Exhibit No.:

Issue: Program Design Witness: Adam Blake

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Sponsoring Party: Brightergy, LLC
Case No.: EO-2015-0240 &

EO-2015-0241

Testimony Date: December 21, 2015

MISSOURI PUBLIC SERVICE COMMISSION

Docket No.: EO-2015-0240, EO-2015-0241

REBUTTAL TESTIMONY

OF

ADAM BLAKE

ON BEHALF OF

BRIGHTERGY, LLC

Kansas City, Missouri December 21, 2015 Q: Please state your name and employer.

3 A: Adam Blake, CEO at Brightergy.

Q: Please describe your professional duties at Brightergy.

A: I'm responsible for the strategic direction of the company and I manage the executive team that includes managers of sales, marketing, public affairs, regulatory affairs, operations, accounting, and technology.

Q: Have you testified previously in a Commission docket?

13 A: Yes, I submitted Testimony in dockets ET-2014-0059, EO-2015-0055 and ER-2014-14 0370.

Q: What is Brightergy's interest in this docket?

A: As a trade ally, Brightergy helps its customers utilize KCP&L's MEEIA program to invest in efficiency measures which reduce their electricity consumption, helping them reduce their utility spend and reduce the need for costly investment in infrastructure by electricity providers. Brightergy also represents a critical perspective that is otherwise unrepresented in this docket, the perspective of commercial customers that participate in the MEEIA program and invest in energy efficiency projects.

Q: What experience does Brightergy have selling energy projects to commercial customers?

A: Brightergy has more than 600 commercial customers and has completed over 1,400 commercial energy projects. The majority of Brightergy's customers are in the state of Missouri. Brightergy also has experience providing energy projects in 15 states and energy services in 49 states. Brightergy has generated approximately 4,000 sales proposals for energy projects in the state of Missouri. Brightergy has particularly strong experience serving public and private school customers in Missouri. Brightergy has provided energy services or projects for over 85 school clients representing over 400 individual schools.

Q: What is Brightergy asking the Commission to do in this docket?

A: Brightergy is asking that the Commission take similar action to that taken in the recent Ameren case. Brightergy asks that the Commission order the parties to engage in further discussions in an effort to address these concerns. Absent constructive resolution of these issues

through negotiations, Brightergy asks that the Commission either reject KCP&L's programs entirely or order KCP&L to continue the existing MEEIA Cycle I Customer Rebate Program.

Q: What concern do you have with KCP&L's proposed MEEIA Cycle II plan?

 A: KCP&L is proposing a dramatic change in its Custom Rebate Program that results in a reduction in incentive levels offered to commercial customers. KCP&L's proposed incentive structure and levels disproportionately penalize certain types of customers such as schools and nonprofit organizations. Brightergy is concerned the proposed program, for commercial customers, is possibly a waste of customer money and certainly a major step backwards for energy efficiency in Missouri. Given these facts, Brightergy is simply proposing that KCP&L continue its existing Custom Rebate Program from MEEIA Cycle I.

Q: Can you describe KCP&L's existing Custom Rebate Program?

A: I refer the Commission to pages two and three of Kim Winslow's Direct Testimony filed in this docket. Her testimony accurately explains the program structure under MEEIA I.

Q: Are there other changes to incentive levels that concern you?

A: Yes, KCP&L is placing a high emphasis on moving LED lighting to standard incentive levels compared to custom incentive levels under MEEIA Cycle I.

Q: Why does KCP&L's emphasis on standard incentive levels for LED lighting versus custom incentive levels cause Brightergy concern?

A: In general, Brightergy could support this change if there are appropriate incentive levels. However, the incentive levels provided by KCP&L thus far are either missing or too low to provide an actual incentive to install LED projects over alternative options. The standard incentive numbers we have seen, for example, might only cover 5-20 percent of the actual cost. Given that the customer's decision to make a change to LED lighting is directly tied to these incentives, this minimal level of incentive reduces the likelihood that customers will actually utilize this energy efficiency tool. Just as important, Brightergy is concerned that KCP&L can change, or eliminate the program entirely, with little notice to customers or input from stakeholders.

Q: KCP&L claims it needs flexibility to adjust or eliminate incentive levels as the market changes. Do you agree?

A: Yes, there are times when it may be appropriate to change incentive levels within a three year period. However, changes should be made with input from stakeholders and there should be sufficient notice provided to customers and trade allies. Under its proposal, KCP&L could make this change unilaterally without input from stakeholders. Many customers make decisions and

then it might take weeks, for example, to submit an application.

Q: Are there any economic benefits of the MEEIA program?

A: Most certainly. A successful efficiency incentive program will benefit the local economy in two ways. First, customers who invest and realize savings on their energy spend can use that money to reinvest in their local business, expand operations, hire additional employees, and find more overall economic efficiency. Second, a successful program will encourage employment of trade allies and local contractors to perform installations and perform general contracting work. These are dollars that would not be invested locally but for the program.

Q: And these benefits would not be realized under KCP&L's proposed MEEIA Cycle II program?

A: Correct. The critical factor here is the nudge that encourages the customer who is on the fence to go forward with an energy efficiency project, because of proper incentives, when it was unlikely to do so otherwise. Without the investment, the customer continues to pay more on utility bills, money which is not reinvested in the business or used to hire more employees. Likewise, the workers who would be paid to perform the retrofit work are left out. But importantly, without energy efficiency investments, customers continue to use more and more energy, creating a need for the utility to invest in costly power plants. Those power plant additions increase the cost and rates for all customers. At a time when the Federal Government has sought to reduce carbon emissions, energy efficiency investments are a key opportunity to help meet this federal mandate. The energy efficiency programs contemplated in this docket are intended to be a more strategic and more affordable way to meet new energy demand.

Q: Why is this incentive change concerning?

A: As a trade ally focusing on underserved markets, including midsize commercial and industrial businesses, local municipalities and school districts, Brightergy has developed expertise in the types of program incentives which actually succeed in incentivizing investment in energy efficiency projects. KCP&L's MEEIA Cycle I program was highly successful. A shift

to a flat, per-kWh incentive based only on first-year savings at the incentive level KCP&L is proposing is unlikely to encourage energy efficiency investments with commercial customers. When an incentive level is too low the incentive is simply rewarding customers that were going to do the project in the first place. As such, this energy efficiency opportunity is lost.

Q: Why will KCP&L's flat rate per kWh custom incentive level fail to incentivize investment?

A: Simply put, the up-front cost of installation is a barrier to many of the commercial clients Brightergy serves. Although every little bit helps when it comes to efficiency investments, when incentive levels are as low as KCP&L is proposing, they do little to actually cause a customer to invest in an efficiency project. Customers will take the free money and the utility may claim their program is successful because they have spent the budget dollars, but in reality the proposed incentive levels do little to incentivize additional energy efficiency projects that wouldn't already happen without the incentive. This is what is more commonly known as "free ridership" and should be a significant concern to the Commission.

Q: Is the program more successful if the rebate rates are as low as possible?

A: No. The Commission should not correlate program success with low rebate levels. As I have noted, extremely low rebates lead to an unfavorable returns on investment. Rebates which do not properly incentivize new investments do not meet the Commission's goals of bringing benefits to all ratepayers, regardless of whether they participate in the program. If a program does not actually result in new energy efficiency projects by providing sufficient incentive levels then it should not be considered successful. There is a critical point where rebates are successful. Rebates that are too low fail to provide the incentive for customers to make the necessary investment. On the other hand, rebates that are too high are wasteful in that they provide too much incentive and shift the investment from the affected customer to the other customers. As previously mentioned, the critical point is that level of rebate necessary to tip the customer that is sitting on the fence to make the energy efficiency investment.

Q: How does the Brightergy proposal overcome this investment barrier?

A: Extending KCP&L's Cycle I business Custom Rebate Program into the Cycle II timeframe is a simple step that will reduce the upfront cost which prevents investment. It has been Brighergy's experience that the Cycle I rebate more appropriately meets the previously stated goal of incentivizing those customers sitting on the fence to make the necessary investment.

Q: Why do you believe KCP&L's proposed program will not incentivize businesses to invest in energy efficiency projects?

A: In working with commercial customers to help address their energy concerns, Brightergy has learned that the payback period is a critical factor in the decision to invest. The longer the payback period on that investment, the less likely a potential customer is to invest. Brightergy has experience selling energy related projects to customers in Missouri and understands the financial metrics necessary to drive a customer to invest in energy projects.

Q: What type of payback period is necessary to drive investments in energy efficiency projects?

A: Brightergy has seen paybacks in the two year range drive customers to invest in energy efficiency. In our experience, successful energy efficiency programs across the country structure incentive levels to achieve paybacks in the 1.5 to 2 year range. Even KCP&L has long recognized a two year payback is an appropriate marker to incentivize customers to invest in energy efficiency projects. Since 2007 KCP&L has offered the Custom Rebate Program and has offered some form of business incentive levels to reduce the payback to two years.

Q: Are there other concerns with a flat, per-kWh approach?

A: Yes, Brightergy is concerned that a rebate structured on first-year savings will drive customers to install the least expensive system possible, not the system with the best energy savings potential, or one that will last for the estimated useful life. For instance, customers can compromise on quality and workmanship if they are only focused on first-year savings. There are many shortcuts contractors can take, for example, when retrofitting existing equipment with newer and more efficient equipment. KCP&L's current Custom Rebate Program, which we are seeking continuation of, encourages customers to invest in a deeper level of sustained energy savings.

Q: Do you agree with Kim Winslow's testimony that one of the primary benefits of a flat rate incentive is the simplicity?

A: No, I do not agree. The existing Custom Rebate Program which offers a buy down to a two year payback or 50 percent of the project cost is more straightforward for customers. Customers understand the concept of a two-year payback. Payback is the single biggest metric businesses utilize when making decisions on investing in energy savings projects. Both the existing Custom Rebate Program and flat rate per kWh approach are easy enough for trade allies

and program implementers to understand whereas the existing Custom Rebate Program is much simpler for customers to understand.

Q: Do you agree with Kim Winslow's testimony that a flat rate per kWh incentive is in better alignment with custom rebates in similar Midwest utility programs?

A: No, I do not. Table 1 below shows a partial list of comparable custom rebate programs to KCP&L's existing Custom Rebate Programs both in the Midwest and other parts of the U.S. Efficiency programs have varying levels of details so it is difficult to summarize in a table as Ms. Winslow did in her testimony and as illustrated below in Table 1. It can be difficult to capture an "apples to apples" comparison. However, the fact is there are many rebate programs in the Midwest that are similar to the existing Custom Rebate Program. There are also many additional programs outside the Midwest that are utilizing a 50 percent or 1.5-2 year payback incentive level.

Utility	Custom Rebate Overview
KCP&L	50% of project costs or two-year payback, whichever is less
Empire District Electric- Missouri	50% of project costs or two-year payback, whichever is less
MidAmerican- Iowa	60% of project costs or two-year payback, whichever is less
MidAmerican- Illinois	60% of project costs or two-year payback, whichever is less
Alliant Energy- Wisconsin	50% of project cost or 1.5-year payback, whichever is less
Xcel Energy- Wisconsin	50% of project cost or 1.5-year payback, whichever is less
National Grid- Rhode Island	50% of project costs or one-year payback, whichever is less
National Grid- Massachusetts	50% of project cost or 1.5-year payback, whichever is less
National Grid- New York	50% of project cost or one-year payback, whichever is less
Empire District Electric- Arkansas	50% of project cost, buy down to two-year payback, or 30 cents per kWh, whichever is less
We Energies- Wisconsin	50% of project cost or 1.5-year payback, whichever is less
Eversource- Massachusetts	50% of project cost or two-year payback, whichever is less

Baltimore Gas & Electric-MD	50% of project costs or 1.5-year payback, whichever is less
FirstEnergy- Maryland	50% of project costs or 1.5-year payback, whichever is less
Wisconsin Public Service	50% of project cost or 1.5-year payback, whichever is less

Finally, it is important to remember that the target market for this program are commercial and industrial customers. Usually, such customers are fairly sophisticated. As such the focus should not be on simplicity, but on creating the necessary incentive to reach the goals of the overall program.

Q: Are these concerns equally valid for customers in both KCP&L and KCP&L-GMO service territories?

A: Yes.

Q: Will the change from a two-year payback buy down to a flat \$0.10/ kWh incentive in the Custom Rebate Program hinder achievement of the MEEIA goal of achieving all cost-effective demand side savings in a way that is beneficial to all customers in the customer class in which the programs are proposed, regardless of whether the programs are used by all customers?

A: Yes. By program design, the existing Custom Rebate Program is cost-effective because each project must pass the cost benefit test required under PSC rules. Based on Brightergy's experience providing thousands of energy project proposals to customers in the state of Missouri, we know that 10 cents per kWh simply is not a high enough incentive for the super majority of customers to invest in energy efficiency. I provide an example later in this testimony of a specific project that would likely not move forward under the proposed incentive levels but would move forward under the existing Custom Rebate Program. Because the project would still be cost-effective under the existing Custom Rebate Program and by changing the program to a flat 10 cent per kWh incentive, the customer would not move forward, then the new proposed program does not meet the goals of achieving all cost-effective demand side savings.

O: Please explain Brightergy's proposal.

- 30 A: We believe customers will benefit from KCP&L continuing its current, tested, Custom
- 31 Rebate Program. Many business have a two-year break-even threshold for deploying capital.
- 32 Capital budget dollars are competitive within commercial and industrial organizations.

Customers have many choices where to spend their capital. If the return on an energy efficiency project is not competitive with alternative options, commercial customers will invest their capital in other projects. KCP&L recognized this in MEEIA I and initially formatted their programs with this in mind. The utility does not provide an incentive for projects that payoff on their own, without incentives, within two years.

Q: Please provide an example using a hypothetical project to illustrate the difference between the existing Custom Rebate Program and KCP&L's proposed custom rebate program for businesses.

A: Yes. If hypothetical Company A is considering investing \$10,000 in energy efficiency measures, it will consider how long it will take for that investment to pay off. Assuming that investment will save the Company 20,000 kWh/yr over 10 years, under KCP&L's proposed plan, assuming the investment would be eligible for a \$0.10/kWh first-year savings incentive, the payment to Company A would be \$2,000. This, along with the annual energy savings, assuming a cost of energy of \$0.09/kWh, would result in a payback period of 4.4 years to recoup that original investment.

Q: Would the MEEIA Cycle I existing Custom Rebate Program reduce that payback period?

A: Yes. With the same initial investment and energy savings, the existing Custom Rebate Program would provide Company A with an incentive equal to 50% of the project cost, meaning the incentive payment would be \$5,000 instead of \$2,000. This would bring the payback down to 2.8 years.

Q: Please explain the two-year buydown provision.

A: If Company B planned to make the same investment as Company A, but had twice the run-hours (for a lighting project, for example), its rebate would be limited by the two-year buydown so as not to over-incentivize that investment. If Company B saved 40,000 kWh/yr, its annual savings would be \$3,600. With a \$10,000 project cost, Company B's investment would be paid back in a bit more than two and a half years, before any incentives. An incentive of 50% of the up-front project cost would over-incentivize this investment. Instead of the up-front rebate, KCP&L would pay the project cost above what would result in a two-year payback. At \$3,600 annual energy savings, for a \$10,000 project cost to have a two-year payback the incentive would thus be limited to \$2,800.

Q: Does Brightergy's proposal and the existing MEEIA Cycle I Custom Rebate Program pass Commission approved cost benefit tests?

A: Yes. Currently any applications for KCP&L's Custom Rebate Program have to pass the societal test. We believe in MEEIA Cycle II that a custom rebate program as Brightergy has proposed would still need to pass the societal or Total Resource Cost test (the "TRC Test").

Q: What happens to the effectiveness of custom rebates if KCP&L's avoided costs change in the future?

A: The TRC test utilizes the utilities' avoided cost of energy as a component in the cost/benefit test. As the utilities' cost changes, the ratios in the TRC will change as well. In summary, the TRC is an effective test even with a changing variable. It's certainly possible some projects would not pass the TRC if the utilities' costs change. That is the reason you have a standard cost/benefit test.

Q: Has Brightergy advocated for this policy in other dockets?

19 A: Yes. Paul Snider testified at the hearing in EO-2015-0055, in which Ameren asked the Commission to approve its proposal for its MEEIA Cycle II plan.

Q: Did Ameren object to the proposal?

 A: Ameren offered an objection in its final Reply Brief in that docket related to the timing of Brightergy's request. It did not articulate a policy, legal, or business argument against the policy. It argued only that the Commission should take more time to study the plan.

Q: Will any customers invest in efficiency measures under KCP&L's proposed change?

A: Certainly some will, particularly those customers that have already been considering investments. It may make economic sense for some customers to invest absent any incentives at all. There are some customers that will invest in very efficient LED lighting, for example, without incentives due to higher quality light, aesthetics, very compelling economics, and other reasons. These are not the customers the MEEIA program should target. Instead, programs should focus on customers who would not otherwise invest but-for the incentives permitted under the program. Without these types of customers, the MEEIA program may as well not exist.

Q: Will the custom rebate structure under MEEIA Cycle I program incentivize customers to invest in energy efficiency?

A: Yes, the existing Custom Rebate Program will make the economic case that the efficiency investment makes good business sense. The Commission can rest assured the data from MEEIA Cycle I supports the representations I have made in this testimony.

Q: What will be the result if the Commission were to approve KCP&L's proposed change to its program?

A: Investment in energy efficiency among commercial customers will slow considerably for the next three years, with a resultant decline in economic activity surrounding it. There will be a loss in jobs among companies that work in energy efficiency. Many Missourians trained with skills such as energy auditing, energy analysis, and energy retrofits will lose their jobs.

Q: Are there any particular types of customers that will be disadvantaged or benefit more than others under KCPL's proposed MEEIA Cycle II custom rebate program?

A: Yes, public school districts are one customer type, in particular, that will be significantly penalized by KCP&L's proposed change. According to Ms. Winslow's testimony, ~80 percent of the custom rebates under MEEIA Cycle I were for LED lighting. School lighting systems typically have lower operating hours compared to commercial businesses. As a result of lower operating hours, a move to flat rate per kWh penalizes schools more dramatically relative to other types of customers. Under the proposed program changes there will be a dramatic reduction in school participation.

Q: Are there any other types of customers that will be disadvantaged relative to other customers?

A: Yes, nonprofit customers such as churches, youth centers, homeless shelters and others will be penalized more so than for-profit companies. Under the current Custom Rebate Program, the incentive is often times sufficient enough for customers to finance their energy project with the energy savings from the project. Tax exempt organizations, in particular, often rely on financing to install efficiency projects. For profit companies often have other incentives such as Section 179(d) tax benefits. For-profit companies are often more likely to have a capital budget for energy projects than nonprofit organizations.

Q: What will be the practical impact of the program design for incentivizing investments that would have been made even without a MEEIA program?

A: There is no doubt that some commercial customers will make investments in efficiency during the course of MEEIA Cycle II, regardless of the incentive levels. KCP&L's shift in program design will incentivize well-funded for-profit businesses that would have completed the efficiency project even without the incentive. In that same manner, it penalizes less fortunate customers that didn't already plan on making investments in efficiency.

Q: Are there other issues in the case that concern Brightergy?

A: Yes. KCP&L wants the ability to terminate its MEEIA Cycle II program upon thirty days' notice.

Q: What is the specific concern?

A: Most customers budget for capital projects. Frequently, funds for discretionary projects are not released until the fourth quarter. If KCP&L is able to quickly alter programs without input from stakeholders, customers that have budgeted money may be waiting for a rebate that is no longer available. Brightergy understands the need to potentially adjust programs year to year as the market changes, but is concerned about the ability to take away incentives in the second half of the year. The ability for KCP&L to quickly terminate the program also makes it difficult for trade allies to participate. Abruptly terminating the program can lead to abrupt job losses with trade allies. It's important to have programs that provide a more friendly business environment and certainty for customers.

Q: Does this conclude your testimony?

A: Yes.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Kansas City Power & Light Company's Notice of Intent to File an Application for Authority to Establish a Demand-Side Programs Investment Mechanism) Docket No. EO-2015-0240)			
In the Matter of KCP&L Greater Missouri Operations Company's Notice of Intent to File an Application for Authority to Establish a Demand- Side Programs Investment Mechanism)			
AFFIDAVIT OF ADAM BLAKE				
STATE OF MISSOURI)) ss COUNTY OF JACKSON)				
Adam Blake, being first sworn on his oath,	states:			
 My name is Adam Blake. I am Chief Executive Officer at Brightergy, LLC. Attached hereto and made part hereof for all purposes is my Rebuttal Testimony. I hereby swear and affirm that my statements contained in this affidavit and in the attached Rebuttal Testimony are true and correct to the best of my knowledge and belief. 				
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	Adam Blake			
Subscribed and sworm with the this 21st day of Decen NOTARY SEAL N	Mun h. Mann Notary Public			
wy Commission expires 10 1011 2014.				