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|---|---|
| *Exhibit No.:* | |
| *Issues:* | *Flex Pay Pilot Program* |
| | *MEEIA* |
| | *Cost Effectiveness* |
| | *Program Design* |
| *Witness:* | *Brad J. Fortson* |
| *Sponsoring Party:* | *MoPSC Staff* |
| *Type of Exhibit:* | *Rebuttal Testimony* |
| *Case No.:* | *EO-2015-055* |
| *Date Testimony Prepared:* | *February 22, 2018* |

# MISSOURI PUBLIC SERVICE COMMISSION

## COMMISSION STAFF DIVISION

## ENERGY RESOURCES DEPARTMENT

# REBUTTAL TESTIMONY

# OF

# BRAD J. FORTSON

## UNION ELECTRIC COMPANY,
## d/b/a AMEREN MISSOURI

## CASE NO. EO-2015-0055

***Jefferson City, Missouri***
***February, 2018***

**REBUTTAL TESTIMONY**

**OF**

**BRAD J. FORTSON**

**UNION ELECTRIC COMPANY,**
**d/b/a AMEREN MISSOURI**

**CASE NO. EO-2015-0055**

Q. Please state your name and business address.

A. My name is Brad J. Fortson and my business address is Missouri Public Service Commission, P.O. Box 360, Jefferson City, Missouri 65102.

Q. What is your present position at the Missouri Public Service Commission ("Commission")?

A. I am a Regulatory Economist III in the Energy Resources Department of the Commission Staff Division ("Staff").

Q. Please state your educational background and work experience?

A. These are contained in Schedule BJF-r1.

Q. Would you please summarize the purpose of your rebuttal testimony?

A. My rebuttal testimony will provide support for Staff's recommendation that the Commission deny Union Electric Company d/b/a Ameren Missouri's ("Ameren Missouri") *Application For Approval Of Flex Pay Program Pilot And Request For Associated Variances* ("Application") filed on November 30, 2017, in Ameren Missouri's Missouri Energy Efficiency Investment Act ("MEEIA")[1] Cycle 2 docket, Case No. EO-2015-0055. Specifically, my rebuttal testimony will describe in detail how the Flex Pay Pilot program proposed in the Application is not cost-effective, most likely does not meet the definition of

[1] Missouri Energy Efficiency Investment Act, Section 393.1075.

an energy efficiency program under MEEIA, and should not be approved as a MEEIA program.

Q. Will you briefly describe Ameren Missouri's proposed Flex Pay Pilot program?

A. Ameren Missouri's proposed Flex Pay Pilot program is a voluntary program for up to 1,000 participants[2] to be able to "prepay" for electric service with the expectation that participating customers will reduce their energy usage.

Q. Does Ameren Missouri propose approval of the Flex Pay Pilot program as a pilot program in its MEEIA Cycle 2 portfolio?

A. Yes.

Q. Is the Flex Pay Pilot program cost effective as proposed by Ameren Missouri?

A. No. The Flex Pay Pilot program has an estimated Total Resource Cost (TRC) of 0.17 as it is proposed.

Q. Does the MEEIA statute provide guidance on cost effectiveness for demand-side programs?

A. Yes. 393.1075.4, RSMo, states in part that:

> …**Recovery** for such programs shall not be permitted unless the programs are approved by the commission, result in energy or demand savings and **are beneficial to all customers in the customer class in which the programs are proposed**, regardless of whether the programs are utilized by all customers.
> [emphasis added]

Q. Will the Flex Pay Pilot program result in benefits to all customers in the customer class in which the program is being proposed?

[2] Up to 750 non-low income and 250 low income participants.

A. No. The Flex Pay Pilot program will be offered to 1,000 customers within the residential service rate class. The Flex Pay Pilot program has an estimated TRC of 0.17. In other words, an estimated TRC of 0.17 means that residential customers only receive $0.17 worth of benefits for every $1.00 of program costs spent.

Q. Are pilot programs held to the same cost effectiveness as non-pilot programs in the MEEIA rules?

A. Yes. 4 CSR 240-20.092(1)(B) provides that:

> Approved demand-side program means a demand-side program or **program pilot** which is approved by the commission in accordance with 4 CSR 240-20.094 Demand-Side Programs; [emphasis added]

Further, 4 CSR 240-20.094(4) (I) states that:

> The commission shall consider the TRC test a preferred cost-effectiveness test. For demand-side programs and program plans that have a TRC test ratio greater than one (1), the commission shall approve demand-side programs or program plans, budgets, and demand and energy savings targets for each demand-side program it approves, provided it finds the utility has met the filing and submission requirements of this rule…

Q. Must all demand-side programs approved by the Commission have a TRC greater than one?

A. No. A demand-side program targeted to low-income customers or a general education campaign does not require a TRC greater than 1.0.

Q. Is Ameren Missouri's proposed Flex Pay Pilot program either targeted to low-income customers or a general education campaign?

A. No, it is neither one. Ameren Missouri's proposed Flex Pay Pilot program limits low income participants to 250 out of a total 1,000 participants, the remaining 750 participants being non-low income. Ameren Missouri's proposed Flex Pay Pilot program targets 3 times as many non-low income customers as low income customers. Also, Ameren

Missouri proposes its Flex Pay Pilot program as "… a voluntary behavioral energy efficiency program that combines ongoing communications and transactions. The idea is that information and education provided to the customer, as well as tangible interactions with electric service payments, will help participating customers make informed energy usage decisions."[3] However, customer education is just one piece of Ameren Missouri's proposed Flex Pay Pilot program.

Q. Does Ameren Missouri expect a fully implemented Flex Pay Program to be cost effective?

A. Yes. On page 22 of Mr. William R. Davis' direct testimony, he states: "While the Pilot is not expected to be cost effective according to the Total Resource Cost test, a fully implemented Flex Pay program is expected to be. The Company has calculated a TRC of 0.17 for the Pilot, and a TRC of 1.41 for a fully launched program." However, in response to Staff data request ("DR") 0027, an error in the TRC calculation was found and the TRC for a fully implemented Flex Pay program is now estimated to be only 1.13.

Q. An estimated TRC of 1.13 for a fully implemented Flex Pay program would make the program cost effective, correct?

A. Yes, if Ameren's estimate is accurate. However, Ameren Missouri is proposing that the Flex Pay Pilot program run from October, 2018 through December 2020. Mr. Davis states, "Throughout the effective period, the Flex Pay Pilot will be evaluated by a third party evaluation, measurement, and verification ("EM&V") contractor… At the end of the Pilot, however, the Company will file a comprehensive evaluation with the Commission."[4]

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[3] William R. Davis, Direct Testimony, Pg. 3, EFIS Item No. 464, EO-2015-0055.
[4] William R. Davis, Direct Testimony, Pg. 14, EFIS Item No. 464, EO-2015-0055.

Until the final comprehensive evaluation is complete, it is difficult, at best, to reasonably estimate the TRC for a fully implemented Flex Pay program.

Q. Does the Flex Pay Pilot program qualify as a demand-side program as defined by the MEEIA rules?

A. It most likely does not. Based on my review of the Flex Pay Pilot program as proposed, it most likely does not qualify as a demand-side program as defined by MEEIA rule 4 CSR 240-20.092(1)(M).

Q. How does MEEIA rule 4 CSR 240-20.092(1)(M) define a demand-side program?

A. 4 CSR 240-20.092(1)(M) states:

> Demand-side program means any program conducted by the utility to modify the net consumption of electricity on the retail customer's side of the electric meter, including, but not limited to, energy efficiency measures, load management, demand response, and interruptible or curtailable load, **but not including deprivation of service** or low-income weatherization;
> [emphasis added]

Q. Emphasis is added on the clause "but not including deprivation of service". Please explain what is meant by "deprivation of service"?

A. Deprivation of service, as used here, refers to a situation where a customer would be deprived of the basic necessity of electricity to a point of potentially being detrimental to that customer.

Q. Will Ameren Missouri's Flex Pay Pilot program lead to deprivation of service?

A. Deprivation of service will most likely be an unavoidable consequence of the Flex Pay Pilot program because the majority of the customers subject to the pilot will be disconnected when the prepaid customer credit balance falls to zero. According to a LIHEAP Clearinghouse Report, pre-payment programs, such as Ameren Missouri's Flex Pay Pilot, are largely targeted at low- and moderate-income households who can least afford to get shut off from service, and it is those customers that overwhelmingly sign up for such service.[5]

Q. Should prepay plans be considered energy efficiency programs?

A. Given the definition of a demand-side program in 4 CSR 240-20-092(1)(M), the Flex Pay Pilot program most likely cannot be considered an energy efficiency program in MEEIA. ACEEE[6] responds to the question of whether prepay plans should be considered energy efficiency programs with the following:

> The short answer is not yet, at least not until more research is conducted. Discussions about the suitability of prepay plans as energy efficiency programs—particularly when targeted to low-income customers—are growing louder and more numerous, and we see a strong need for additional data and rigorous evaluations to help understand the impacts of prepay plans on energy consumption…[7]

See Schedule BJF-r2. Further, deprivation of service can only be determined based on EM&V results during and/or after the Flex Pay Pilot program has been implemented. If the Flex Pay Pilot were initially offered and approved outside of MEEIA, once EM&V has been performed, the Flex Pay Pilot program could possibly be reconsidered for approval as a MEEIA program.

Q. Does Staff have any concern for a program period from October, 2018, through December, 2020?

A. Yes. Staff has a general concern for starting a pilot program such as the Flex Pay Pilot program in MEEIA Cycle 2[8] and concluding it after the end of MEEIA Cycle 2 and

[5] LIHEAP Clearinghouse Report; Prepaid Utility Service, Low-Income Customers and LIHEAP; March, 2014 Report #1.
[6] American Council for an Energy-Efficient Economy.
[7] ACEEE; Should utility prepay plans be considered energy efficiency programs?; February 28, 2017.
[8] Ameren Missouri's MEEIA Cycle 2 programs started March 1, 2016 and will terminate February 28, 2019 with the exception of the pending completion of long-lead projects that occur after February 28, 2019 and completed by January 31, 2021.

in a possible MEEIA Cycle 3[9], should a MEEIA Cycle 3 be approved. One of Staff's general concerns is the transition of the Flex Pay Pilot program from the current MEEIA Cycle 2 into a possible MEEIA Cycle 3, particularly if there are significant changes in the functionality of a possible MEEIA Cycle 3 as compared to MEEIA Cycle 2. Further, is the general concern of program costs and throughput disincentive ("TD") overlapping MEEIA Cycle's and how that potentially affects Rider EEIC[10] filings and prudency reviews.

Q. How does Ameren Missouri propose to recover the Flex Pay Pilot program costs?

A. Ameren Missouri proposes to recover the Flex Pay Pilot program costs by including its costs in the Net Program Cost ("NPC") components of the MEEIA Cycle 2 Rider EEIC.

Q. Is Ameren Missouri seeking recovery of the TD associated with the energy savings of the Flex Pay Pilot program?

A. Yes. Ameren Missouri is seeking recovery of the TD associated with energy savings by including it in the Net Throughput Disincentive ("NTD") components of Rider EEIC.

Q. Is Ameren Missouri seeking additional earnings opportunity for the Flex Pay Pilot program?

A. No.

Q. How immediate will Ameren Missouri receive cost recovery of the additional Flex Pay Pilot program costs and TD by collecting these costs through the MEEIA Cycle 2 Rider EEIC?

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[9] It is anticipated that MEEIA Cycle 3 programs, if approved, would start March 1, 2019
[10] UNION ELECTRIC COMPANY, MO.P.S.C. NO.6, 1st Revised Sheet No. 91 through 2nd Revised Sheet No. 91.11.

A. Ameren Missouri makes a Rider EEIC filing each calendar year to be effective for the subsequent calendar year's February billing month. Ameren Missouri is allowed or may be ordered by the Commission to make one other Rider EEIC filing in each calendar year with subsequent filing to be effective beginning with either the June or October billing month. If the Flex Pay Pilot gets approved as a MEEIA program with an effective date in October, 2018 as proposed, Ameren Missouri could start collecting the additional Flex Pay Pilot program costs and TD within just a few months of program approval. This means that Ameren Missouri would begin collecting the program costs and TD shortly after approval for a pilot program that results in no benefits for all of the residential rate class customers.

Q. Could Ameren Missouri propose the Flex Pay Pilot program outside of MEEIA?

A. Yes.

Q. Could Ameren Missouri recover the program costs of the Flex Pay Pilot program if proposed outside of MEEIA?

A. Yes. If Ameren Missouri proposes a new prepay service outside of MEEIA, and it is approved by the Commission, Ameren Missouri would be allowed to recover the costs of the new prepay service through its residential rates approved for the program, or through residential rates approved in a subsequent general rate case following approval of the Flex Pay Pilot program, if it is initially proposed outside of a general rate case.

Q. Would Staff support Ameren Missouri's Flex Pay Pilot program if proposed outside of MEEIA?

A. Possibly. This is discussed in the rebuttal testimony of Staff witness Ms. Tammy Huber.

Q. Are there other investor-owned utilities ("IOU") that have pilot programs similar to Ameren Missouri's Flex Pay Pilot program?

A. Yes. Currently, electric utilities in at least 34 states offer some version of a prepay payment plan, with the highest number occurring in the Southeast.[11] Cooperatives and municipal utilities offer most of them, and these utilities usually don't have regulatory oversight by a public commission.[12] Further, according to ACEEE, "We know of only two utilities that are allowed by regulators to count savings toward energy efficiency targets: Arizona Public Service (APS) and Salt River Project (SRP), both in Arizona."[13] It should also be noted that the Salt River Project is designated as a quasi-municipality which the Arizona Corporation Commission does not have regulatory authority over.[14] On page 14 of Mr. Davis' direct testimony, he provides a short list of IOU's that are, "examining the option, running pilots, or in various stages of program development."

Q. Does Staff have any information related to the prepay programs of the IOU's listed by Mr. Davis?

A. Yes. In May, 2014, the Kansas Corporation Commission ("KCC") approved an Optional Prepay Service Pilot Program ("the Prepay Pilot") proposed by Westar Energy. In May, 2016, the KCC approved an extension of the Prepay Pilot through October, 2016, and directed Westar to file a status report by November 1, 2016, informing the KCC of the Prepay Pilot results and whether Westar intended to continue, modify, or cancel the Prepay Pilot. In November, 2016, the KCC approved a limited extension of the Prepay Pilot through December 1, 2016, to allow Westar to explain why the Prepay Pilot should be extended

[11] ACEEE; Should utility prepay plans be considered energy efficiency programs?; February 28, 2017.
[12] Ibid.
[13] Ibid.
[14] http://www.azcc.gov/divisions/utilities/electric/srp.asp

further. The KCC also directed Westar to file a detailed report demonstrating the efficacy of the program and identifying the benefits justifying the Prepay Pilot program's cost by November 15, 2016, if it believed a further extension was necessary. On November 16, 2016, Westar filed a Motion to convert the Prepay Pilot into a permanent program based off the status report filed simultaneously. On December 15, 2016, the KCC denied Westar's Motion and ordered customers be transferred off of prepay within six months of the Order. The KCC included in the Order that Westar failed to conduct a cost-benefit analysis of the Prepay Pilot Program as Westar believed traditional, program-specific cost-benefit analysis was too difficult to apply to the Prepay Program. Westar Energy later filed an update that all customers were transferred off of prepay as of March 31, 2017. See Schedule BJF-r3.

Q. Does Staff have any recommendations for the Flex Pay Pilot program should the Commission decide to approve it as a MEEIA program?

A. First, should the Commission approve the implementation of the prepaid service offering proposed by Ameren, Staff recommends the Commission not allow it under MEEIA because there is limited credible evidence supporting prepaid service offerings as energy efficiency programs. If the Commission should approve Ameren Missouri's proposed Flex Pay Pilot program to be included in Ameren Missouri's MEEIA Cycle 2 portfolio, Staff recommends the Commission approve it without the "prepay" portion of the proposed pilot program. On page 2 of Mr. Davis' direct testimony, he describes Ameren Missouri's proposed Flex Pay Pilot program as:

> . . . a behavioral energy efficiency program that offers enhanced communications and **payment flexibility** to help participating customers reduce their energy usage. The Flex Pay Pilot promotes energy efficiency by raising awareness through dramatically enhanced communications that deliver proactive, actionable, and timely

> information and guidance that will drive positive behavior in a manner that encourages participants to reduce their energy consumption. [emphasis added]

An energy efficiency pilot program could be implemented with the same description from Mr. Davis' direct testimony, excluding the payment flexibility wording, to encourage participants to reduce their energy consumption.

Q. Does this conclude your rebuttal testimony?

A. Yes.

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

| | | |
|---|---|---|
| In the Matter of Union Electric Company d/b/a Ameren Missouri's 2nd Filing to Implement Regulatory Changes in Furtherance of Energy Efficiency as allowed by MEEIA | ) ) ) ) | **File No. EO-2015-0055** |

**AFFIDAVIT OF BRAD J. FORTSON**

State of Missouri )
) ss.
County of Cole )

**COMES NOW** Brad J. Fortson and on his oath declares that he is of sound mind and lawful age; that he contributed to the attached *Rebuttal Testimony*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Brad J. Fortson

Brad J. Fortson

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 1st day of February, 2018.

Dianna L. Vaught

NOTARY PUBLIC

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: June 28, 2019
Commission Number: 15207377

# **Brad J. Fortson**

## **Education and Employment Background**

I am a Regulatory Economist in the Energy Resources Department, Commission Staff Division of the Missouri Public Service Commission. I have been employed at the Missouri Public Service Commission as a Regulatory Economist from December 2012 through March 2015 and August 2015 through current.

I received an Associate of Applied Science degree in Computer Science in May 2003, Bachelor of Science degree in Business Administration in May 2009, and Master of Business Administration degree with an emphasis in Management in May 2012, all from Lincoln University, Jefferson City, Missouri.

Prior to first joining the Commission, I worked in various accounting positions within four state agencies of the State of Missouri. I was employed as an Account Clerk II for the Inmate Finance Section of the Missouri Department of Corrections; as an Account Clerk II for the Accounts Payable Section of the Missouri Department of Health and Senior Services; as a Contributions Specialist for the Employer Accounts Section of the Missouri Department of Labor and Industrial Relations; and as an Accountant I for the Payroll Section of the Missouri Office of Administration. From April 1 through July 31, 2015, I worked for the Missouri Office of Public Counsel before joining the Commission once again.

# Brad J. Fortson

## Case Participation History

| Case Number | Company | Issue | Exhibit |
|---|---|---|---|
| HT-2013-0456 | KCP&L Greater Missouri Operations Company | Quarterly Cost Adjustment | Staff Memorandum |
| HR-2014-0066 | Veolia Energy Kansas City | Revenue by Class and Rate Design | Staff Report |
| HR-2014-0066 | Veolia Energy Kansas City | Recommendation of tariff approval | Staff Memorandum |
| GR-2014-0086 | Summit Natural Gas of Missouri, Inc. | Large Volume Service Revenue | Staff Report |
| HT-2014-0286 | KCP&L Greater Missouri Operations Company | Quarterly Cost Adjustment | Staff Memorandum |
| ER-2015-0132 | Union Electric Company d/b/a Ameren Missouri | Recommendation of tariff approval | Staff Memorandum |
| ER-2014-0258 | Union Electric Company d/b/a Ameren Missouri | Revenue by Class and Rate Design | Staff Report |
| ER-2014-0258 | Union Electric Company d/b/a Ameren Missouri | Revenue by Class and Rate Design | Rebuttal & Surrebuttal |
| ER-2014-0351 | The Empire District Electric Company | Revenue by Class and Rate Design | Staff Report |
| ER-2014-0351 | The Empire District Electric Company | Revenue by Class and Rate Design | Rebuttal |
| EO-2015-0240 | Kansas City Power & Light Company | Custom Program Incentive Level | Direct Testimony |
| EO-2015-0241 | KCP&L Greater Missouri Operations Company | Custom Program Incentive Level | Direct Testimony |
| ET-2016-0145 | Kansas City Power & Light Company | Recommendation of tariff approval | Staff Memorandum |
| ET-2016-0146 | KCP&L Greater Missouri Operations Company | Recommendation of tariff approval | Staff Memorandum |
| ET-2016-0152 | Union Electric Company d/b/a Ameren Missouri | Recommendation of tariff approval | Staff Memorandum |
| EO-2015-0240 | Kansas City Power & Light Company | Recommendation of tariff approval | Staff Memorandum |
| EO-2015-0241 | KCP&L Greater Missouri Operations Company | Recommendation of tariff approval | Staff Memorandum |
| ER-2016-0023 | The Empire District Electric Company | DSM Programs and MEEIA Filings | Staff Report |
| ER-2016-0023 | The Empire District Electric Company | DSM Programs and MEEIA Filings | Rebuttal & Surrebuttal |
| ET-2016-0268 | Kansas City Power & Light Company | Recommendation of tariff approval | Staff Memorandum |
| ET-2016-0269 | KCP&L Greater Missouri Operations Company | Recommendation of tariff approval | Staff Memorandum |
| JE-2016-0344 | Kansas City Power & Light Company | Recommendation of tariff approval | Staff Memorandum |
| EM-2016-0213 | The Empire District Electric Company (merger case) | DSM Programs and MEEIA Filings | Rebuttal & Surrebuttal |
| JE-2017-0043 | Kansas City Power & Light Company | Recommendation of tariff approval | Staff Memorandum |
| JE-2017-0044 | KCP&L Greater Missouri Operations Company | Recommendation of tariff approval | Staff Memorandum |
| JG-2017-0038 | Missouri Gas Energy (Laclede) | Recommendation of tariff approval | Staff Memorandum |
| ER-2016-0156 | KCP&L Greater Missouri Operations Company | MEEIA summary and LED street lighting | Staff Report |
| EO-2016-0183 | Kansas City Power & Light Company | MEEIA prudence review | Staff Report |
| EO-2016-0223 | The Empire District Electric Company | Triennial compliance filing | Staff Report |
| ER-2016-0285 | Kansas City Power & Light Company | LED street lighting | Staff Report |
| ER-2016-0179 | Union Electric Company d/b/a Ameren Missouri | LED street lighting | Staff Report |
| ER-2016-0285 | Kansas City Power & Light Company | Response to Commissioner questions | Staff Report |
| ER-2017-0149 | Union Electric Company d/b/a Ameren Missouri | Recommendation of tariff approval | Staff Memorandum |
| ER-2016-0179 | Union Electric Company d/b/a Ameren Missouri | Response to Commissioner questions | Staff Report |
| ER-2017-0166 | KCP&L Greater Missouri Operations Company | Recommendation of tariff approval | Staff Memorandum |
| ER-2017-0167 | Kansas City Power & Light Company | Recommendation of tariff approval | Staff Memorandum |
| EO-2015-0240 | Kansas City Power & Light Company | TRM and Program Incentive Range Changes | Staff Memorandum |
| EO-2015-0241 | KCP&L Greater Missouri Operations Company | TRM and Program Incentive Range Changes | Staff Memorandum |
| EO-2015-0240 | Kansas City Power & Light Company | Recommendation of tariff approval | Staff Memorandum |
| EO-2015-0241 | KCP&L Greater Missouri Operations Company | Recommendation of tariff approval | Staff Memorandum |
| EO-2015-0055 | Union Electric Company d/b/a Ameren Missouri | Recommendation of tariff approval | Staff Memorandum |
| EO-2017-0209 | Kansas City Power & Light Company | MEEIA prudence review | Staff Report |
| EO-2017-0210 | KCP&L Greater Missouri Operations Company | MEEIA prudence review | Staff Report |
| EO-2015-0240 | Kansas City Power & Light Company | Recommendation of tariff approval | Staff Memorandum |
| EO-2015-0241 | KCP&L Greater Missouri Operations Company | Recommendation of tariff approval | Staff Memorandum |
| ER-2017-0316 | Kansas City Power & Light Company | Recommendation of tariff approval | Staff Memorandum |
| ER-2017-0317 | KCP&L Greater Missouri Operations Company | Recommendation of tariff approval | Staff Memorandum |
| ER-2018-0144 | Union Electric Company d/b/a Ameren Missouri | Recommendation of tariff approval | Staff Memorandum |
| ER-2018-0152 | Kansas City Power & Light Company | Recommendation of tariff approval | Staff Memorandum |
| ER-2018-0153 | KCP&L Greater Missouri Operations Company | Recommendation of tariff approval | Staff Memorandum |

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Home > Should utility prepay plans be considered energy efficiency programs?

# Should utility prepay plans be considered energy efficiency programs?

Utility proposals for customer prepayment plans are on the rise. These payment plans require customers to pay in advance for their utility services and, if they run out of prepaid credit, they are remotely disconnected from service until they top up their credit. While utilities can benefit from these plans because of reduced financial risks from overdue payments and other reduced service costs, many consumer advocates are concerned about these plans' effects on health and safety, particularly for low-income participants.

Some utilities and prepay advocates claim that prepayment influences customers to save energy. If this is true, should prepay plans be considered energy efficiency programs? To answer this question, there are a few key questions that we need to ask. What portion of the observed usage reductions result from energy efficiency improvements such as structural building and equipment upgrades, or from energy waste reduction through positive behavioral changes? And what proportion result from behavioral curtailment that cause discomfort, deprivation, and (or) full shut-offs? And how long do these energy savings last? It's important to keep in mind that a central tenet of energy efficiency is the notion that customers do not have to sacrifice comfort or level of service to save energy.

In this blog post, we will discuss recent prepay developments and questions we have regarding prepay as energy efficiency, and we will tee up some areas for further research.

## Recent trends and key questions about energy savings claims

Currently, electric utilities in at least 34 states offer some version of a prepay payment plan, with the highest number occurring in the Southeast. Cooperatives and municipal utilities offer most of them, and these utilities usually don't have regulatory oversight by a public commission. This payment option is often targeted to low-income customers to ensure fewer missed bill payments and reduced costs of energy shut-offs. Proponents of prepay plans suggest that this payment option not only reduces costs and financial risks for the utility but also saves customers money on their energy bills. According to E Source, seven utilities have noted energy savings associated with prepay plans of 5% to 14%. However only a few of these savings claims are supported by full evaluation studies. Also, this level of savings is higher than the roughly 2% to 7% energy savings ACEEE has found with most opt-in behavior change programs.

## Some evaluations exist, but also key questions remain

At this time, we are aware of only a few evaluation studies that quantify energy savings from prepay plans,, some of which combine education and feedback elements. We know of only two utilities that are allowed by regulators to count savings toward energy efficiency targets: Arizona Public Service (APS) and Salt River Project (SRP), both in Arizona. It's worth noting some recent prepay developments for both APS and SRP.

APS is undergoing billing system changes that precluded the expansion of the program, which ended in 2016, beyond the pilot phase. The Arizona Corporation Commission has ordered APS to work with stakeholders to enhance the education and communication offerings for potential future prepay plans to increase their effectiveness.

SRP is continuing their M-Power program, which includes a prepay tariff, an in-home display device, and customer education. SRP's 2016 energy efficiency plan relies on the M-Power program, including the prepay plan, to account for 67% of energy savings in the residential sector and 52% of total portfolio savings. That level of reliance on a single program for energy efficiency savings raises significant questions. To what extent are the energy savings the result of energy efficiency as compared to changes in usage due to disconnection and (or) deprivation? To what extent might energy savings be accounted for by paying in advance as opposed to receiving feedback or education? And how long might these savings last? Some key parties involved in these cases hypothesize that most of the reductions in energy use observed in the SRP M-Power program are due to energy efficiency information and the in-home display unit provided to participants, and do not simply result from the prepay tariff. This uncertainty is one reason that we need more research on prepay plans.

## Many groups are concerned about consumer protections

Aside from the question of energy savings, some consumer advocates are concerned about customer deprivation (i.e., being deprived of the necessary amount of energy for a safe living environment) as a consequence of prepay plans and also about health and safety risks, burdensome transaction fees, and increased risk of shut-offs for low-income and vulnerable customers. There has been some research on the number of disconnections under a prepay plan. For example, a 2015 study of the APS prepaid service plan found that 93% of sampled participants experienced at least one disconnection event over a 13-month period. In the same study, analysis of a smaller group of participants demonstrated that over the same period, 30% experienced at least five disconnections, with most occurring during the peak hot weather months.

Consumer advocates have created consumer protection guidelines for state adoption of prepayment plans. For example, the National Consumer Law Center (NCLC), which opposes prepay service, provides several recommendations to states in regards to prepay plan requirements and protections if states decide to move forward with prepay rates. Additionally, the National Association of Utility Consumer Advocates (NASUCA) passed a resolution, "Urging States to Require Consumer Protections as a Condition for Approval of Prepaid Residential Gas and Electric Service," which advocates for rules on who can participate in prepay plans and how they should be protected once enrolled.

Prepayment plans have clearly raised many serious concerns about consumer protections and access to energy service, with some policymakers and regulators choosing to reject prepay plan proposals. For example, in November 2013, the California Public Utilities Commission (PUC) rejected a proposal from San Diego Gas and Electric for a prepay plan, citing concerns that the proposed plan would induce customers to forgo essential consumer protections and that some would not receive secure notification of impending disconnection. In 2009, Massachusetts dismissed a utility proposal, stating that the plan would have unfairly targeted low-income customers.

## So should prepay plans be considered energy efficiency programs?

The short answer is not yet, at least not until more research is conducted. Discussions about the suitability of prepay plans as energy efficiency programs—particularly when targeted to low-income customers—are growing louder and more numerous, and we see a strong need for additional data and rigorous evaluations to help understand the impacts of prepay plans on energy consumption. Stakeholders need high-quality data and evaluations on three key questions to inform regulatory decisions.

1. **If customers on prepay plans reduce their energy consumption, what actions are they taking to do so?** What proportion of these savings or changes in usage can we attribute to each of the following: (1) energy efficiency retrofits (i.e., physical measures and upgrades), (2) education and behavior change leading to less wasted energy, (3) curtailment behavior to the point of reduced comfort, and (4) complete energy shut-offs due to missed payments?
2. **To the extent that prepay plans lead to changes in usage that we would consider beneficial energy savings (i.e., categories (1) and (2) above), what components of the plans drive these savings?** Available evaluations also suggest that prepay plans have been effective at reducing energy consumption when they include customer education and near-real-time feedback components such as in-home displays or text messages. Given that we know education and feedback strategies can reduce energy consumption, we are interested in determining if, and in what ways, the fact of paying in advance for electricity influences customer behavior.
3. **How do we best ensure that prepay customers receive quality energy efficiency services?** Are prepay plan participants also offered access to weatherization and other energy efficiency services that can lead to long-term improvements in health, comfort, and energy affordability? Utilities should market these energy efficiency programs to customers who enroll in prepay plans to ensure they save the most possible energy.

Meanwhile, ACEEE believes that any prepayment plans that are included in efficiency portfolios should be combined with energy efficiency components to help customers reduce their bills. These components should include energy efficiency information and behavioral feedback at a minimum, but potentially also targeted energy efficiency materials and services. To date, it is largely unknown whether existing prepayment plans specifically include the provision of these energy efficiency components.

It is important to note that if utilities and regulators are looking for ways to help their customers save energy and help meet long-term energy efficiency targets, there are many other options. For examples, see ACEEE research reports on next-generation utility programs and expanding program participation. Another ACEEE report expands on best practice programs for low-income customers. And see our new research report for behavioral program ideas. Like customers with certain prepayment arrangements, customers enrolled in behavioral programs can receive frequent (e.g., daily or high-usage) feedback through email, text, or phone alerts as a way to motivate energy-saving habits.

ACEEE intends to explore the above questions in greater depth based on robust research into prepay plans and their relationship to energy savings. We are currently seeking other organizations to partner with or to financially support this research. If you are interested in partnering with ACEEE to advance research of prepayment plans, please contact Ariel Drehobl at adrehobl@aceee.org.

**Social Sharing:**

**Source URL:** http://aceee.org/blog/2017/02/should-utility-prepay-plans-be

**THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

Before Commissioners: Jay Scott Emler, Chairman
Shari Feist Albrecht
Pat Apple

| | | |
|---|---|---|
| In the Matter of the Application of Westar Energy, Inc. and Kansas Gas and Electric Company for Approval of Revisions to Their General Terms and Conditions to Implement an Optional Prepay Service Pilot Program. | ) | Docket No. 14-WSEE-148-TAR |

**ORDER DENYING MOTION TO CONVERT PREPAY PILOT PROGRAM INTO A PERMANENT PROGRAM**

This matter comes before the State Corporation Commission of the State of Kansas (Commission) for consideration and decision. Having reviewed its files and records and being duly advised in the premises, the Commission finds:

1. On October 1, 2013, Westar Energy, Inc. and Kansas Gas and Electric Company (Westar) filed an Application for approval of its Optional Prepay Service Pilot Program (the Prepay Pilot). The Prepay Pilot is a voluntary program, originally limited to 1,000 customers, allowing those customers the option to prepay for their electric service.[1] Participants in the Prepay Pilot can make smaller payments in advance, rather than paying their full bill at the end of the monthly billing cycle.[2]

2. On April 25, 2014, Westar, Commission Staff (Staff), and the Citizens' Utility Ratepayer Board (CURB) filed a Joint Motion to Approve Stipulation and Agreement, recommending the Commission implement the Prepay Pilot Program upon certain conditions, including a limit on the total number of customers with preexisting arrears balances that participate

[1] Application, Oct. 1, 2013, ¶ 3.
[2] *Id.*, ¶ 6.

in the program to 250 of the maximum 1,000 participants, available on a first come, first served basis.[3]

3. On May 29, 2014, the Commission issued an Order Approving Stipulation and Agreement.

4. On May 11, 2016, Westar, Staff, and CURB filed their Joint Motion to Extend the Term of Prepay Pilot Program explaining that they had contemplated the initial program to last two years, ending on May 29, 2016.[4] The Joint Motion sought to extend the program for an additional five months to allow Westar to collect data covering the summer months and when college students arrive on campus for the upcoming school year.[5] Westar proposed to gather the data by August 31, 2016, and file a status report by November 1, 2016, informing the Commission of the results of the program and whether Westar intended to continue, modify, or cancel the program.[6]

5. On May 17, 2016, the Commission approved the Joint Motion to Extend Term of the Prepay Pilot Program through October 2016, and directed Westar to file a status report by November 1, 2016, informing the Commission of the results of the Prepay Pilot Program and whether Westar intends to continue, modify, or cancel the program.[7]

6. On June 9, 2016, Joint Movants filed a Joint Motion to Amend Prepay Pilot Program to remove participation limits of 250 customers in arrears and 1,000 total participants for the remainder of the pilot program.[8]

7. On June 23, 2016, the Commission issued an Order Granting Joint Motion to Amend Prepay Pilot Program, explaining removing the limitations on participation will allow

[3] Stipulation and Agreement, Apr. 25, 2014, ¶ 13.
[4] Joint Motion to Extend the Term of Prepay Pilot Program, May 11, 2016, ¶ 4.
[5] *Id.*, ¶ 5.
[6] *Id.*, ¶¶ 7-8.
[7] Order Granting Joint Motion to Extend Term of Prepay Pilot Program, May 17, 2016, Ordering Clauses A&B.
[8] Joint Motion to Amend Prepay Pilot Program, June 9, 2016, ¶ 7.

Westar to collect more data, to better evaluate customer interest in the Prepay Program, and to best determine the success of the program and whether it should be extended.[9]

8. On October 25, 2016, Joint Movants filed a Joint Motion to Extend Term of Prepay Pilot Program seeking to extend the Prepay Pilot Program for an additional year to allow Westar to determine whether the pilot program should be made permanent as Westar awaits approval of its acquisition by Great Plains Energy, Inc. pending in Docket No. 16-KCPE-593-ACQ (16-593 Docket).[10]

9. On November 1, 2016, the Commission issued an Order Approving Limited Extension of Westar's Prepay Pilot Program, extending the Prepay Pilot Program until December 1, 2016, to allow Westar to articulate why the program should be extended further.[11] The Commission directed Westar to file a detailed report demonstrating the efficacy of the program and identifying the benefits justifying the program's cost by November 15, 2016, if it believed a further extension was warranted.[12]

10. On November 16, 2016, Westar filed a Motion to Convert Prepay Pilot Program into Permanent Program, including a status report. Based on the status report, Westar seeks to convert the Prepay Pilot Program into a permanent program and lift the participation limits currently in place.[13] Westar also seeks permission to add new participants to the Prepay Program while its Motion is pending.[14] In the alternative, Westar requests a six-month grace period to transition customers off of the Prepay Program and to conclude its contract with the third-party program administrator.[15]

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[9] Order Granting Joint Motion to Amend Prepay Pilot Program, June 23, 2016, ¶ 5.
[10] Joint Motion to Extend Term of Prepay, Oct. 25, 2016, ¶ 8.
[11] Order Approving Limited Extension of Westar's Prepay Pilot Program, Nov. 1, 2016, ¶ 9.
[12] *Id.*,¶ 10.
[13] Motion to Convert Prepay Pilot Program into Permanent Program, Nov. 16, 2016, ¶ 11.
[14] *Id.*
[15] *Id.*, fn. 1.

11. Through October, Westar has collected $305,604 in arrears from customers in the Prepay Program. [16] Westar's total program costs as of October 2016 were approximately $170,000.[17] Assuming an average participation rate of 200 customers, Westar considers the $170,000 in costs as an $850 subsidy for each participant in the Prepay Program.[18] Westar argues when applied to all 600,000 residential customers and spread over the entire 30-month life of the Program, the subsidy is only about $0.28.[19]

12. On November 23, 2016, Staff filed its Opposition to Westar Energy, Inc. and Kansas Gas and Electric Company's Motion to Convert Prepay Pilot Into Permanent Program because the analysis presented in Westar's Status Report does not support making the program permanent.[20] Specifically, Staff faults Westar for failing to conduct a cost-benefit analysis of the Prepay Pilot Program as Westar believed traditional, program-specific cost-benefit analysis was too difficult to apply to the Prepay Program.[21]

13. Staff relies on Attachment B to Westar's Status Report, which states the average number of participants is 164 per month, as opposed to the 200 assumed by Westar.[22] Therefore, dividing the costs among the 164 participants, rather than 200 participants, results in a much higher subsidy than $850; instead, it is close to $1,040. But even using Westar's $850 figure, Staff asserts the subsidy is too high to justify making the Prepay Program permanent.[23] Staff also questions whether any arrears payments collected through the Prepay Program would have

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[16] Westar Report of PrePay Pilot Program, Nov. 15, 2016, p. 3.
[17] *Id.*
[18] *Id.*
[19] *Id.*
[20] Staff's Opposition to Westar Energy, Inc. and Kansas Gas and Electric Company's Motion to Convert Prepay Pilot Into Permanent Program, Nov. 23, 2016, ¶ 7.
[21] *Id.*, ¶ 8.
[22] *Id.*
[23] *Id.*

been collected through Westar's other arrears programs.[24] Westar has produced no evidence that any arrears payments collected through the Prepay Program would not have been collected through other means. In essence, Staff concluded the program's costs, primarily incurred through a third-party provider, are too high to justify making the program permanent.[25]

14. On November 28, 2016, CURB filed its Opposition to Westar Energy, Inc. and Kansas Gas and Electric Company's Motion to Convert Prepay into Permanent Program, mirroring Staff's concerns. CURB agrees with Staff that Westar's Status Report does not support making the Program Permanent and opposes Westar's request to add new participants to the Prepay Program while the Motion is pending.[26] Like Staff, CURB is troubled by Westar's failure to perform a cost-benefit analysis of the Prepay Program and by the $850 subsidy for each participant.[27] CURB believes the Program's current costs, particularly those incurred through a third-party provider, are too high to support a permanent Prepay program.[28]

15. The Commission agrees with both Staff and CURB that Westar's Status Report fails to demonstrate sufficient benefits of the Prepay Program to make it permanent. Westar failed to provide an estimate of how much of the $305,604 arrears debt collected through the Prepay Program would not have been collected absent the Prepay Program. Without such an estimate, there is no way to know how much, if any, of the $305,604 collected through the Prepay Program would have been recovered by Westar through other means.

16. By its admitted failure to produce a traditional, program-specific cost benefit analysis, Westar cannot demonstrate the efficacy of the pilot program and certainly cannot meet

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[24] *Id.*, ¶ 9.
[25] *Id.*, ¶ 10.
[26] CURB's Opposition to Westar Energy, Inc. and Kansas Gas and Electric Company's Motion to Convert Prepay into Permanent Program, Nov. 28, 2016, ¶ 11.
[27] *Id.*, ¶ 12.
[28] *Id.*, ¶ 13.

its burden to prove establishing a permanent Prepay Program is justified. Westar has not presented a sufficient record to justify making the Prepay Program permanent. Accordingly, the Commission denies Westar's Motion to Convert Prepay Pilot Program into Permanent Program.

17. In an October 25, 2016 Joint Motion to Extend Term of Prepay Pilot Program, the Joint Movants requested that Westar be given time to transition customers off of the program and to provide contractually required notice to the contractor administering the program to cancel the services agreement before discontinuing the program.[29] In its Motion to Convert Prepay Pilot Program into Permanent Program, Westar clarified that it sought six months to transition customers off of the Prepay Program and to conclude its contract with its third-party program administrator.[30] Since neither Staff nor CURB object to a six-month transition period, the Commission has no reason to question the reasonableness of a six-month transition period. Accordingly, Westar has six months from the date of this Order to transition customers off of the Prepay Program. During the transition period, Westar cannot add new participants to the Prepay Program.

**THEREFORE, THE COMMISSION ORDERS:**

A. Westar's Motion to Convert Prepay Pilot Program into Permanent Program is denied. Westar has six months from the date of this Order to transition customers off the Prepay Program.

B. The parties have fifteen days from the date this order was electronically served to petition for reconsideration.[31]

C. The Commission retains jurisdiction over the subject matter and the parties for the purpose of entering such further orders as it deems necessary.

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[29] Joint Motion to Extend Term of Prepay Pilot Program, Oct. 25, 2016, ¶ 13.
[30] Motion to Convert Prepay Pilot Program into Permanent Program, fn. 1.
[31] K.S.A. 66-118b; K.S.A. 77-529(a)(1).

**BY THE COMMISSION IT IS SO ORDERED.**

Emler, Chairman; Albrecht, Commissioner; Apple, Commissioner

Dated: DEC 15 2016

Amy L. Green
Secretary to the Commission

BGF

EMAILED

DEC 15 2016

## CERTIFICATE OF SERVICE

14-WSEE-148-TAR

I, the undersigned, certify that the true copy of the attached Order has been served to the following parties by means of

Electronic Service on DEC 15 2016.


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DEC 15 2016