

Measure

An end-use measure, energy efficiency measure, and energy management measure as defined in 4 CSR 240-22.020(18), (20), and (21).

Program Administrator

The entity selected by the Company to provide program design, promotion, administration, implementation, and delivery of services.

Program Period - The period from March 1, 2016 through February 28, 2019, unless sooner terminated under the TERM provision of this tariff. Programs may have slightly earlier deadlines for certain activities, as noted on the Company's website [AmerenMissouri.com](http://AmerenMissouri.com).

Program Partner

A retailer, distributor or other service provider that the Company or the Program Administrator has approved to provide specific program services through execution of a Company approved service agreement.

\*Indicates Addition.

DATE OF ISSUE November 30, 2017 DATE EFFECTIVE October 1, 2018  
ISSUED BY Michael Moehn President St. Louis, Missouri  
NAME OF OFFICER TITLE ADDRESS

MO.P.S.C. SCHEDULE NO. 6 2nd Revised SHEET NO. 211.1
CANCELLING MO.P.S.C. SCHEDULE NO. 6 1st Revised SHEET NO. 211.1

APPLYING TO MISSOURI SERVICE AREA

RESIDENTIAL ENERGY EFFICIENCY MEEIA 2016-18 (Cont'd.)

DEFINITIONS (Cont'd.)

\*Total Resource Cost (TRC) Test - A test of the cost-effectiveness of demand-side programs that compares the avoided utility costs to the sum of all incremental costs of end-use measures that are implemented due to the program...

AVAILABILITY

Except as otherwise provided in the terms governing a particular program, residential energy efficiency programs are available to residential customers in the Company's Missouri service area being served under the Residential Service Rate 1(M) rate schedule.

Unless otherwise provided for in the tariff sheets governing a particular Program, customers may participate in multiple Programs, but may receive only one Incentive per Measure.

\*\*TERM

This tariff and the tariffs reflecting each specific residential energy efficiency program shall be effective from March 1, 2016 through February 28, 2019, except that the programs shall terminate immediately, and without further Commission action, on the effective date of any court order, judgment, or opinion or Commission order that changes or eliminates the approved DSIM or Technical Resource Manual...

If the programs are terminated prior to February 28, 2019 under this provision, only Incentives for qualifying Measures that have been installed prior to the programs' termination will be provided to the customer.

The Flex Pay Pilot will extend through December 31, 2020.

DESCRIPTION

The reductions in energy consumption will be accomplished through the following programs:

- 1. Lighting
2. Energy Efficient Products
3. HVAC
4. Home Energy Reports
5. Low Income

\*Indicates Reissue. \*\*Indicates Change.

DATE OF ISSUE November 30, 2017 DATE EFFECTIVE October 1, 2018
ISSUED BY Michael Moehn President St. Louis, Missouri
NAME OF OFFICER TITLE ADDRESS



MO.P.S.C. SCHEDULE NO. 6 1st Revised SHEET NO. 211.2
CANCELLING MO.P.S.C. SCHEDULE NO. 6 Original SHEET NO. 211.2

APPLYING TO MISSOURI SERVICE AREA

RESIDENTIAL ENERGY EFFICIENCY MEEIA 2016-18 (Cont'd.)

\*DESCRIPTION (Cont'd.)

- 6. Energy Efficiency Kits
7. Home Energy Reports

Program details regarding the interaction between the Company or Program Administrators and customers participating in the Programs, such as Incentives paid directly to customers, available Measures, Measure ranges, availability of the programs, eligibility, and application and completion requirements may be adjusted through the change process as presented below. Those details, additional details on each program, and other details such as process flows, application instructions, and application forms, will be provided on the Company's website AmerenMissouri.com, or by calling the Company's Customer Contact Center toll free 1-866-422-4605.

CHANGE PROCESS

The change process is applicable to changes in a program detail regarding the interaction between the Company or Program Administrators and customers participating in the Programs.

- 1. Identify need for program detail change regarding the interaction between the Company or Program Administrators and customers participating in the Programs;
2. Discuss proposed change with implementer;
3. Discuss proposed change with evaluator;
4. Analyze impact on program and portfolio (Cost-effectiveness, goal achievement, etc.);
5. Inform the Staff, Office of the Public Counsel, and the Missouri Department of Economic Development - Division of Energy (DE) of the proposed change, the time within which it needs to be implemented, provide them the analysis that was done, and consider recommendations from them that are received within the implementation timeline (the implementation timeline shall be no less than five business days from the time that the Staff, Office of the Public Counsel, and the Missouri Department of Natural Resources are informed and provided the above-referenced analysis);
6. Take timely received recommendations into account and incorporate them where the Company believes it is appropriate to do so;
7. Notify and train customer contact personnel (Contact Center, Energy Advisors, Business Center, Key Account Executives, Customer Service Advisors) of the changes;
8. Make changes to forms and promotional materials;
9. Update program website;
10. File updated web pages and, if appropriate, updated list of Measures and Incentive amounts in File No. EO-2015-0055; and
11. Inform Customers, Trade Allies, etc.

Company will also continue to discuss and provide information on ongoing program and portfolio progress at quarterly regulatory stakeholder update meetings.

\*Indicates Reissue.

DATE OF ISSUE November 30, 2017 DATE EFFECTIVE October 1, 2018
ISSUED BY Michael Moehn President St. Louis, Missouri
NAME OF OFFICER TITLE ADDRESS