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MISSOURI PUBLIC SERVICE COMMISSION

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CASE NO. ER-2012-0166

REBUTTAL TESTIMONY

OF

WILBON L. COOPER

ON

BEHALF OF

UNION ELECTRIC COMPANY d/b/a Ameren Missouri

St. Louis, Missouri August 2012

Ameren F. 37 Date 10-11-12 hoponul 4F File No FR-2012-0166

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1	REBUTTAL TESTIMONY
2	OF
3 4	WILBON L. COOPER
5	CASE NO. ER-2012-0166
6	Q. Please state your name and business address.
7	A. My name is Wilbon L. Cooper. My business address is One Ameren
8	Plaza, 1901 Chouteau Avenue, St. Louis, MO 63103.
9	Q. Are you the same Wilbon L. Cooper who filed direct testimony in this
10	proceeding?
11	A. Yes, I am.
12	Q. What is the purpose of your rebuttal testimony in this proceeding?
13	A. The purpose of my rebuttal testimony is to provide comments and
14	evidence that address and rebut the portions of the Rate Design and Class Cost-Of-
15	Service Report on the allocation of production plant and/or class revenue requirements
16	sponsored by Missouri Public Service Commission Staff ("Staff") witness Michael
17	Scheperle, and the direct testimonies on the same issues filed by Office of the Public
18	Counsel ("OPC") witness Barbara A. Meisenheimer, and Missouri Industrial Energy
19	Consumers ("MIEC") witness Maurice Brubaker.
20	Additionally, I will provide comments and evidence that address and rebut the
21	portions of the Rate Design and Class Cost-Of-Service Report on rate design sponsored
22	by Staff witness Scheperle, and, also, certain portions of that report and Staff's Revenue
23	Requirement Cost-Of-Service Report sponsored by Staff witness Lena Mantle on the
24	Company's Fuel Adjustment Clause Tariff Sheets. Other Company witnesses may also

1	provide addit	ional rebuttal testimony to address certain issues raised by these witnesses.
2	In addition,	want to state that the Commission should not construe the fact that I or
3	another Ame	eren Missouri witness do not specifically address a particular witness'
4	position or a	rgument as endorsement of that position or argument. In the interest of
5	brevity, the	Company is limiting its rebuttal testimony on allocation and rate design
6	issues to the 1	najor points of disagreement between the parties.
7		I. <u>PRODUCTION PLANT ALLOCATION</u>
8	Q.	Please summarize the position stated by each of the parties in direct
9	testimony as	it relates to the allocation of fixed production plant costs among the
10	Company's i	rate classes for ratemaking purposes in this case.
11	А.	The following provides a high level summary of each party's
12	recommendat	ion on the allocation of fixed production plant:
13	•	Company - The Company utilized a four non-coincident peak ("4 NCP")
14		version of the Average and Excess Demand Allocation methodology
15		("A&E") that gives weight to both a) class peak demands and b) class
16		energy consumption.
17	8	Staff - The Staff utilized a Base, Intermediate, and Peaking ("BIP")
18		method that is a time-differentiated method that assigns production plant
19		costs to three rating periods: (1) peak hours; (2) secondary peak, or
20		intermediate hours; and (3) base loading hours.
21	e	OPC - OPC utilized a four coincident peak ("4 CP") version of the Peak
22		and Average methodology ("P&A") that gives weight to both a) adjusted
23		class peak demands and b) class energy consumption. OPC also prepared

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1		a second study that utilized an Average and Excess Demand Allocation
2		methodology which is similar to the Company's methodology.
3	•	MIEC - MIEC also recommends an A&E methodology; however,
4		MIEC'S methodology only uses the July and August system peaks.
5		Because there is only a small difference between results produced by
6		MIEC'S method and the Company's results, MIEC has accepted for this
7		case the results of the Company's recommended 4 NCP version of the
8		Average and Excess Demand Allocation methodology in order to narrow
9		the issues.
10	Q.	Have you prepared a table that summarizes, by customer class, the
11	production]	plant allocation and associated production plant allocation factors that

12 are produced by each of the parties' recommended methodologies?

13

A. Yes, Table 1 depicts this summary.

Table 1	1	Table
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Party	Method	RES	SGS	LGS/SPS	LPS	LTS	Lighting
Company & MIEC	4 NCP – A&E	46.89%	10.65%	28.47%	7.23%	6.04%	0.72%
MPSC Staff	Base- Intermediate- Peak	47.37%	10.70%	27.71%	7.40%	6.11%	0.70%
OPC 1 (P&A)	4 CP – A&E	41.65%	10.00%	30.49%	8.75%	8.83%	0.30%
OPC 2 (A&E)	4-NCP – A&E	46.88%	10.65%	28.47%	7.23%	6.05%	0.73%

Q. Is there a common element in the production plant allocation methods listed in Table 1?

3 Yes, the common element in all the methods is the use of class kilowatt-Α. hours to allocate a portion of production plant. The references to "A" (Average) or 4 5 "Base" for each of the methods shown in Table 1 reflects the fact that class average demands are calculated by dividing annual class energy consumption by 8,760 hours, 6 7 which is the total number of hours in a year. In addition, with regard to each of the methods referenced with an "A" in Table 1, the class averages are computed as a 8 9 percentage of the system average demand and are then multiplied by the system's annual 10 load factor of approximately 55%. As a result, 55% of the Company's production plant 11 investment is allocated on an energy basis in each of the "A" methods. The Staff's BIP 12 method produces a comparable value of approximately 56% allocated on an energy basis. 13 Therefore, the major differences among the parties lie with the allocation of the 14 remaining 44%-45% of production plant investment. These differences are driven by the 15 use of "Excess" demands associated with Non-Coincident Peaks vs. total Non-Coincident 16 or Coincident Peaks.

Q. Please explain the differences between the A&E method, which was
used by the Company, MIEC, and in the OPC's second study vs. the P&A method,
which is used in the OPC's first study.

A. The A&E method first allocates production plant investment based on the average demand on the Company's system by the various customer classes. Any excess demand above the average demand is then allocated based on each class' contribution to these excess demands. The P&A method also initially allocates production plant

investment to customer classes based on average demand, but instead of allocating just
 the excess average demand to the cost causing classes the P&A method allocates the
 entire peak demand to the classes.

4 As the Commission specifically has found in each of the Company's last two rate 5 cases - Case Nos. ER-2010-0036 and ER-2011-0028 - the use of the P&A method is inherently flawed because it double counts the average demand of customer classes. This 6 7 double counting results from the previously described use of class average demand for a portion of production plant allocation (i.e., the 55% system load factor weighting piece) 8 9 and the use of class peak or non-coincident peak demands, which include an average 10 demand component, for the remaining allocation of production plant (i.e., 44-45%). 11 More specifically, this double counting causes customers with higher load factors to be 12 allocated an inequitable share of production plant investment. And because high load 13 factor customers demonstrate a better correlation between average demands and peak 14 demands than do lower load factor customers, higher load factor customers receive a disproportionate share of the non-average demand (i.e., 44-45%) portion of production 15 16 plant investment under the P&A method.

As a result of this double-counting flaw, in each of the Company's last two rate cases, the Commission found that the use of the A&E method is more equitable than the P&A method. The A&E method more appropriately and equitably deals with "Excess" demands (i.e., the <u>difference</u> between class non-coincident or peak demands and class average demands) for application of the remaining 44-45% of production plant investment, thus avoiding any double counting of demands.



Q. Please summarize the Company's overall position regarding the
 allocation of fixed production plant costs.

A. The Company's net investment in fixed production assets represents approximately 72% of net original cost rate base in this case. Consequently, the variations among the Company, MIEC, Staff and the OPC with respect to the allocation of the cost of these assets, as depicted in Table 1 above, contribute materially to the significant difference among the parties in class cost of service requirements in this case.

8 In my opinion, the Company's 4 NCP A&E allocation methodology is superior to 9 the proposals offered by the other parties in this case because the Company's method is 10 more balanced in its consideration of both the energy and excess demand requirements 11 for serving each customer class. Consideration of energy usage is important due to its 12 relevance in the type of generation on the Company's system, while the consideration of demand is also relevant due to its importance in the magnitude of the capacity of the 13 14 Company's generating facilities, and both are important in determining an equitable 15 allocation of costs. The A&E method assigns a weight of 55% to class energy 16 requirements and 45% to class excess demands, based on the Company's annual system 17 load factor of 55% during the study period. Additionally, the Company has utilized the 18 4 NCP A&E methodology for its most recent cases before the Commission and the 19 continued use of this allocation methodology will promote cost of service stability.

The Company is not suggesting that there is a single methodology that can be deemed as the absolute, correct, and only method for the allocation of fixed production plant. However, the Commission has adopted the 4 NCP A&E method in the Company's two most recently adjudicated electric rate cases (Case Nos. ER-2011-0028 and ER-

1	2010-0036). It would be desirable to continue the use of the 4 NCP A&E method in this
2	case as well because there has been no material change in the Company's load
3	characteristics, and also because such consistency affords all parties the ability to rely
4	upon a standardized methodology whose results could be reasonably predicted. All these
5	considerations contribute to the prevention of material case-to-case swings in class
6	revenue responsibility for the most significant portion of the Company's investment in
7	rate base.
8	II. <u>CLASS REVENUE REQUIREMENTS</u>
9	Q. Please reiterate the Company's position on the allocation of the
10	revenue increase authorized in this case.
10 11	revenue increase authorized in this case.A. As stated in my direct testimony, the Company is proposing to allocate the
10 11 12	 revenue increase authorized in this case. A. As stated in my direct testimony, the Company is proposing to allocate the requested increase in this case on an across-the-board basis, with an equal percentage
10 11 12 13	 revenue increase authorized in this case. A. As stated in my direct testimony, the Company is proposing to allocate the requested increase in this case on an across-the-board basis, with an equal percentage increase for all customer classes.
10 11 12 13 14	 revenue increase authorized in this case. A. As stated in my direct testimony, the Company is proposing to allocate the requested increase in this case on an across-the-board basis, with an equal percentage increase for all customer classes. Q. What are the positions of the other parties on class specific revenue
10 11 12 13 14 15	 revenue increase authorized in this case. A. As stated in my direct testimony, the Company is proposing to allocate the requested increase in this case on an across-the-board basis, with an equal percentage increase for all customer classes. Q. What are the positions of the other parties on class specific revenue requirements?
10 11 12 13 14 15 16	 revenue increase authorized in this case. A. As stated in my direct testimony, the Company is proposing to allocate the requested increase in this case on an across-the-board basis, with an equal percentage increase for all customer classes. Q. What are the positions of the other parties on class specific revenue requirements? A. The following Table 2 depicts a summary of the positions of the other

Table 2

Party	Class Revenue Recommendation			
	Residential and Lighting Classes 1% and 3%			
	revenue neutral increase, respectively.			
	Small General Service, Large General			
	Service/Small Service, Large Primary Service,			
	and Large Transmission Service receive a			
MPSC Staff	revenue neutral decrease of approximately 1.0%.			
	• Having made the above changes, any overall			
	change in revenues can be applied to all classes			
	on an equal percentage basis.			
	• Lighting class 5(M) to have the pole and span			
	charges removed and included in 5(M) rates.			
OPC	No Revenue Neutral Adjustments to Residential and			
Urc	Small General Service, silent on remaining classes.			
	Simplified and Generalized:			
	Step 1: (Revenue neutral adjustments as follows):			
	Residential +2%			
	SGS Proportional decrease			
	LGS/SPS Proportional decrease			
MIEC	LPS Proportional decrease			
MILC	LTS Proportional decrease			
	Lighting +2%.			
	Step 2: Class specific assignment of EE revenue			
	requirement.			
	Step 3: Equal Percentage Increase of Remaining			
	Revenue Requirement to Class Revenues.			

Q. Considering the results of the Company's class cost of service study, which supports non-equal class percentage increases, why should the Commission adopt the Company's recommendation for an across-the-board, equal percentage increase for all classes?

A. While cost-based rates are an important starting point in developing class revenue targets and rate design, there are other factors (e.g., public acceptance particularly among the Company's largest rate class - residential customers, rate stability, and revenue stability from year to year) that also should be considered when determining class revenue requirements and designing rates. Especially in today's challenging

1 economic conditions, these other factors take on greater importance. The Commission's

2 Report and Order in Case No. ER-2010-0036 seems to acknowledge this fact when it

3 states, at pages 115-116:

4 In general, it is important that each customer class carry its own weight by 5 paying rates sufficient to cover the cost to serve that class. That is a matter of simple fairness in that one customer class should not be required to 6 7 subsidize another. Requiring each customer class to cover its actual cost of 8 service also encourages cost effective utilization of electricity by 9 customers by sending correct price signals to those customers. However, the Commission is not required to precisely set rates to match the 10 11 indicated class cost of service. Instead, the Commission has a great deal of 12 discretion to set just and reasonable rates, and can take into account other 13 factors, such as public acceptance, rate stability, and revenue stability in 14 setting rates. 15

16 Additionally, if the Commission were to reject the Company's across-the-board 17 recommendation and adopt the other parties' proposed class revenue shifts, then the 18 Commission would need to perform an analysis of potential rate migration (i.e., non-19 residential customers qualifying for more than one service classification opting out of 20 their test year classification to another qualifying lower cost classification) and then make 21 appropriate adjustments to the Company's billing units used to set rates in this case. This 22 process would be essential if the Company is to satisfactorily design rates to meet the 23 Commission-ordered revenue requirement in this case. But none of the parties that have 24 proposed non-residential class revenue shifts have provided the evidence necessary for 25 the Commission to complete such an analysis.

Q. The overwhelming majority of speakers thus far at the local public hearings held in this docket have been residential customers expressing their discontent with the potential impact on their electric bills of the increase being requested in this case. Have you performed an analysis that could aid the

1 Commission should it desire to take steps to mitigate the impact of a rate increase

2 on residential customers?

Yes, I have. I examined the impact of shifting 1% of present revenues 3 A. from the Company's Service Classification No. 1(M) Residential Service to Service 4 Classification Nos. 11(M) – Large Primary Service and 12(M) – Large Transmission 5 Service (i.e., the Company's service classifications with the lowest prices paid per unit of 6 energy delivered). Utilizing present class revenues for the test year of twelve months of 7 8 usage through September 30, 2011, and then shifting 1% of the residential class' revenue 9 to the previously identified 11(M) and 12(M) classes based on these two classes' 10 percentage of combined revenue, the resulting increase for classifications 11(M) and 11 12(M) would be approximately 3.5% higher than it would be if an across-the-board 12 allocation to all classes was used.

This analysis was performed merely to provide the Commission information on the impact on class revenues if, as a matter of public policy, the Commission chose to mitigate the rate increase for residential customers given the comments from the public at the local public hearings.

17

III. RATE DESIGN

Q. On pages 21 through 23 of its Rate Design and Class Cost-Of-Service
Report, Staff outlines eleven recommendations on rate design. What is the
Company's position on those recommendations?

A. Two of Staff's recommendations pertain to class revenue requirements,
which were addressed above, and a third, which pertains to pole and span charges

associated with Service Classifications No. 5(M), is consistent with the Company's
 recommendation in my direct testimony.

Another of Staff's remaining recommendations addresses the uniformity of certain interrelationships among non-residential rate schedules, while six other recommendations address uniform adjustments of the respective classes' rate elements after determination of class rate increase percentages and customer charges. With regard to these seven recommendations, the Company's direct testimony in this docket reflects this same "uniformity"; therefore, the Company supports each of these seven Staff proposals as they apply to the final determination of affected rates in this docket.

10 Q. What about Staff's recommendation to increase the residential 11 monthly customer charge to \$9.00; does the Company agree with this 12 recommendation?

A. No. As stated in my direct testimony, the Company's CCOS results support a residential customer charge of approximately \$20. Although workpapers that accompanied Staff's Rate Design and Class Cost-Of-Service Report indicate that Staff's own study supports a value of \$8.97 per month, that amount is suspect because of flaws in Staff's study. Company witness William Warwick's rebuttal testimony addresses the flaws and shortfalls of Staff's study.

Q. How does the Company's existing monthly residential customer
charge compare to similar charges of other electric utilities regulated by the
Commission?

A. The following Table 3 shows how the Company's existing monthly
 customer charge compares to other regulated electric utilities in Missouri (note: Staff
 provided a similar depiction in its Rate Design and Class Cost-Of-Service Study Report):

- 4 5
- Table 3.

 Current Residential Monthly Customer Charges of MO Regulated Utilities

Company	Current Residential Customer Charge
Ameren Missouri	\$8.00
Empire District Electric Company	\$12.52
Kansas City Power & Light Company	\$9.00
KCP&L Greater Missouri Operations Company L&P	\$9.75
KCP&L Greater Missouri Operations Company MPS	\$10.43

6

7 This shows that the Company's residential customer charge is lagging behind 8 similar charges of all of the other regulated electric utilities in the state. In fact, the 9 Company's current monthly residential customer charge of \$8 is more than 23% less than 10 the \$10.42 per month average of the other four Missouri regulated electric utilities. And 11 increasing the customer charge to \$9.00, as Staff proposes, would still make the 12 Company's monthly residential customer charge less than the comparable charges of all 13 but one other regulated electric utility in the state. These facts are especially ironic and 14 troubling considering that the Company will have the most robust energy efficiency 15 programs in the state. Lastly, the expected customer energy use reductions associated 16 with efforts by third parties (e.g., Missouri Department of Natural Resources) or federal 17 government standards that promote energy efficiency and demand response, and the 18 impacts on the Company's ability to earn its authorized rate of return also provide

support for the Company's recommendation. If the Commission were to approve the Company's recommended level of \$12 for its residential service customer charge, then the Company's customer charge would still be less than that of The Empire District Electric Company and only approximately 15% above the average of all regulated electric utilities within the state.

- 6 Q. How does the Company's proposed monthly residential customer 7 charge compare to similar charges of non-regulated electric coop utilities in 8 Missouri?
- 9 A. The following Table 4 shows how the Company's proposed residential 10 monthly customer charge of \$12 compares to the majority of non-regulated coop electric
- 11 service providers in Missouri.

Table 4

		<u>Monthly</u>
<u>Company Name</u>	<u>City</u>	Customer Charge
Webster Electric	Marshfield	\$18.00
Se-Ma-No Electric	Mansfield	\$21.90
Southwest Electric	Bolivar	\$16.00
Central Missouri Electric Cooperative	Sedalia	\$14.00
Cuivre River Electric Cooperative	Troy	\$15.21
Laclede Electric Cooperative	Lebanon	\$11.79
Barry Electric Coop	Cassville	\$20.00
Gascosage Electric Coop	Dixon	\$25.00
SEMO Electric	Sikeston	\$16.00
Ozark Border Electric	Poplar Bluff	\$22.00
Crawford Electric	Bourbon	\$25.00
Howell-Oregon Electric Coop	West Plains	\$25.00
Black River	Fredericktown	\$20.00
Missouri Rural Electric Cooperative	Palmyra	\$25.00
Co-Mo Electric Cooperative	Tipton	\$25.00
Boone Electric Cooperative	Columbia	\$20.00

MISSOURI COOP MONTHLY RESIDENTIAL CUSTOMER CHARGES

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Intercounty Electric	Licking	\$24.33
Ozark Electric Cooperative	Mt. Vernon	\$20.00
West Central Electric	Higginsville	\$25.00
Grundy Electric	Trenton	\$25.00
Osage Valley Electric	Butler	\$25.00
Consolidated Electric	Mexico	\$27.50
Macon Electric Cooperative	Macon	\$28.00
New-Mac Electric Cooperative	Neosho	\$20.00
Farmers' Electric Coop	Chillicothe	\$20.00
Pemiscot Dunklin Electric	Hayti	\$22.00
Callaway Electric	Fulton	\$25.00
Citizens Electric	Ste. Genevieve El Dorado	\$24.00
Sac Osage Electric	Springs	\$25.00
TriCounty Electric	Lancaster	\$30.20
Lewis County Electric	Lewistown	\$27.00
North Central Missouri Electric	Milan	\$25.00
Barton County Electric	Lamar	\$25.00
United Electric	Savannah	\$25.00
Ralls County Electric	New London	\$34.00
Atchison-Holt Electric	Rock Port	\$15.50
Three Rivers Electric	Linn	\$25.00
Platte-Clay	Kearney	\$25.00

1

An examination of the monthly residential customer charges for both regulated and unregulated service providers of electric service in the State of Missouri, as shown in Tables 3 and 4 above, clearly shows that the Company's proposed monthly residential customer charge of \$12.00 is not unreasonable and, also, that it would still be among the lowest charges for many electric service providers in the state.

7 The rebuttal testimonies of Company witnesses Mr. William Davis and 8 Mr. William Warwick include additional support for the Company's proposed customer 9 charge for this class.

Q. Did the Staff or the OPC make any recommendations regarding
changes to the customer charge for the Company's Small General Service
Classification?

A. Yes. The Staff recommended that after a revenue-neutral reduction of 1% for the Small General Service Classification, the existing customer charge should be increased by the percentage increase in revenue requirement authorized by the Commission in this case. The OPC recommended no change from the existing level of \$9.74 per month.

6

Q. Does the Company agree with either of these recommendations?

A. Staff's class cost of service study yielded a monthly customer charge for the Small General Service of \$10.98 per month, while OPC's study yielded a charge of \$10.64. As stated in my direct testimony, the Company's class cost of study supported a \$22 per month customer charge; however, the Company proposes to limit the increase in this case to \$14.61 per month for single phase service and \$29.24 for three phase service.

As was the case for the Residential class, due consideration of costs and the Company's robust energy efficiency program provide more than adequate support for the Company's recommended monthly customer charge for the Small General Service Classification.

Q. On page 30 of the Staff's Rate Design and Class Cost-Of-Service Report Staff recommends the Commission order the Company to file, within thirty (30) days of the effective dates of rates in this case, the Company's entire tariff as a single document bearing the designation "P.S.C. Mo. 6" to replace several documents currently on file. What is the Company's position regarding this recommendation?

A. As stated in Staff's report, the Staff and the Company have "spent a
substantial amount of time and resources in this endeavor and completed much of the

work." Therefore, absent any unforeseen events or circumstances, Staff's proposed thirty day window should provide ample opportunity for the Staff and the Company to reach consensus on the tariffs to be filed and, at the same time, not result in a "pancaking" of the proposed Schedule 6 filing with any other planned tariff filing (e.g., the Company's periodic Rider FAC tariff sheet filing). The Company expects to reach agreement with Staff on this issue prior to the evidentiary hearings in this case.

Q. On pages 31-32 of the Staff's Rate Design and CCOS Report, Staff recommends certain changes to the Company's Rider FAC tariff sheets. As described by Staff, these changes involve revisions to certain terminology used in the FAC and are proposed to support Staff's effort to promote uniformity of FAC tariffs among regulated electric utilities in Missouri. What is Ameren Missouri's position on this recommendation?

A. First, the Company fully supports Staff's effort to promote uniformity of FAC tariffs in Missouri, where practicable. As stated in Staff's report, the Company has already provided some preliminary feedback to a draft of Staff's proposed changes to the Company's Rider FAC prior to the filing of Staff's Schedules LMM-2 and LMM-3 to Staff's report. Since the filing of those two schedules, the Company has identified some additional terminology or housekeeping type changes to suggest.

Schedule WLC-ER8 to my rebuttal testimony contains exemplar FAC tariff sheets
with the Company proposed changes to Schedule LMM-2 without any markings to track
the proposed changes, and Schedule WLC-ER9 is a tracked version of those same
proposed changes to LMM-2.

1	It should be noted that the changes indicated on these two schedules represent the
2	Company's comprehensive proposed changes to the Company's Rider FAC tariffs (i.e.,
3	both housekeeping changes and material/substantive changes).
4	Q. Please comment on certain of the material/substantive changes.
5	A. I will address two areas: 1) Staff's proposal to eliminate the seasonality of
6	the factor BF or net base energy cost factor and 2) Staff's proposal to refine the definition
7	of factor OSS or Off-System Sales Revenue to address the potential loss of Large
8	Transmission Service load.
9	Q. What are the Company's concerns with Staff's proposal to eliminate
10	the seasonality of base fuel charges (Factor BF)?
10 11	the seasonality of base fuel charges (Factor BF)?A.The Company is concerned that the elimination of the seasonality of factor
10 11 12	 the seasonality of base fuel charges (Factor BF)? A. The Company is concerned that the elimination of the seasonality of factor BF would likely increase volatility in the Company's monthly Rider FAC adjustment.
10 11 12 13	 the seasonality of base fuel charges (Factor BF)? A. The Company is concerned that the elimination of the seasonality of factor BF would likely increase volatility in the Company's monthly Rider FAC adjustment. The following graph illustrates the volatility that would result from utilizing the
10 11 12 13 14	 the seasonality of base fuel charges (Factor BF)? A. The Company is concerned that the elimination of the seasonality of factor BF would likely increase volatility in the Company's monthly Rider FAC adjustment. The following graph illustrates the volatility that would result from utilizing the Company's test year sales and proposed seasonal BF's (i.e., summer 1.529¢/kWh and
10 11 12 13 14 15	 the seasonality of base fuel charges (Factor BF)? A. The Company is concerned that the elimination of the seasonality of factor BF would likely increase volatility in the Company's monthly Rider FAC adjustment. The following graph illustrates the volatility that would result from utilizing the Company's test year sales and proposed seasonal BF's (i.e., summer 1.529¢/kWh and winter 1.533¢/kWh) vs. weighting these values consistent with Staff's recommendations
10 11 12 13 14 15 16	 the seasonality of base fuel charges (Factor BF)? A. The Company is concerned that the elimination of the seasonality of factor BF would likely increase volatility in the Company's monthly Rider FAC adjustment. The following graph illustrates the volatility that would result from utilizing the Company's test year sales and proposed seasonal BF's (i.e., summer 1.529¢/kWh and winter 1.533¢/kWh) vs. weighting these values consistent with Staff's recommendations (i.e., a flat BF) and assuming hypothetically "perfect" prospective FAC ratemaking:



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3 As shown above, actual fuel costs during the summer accumulation period ("AP1") would be lower than the tariffed BF, which would produce a positive difference 4 5 and credits for customers in a subsequent Recovery Period, while actual BF costs in the two winter APs (AP2 and AP3) would be higher than the tariffed BF, which would 6 7 produce a negative difference and surcharges for customers' bills in a subsequent 8 Recovery Period. Mathematically, and ignoring interest, the net effect over all three 9 periods would be zero; however, there would be volatility reflected in customers' bills 10 due to these seasonal differences.



1	Also,	creating this increased volatility in customers' bills appears to be
2	inconsistent v	with the Staff's desire, as expressed in the Cost-Of-Service and Revenue
3	Requirement	Report to reduce the volatility of the Company's FAC adjustments.
4	Q.	Does the Company agree with Staff's recommendation to clarify the
5	mechanics o	f its Rider FAC which apply in the event the Large Transmission
6	Service "loss	of load" event triggers?
7	А.	Yes, Staff's language provides additional clarity to this provision while
8	maintaining tl	he overall objective of this provision of the tariff.
9	Q.	Does the Company agree with Staff's proposals for: 1) "Additional
10	Filing Requi	rements, 2) Fuel Adjustment Clause Heat Rate Efficiency Testing, and
11	3) FAC Adju	stments for Updated System Loss Study recommendations as discussed
12	on pages 172	-175 of Staff's Revenue Requirement Cost-of-Service Report?
13	А.	Yes, the Company agrees with Staff's recommendations.
14	Q.	Does the Company agree with the Staff's changes regarding the
15	sharing perce	entage in the FAC and regarding transmission costs?
16	А.	No. Company witnesses Lynn M. Barnes and Jaime Haro address the
17	sharing percer	ntage issues, and Mr. Haro addresses the transmission cost issue.
18	Q.	Does this conclude your rebuttal testimony?
19	А.	Yes, it does.

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BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Increase Its Annual Revenues for Electric Service.

File No. ER-2012-0166

AFFIDAVIT OF WILBON L. COOPER

)

STATE OF MISSOURI) ss **CITY OF ST. LOUIS**)

Wilbon L. Cooper, being first duly sworn on his oath, states:

1. My name is Wilbon L. Cooper. I am employed by Union Electric Company d/b/a

Ameren Missouri as Manager of the Rates and Tariffs Department.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony

on behalf of Union Electric Company, d/b/a Ameren Missouri, consisting of 20 pages and Schedule(s) WLC-ER8 thru WLC-ER9 _____, all of which have been prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to

the questions therein propounded are true and con ilbon L. Cooper

Subscribed and sworn to before me this 144 day of August, 2012.

My commission expires: $\frac{2}{17} \frac{2013}{2013}$

Notary Public

	•
Julie Donohue - Notary Public	3
Notary Seal, State of	3
Missouri - St. Louis City	Ş.
Commission #09753418	ξ
My Commission Expires 2/17/2013	ξ

MO.P.S.C. SCHEDULE NO. 5	SHEET NO
CANCELLING MO.P.S.C. SCHEDULE NO. 5	SHEET NO
APPLYING TO MISSOURI SE	RVICE AREA
<u>RIDE</u> <u>FUEL AND PURCHASED P</u> **(Applicable To Service Provided Bet Effective Dat	<u>CR FAC</u> OWER ADJUSTMENT CLAUSE ween July 31, 2011 And The Day Before The e Of This Tariff)
APPLICABILITY	
This rider is applicable to kilowatt- customers served by the Company under 2(M), 3(M), 4(M), 5(M), 6(M), 7(M), 1	-hours (kWh) of energy supplied to r Service Classification Nos. 1(M), l1(M), and 12(M).
Costs passed through this Fuel and Pu reflect differences between actual fu including transportation and emission System Sales Revenues (OSSR) (i.e., A Net Base Energy Costs (B), calculated herein.	Archased Power Adjustment Clause (FAC) Hel and purchased power costs, hs costs and revenues, net of Off- Actual Net Energy Costs (ANEC)) and d and recovered as provided for
The Accumulation Periods and Recovery following table:	y Periods are as set forth in the
Accumulation Period (AP)	Recovery Period (RP)
February through May	October through May
June through September October through January	February through September June through January
AP means the four (4) calendar months revenues subject to this rider will k determining the Fuel Adjustment Rate	during which the actual costs and accumulated for the purposes of (FAR).
RP means the billing months during wh customer usage on a per kWh basis, as	ich the FAR is applied to retail adjusted for service voltage.
The Company will make a FAR filing no the first billing cycle read date of All FAR filings shall be accompanied filing in an electronic format with a) later than sixty (60) days prior to the applicable Recovery Period above. by detailed workpapers supporting the all formulas intact.
FAR_DETERMINATION	
Ninety five percent (95%) of the diff respective AP will be utilized to cal pursuant to the following formula wit line item on the customers' bills.	ference between ANEC and B for each Iculate the FAR under this rider th the results stated as a separate
**Indicates Change.	

Schedule WLC-ER8

DATE OF ISSUE DATE EFFECTIVE ISSUED BY Warner L. Baxter

NAME OF OFFICER

St. Louis, Missouri ADDRESS

	MO.P.S.C. SCHEDULE	NO. 5	SHEET NO
CANCE	LLING MO.P.S.C. SCHEDULE	NO. <u>5</u>	SHEET NO.
APPLYING TO		MISSOURI SERVI	CE AREA
** (Appl.	<u>FUEL AND PURC</u> icable To Service I	RIDER I HASED POWER ADJ Provided Between Sffective Date Of	<u>AC</u> USTMENT CLAUSE (CONT'D.) n July 31, 2011 And The Day Before The This Tariff)
For each 1	FAR filing made,	the FAR_{RP} is c	alculated as:
Where:	$FAR_{RP} =$	[(ANEC - B) x 9	5% + I ± P ± T]/S _{RP}
ANEC	= FC + PP + E	- OSSR	
В	= BF x S _{AP}		
FC	= Fuel costs a These consis	ssociated with st of the follo	the Company's generating plants. wing:
	a) For fo	ossil fuel plan	ts:
•	(i)	the following applicable tax Regulatory Com for: coal comm additives, Btu suppliers, qua sulfur content suppliers, rai demurrage char costs, railcar similar costs modes of trans oil adjustment transportation costs and reve resulting from optimization a	net costs and revenues (including es) reflected in Federal Energy mission (FERC) Account Number 501 odity, gas, alternative fuels, fuel adjustments assessed by coal lity adjustments related to the of coal assessed by coal lroad transportation, switching and ges, railcar repair and inspection depreciation, railcar lease costs, associated with other applicable portation, fuel hedging costs, fuel s included in commodity and costs, oil costs, ash disposal nues, and revenues and expenses i fuel and transportation portfolio ctivities; and
	(ii)	the following in FERC Accoun costs related (AQCS) operati powder activat	net costs and revenues reflected t Number 502 for: consumable to Air Quality Control System on, such as urea, limestone and ed carbon; and
	(iii)	the following in FERC Accoun generation cos transportation fuel losses, h resulting from optimization a	net costs and revenues reflected t Number 547 for: natural gas ts related to commodity, oil, , storage, capacity reservation , edging, and revenues and expenses a fuel and transportation portfolio ctivities;
	b) Ne Expen:	et costs and re Number518 se).	evenues in FERC Account (Nuclear Fuel
**Indicat	es Change.		

			Schedule WLC-ER8
DATE OF ISS	UE	DATE EFFECTIVE	
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
_	NAME OF OFFICER	TITLE	ADDRESS

МО	.P.S.C. SCHEDULE NO. 5	SHEET NO
CANCELLING MO	.P.S.C. SCHEDULE NO. 5	SHEET NO
APPLYING TO	MISSOURI SERVI	CE AREA
<u>FUE:</u> **(Applicable	<u>RIDER 1</u> L AND PURCHASED POWER ADJ To Service Provided Betweer Effective Date Of	FAC USTMENT CLAUSE (CONT'D.) 1 July 31, 2011 And The Day Before The 5 This Tariff)
PP = M S S U C I I M D O D A	Net costs and revenues f FERC Ac 55, 565, and 575, includi xcluding MISO administrat nder MISO Schedules 10, 1 harges for contracts with ncluded in factor "PP" ar umber 924 for replacement remiums are not reflected f purchased power will be ower insurance recoveries ccepted Accounting Princi	for purchased power reflected in count Numbers ng those associated with hedging, bu ive fees arising 6, 17, and 24, and excluding capacit terms in excess of one(1) year. Als e insurance premiums in FERC Account power insurance to the extent those in base rates. Additionally, costs reduced by expected replacement s qualifying as assets under Generall ples.
E = No al in	et costs and revenues for llowances in Accounts 411 ncluding those associated	SO ₂ and NO _x emissions .8, 411.9, and 509, with hedging.
OSSR = N W	et revenues in FERC Acco ith hedging.	unt 447, including those associated
**Indicates Cha	nge.	

DATE OF ISSUE			DATE EFFECTIVE			
ISSUED BY	Warner L.	Baxter	President & CEO	St.	Louis,	Missouri
	NAME OF O	FFICER	TITLE		ADD	RESS

MO.P.S.C. SCHEDULE NO. 5

SHEET NO.

SHEET NO.

CANCELLING MO.P.S.C. SCHEDULE NO. 5

APPLYING TO

MISSOURI SERVICE AREA

<u>RIDER FAC</u> <u>FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE (CONT'D.)</u> **(Applicable To Service Provided Between July 31, 2011 And The Day Before The Effective Date Of This Tariff)

Adjustment For Reduction of Service Classification 12(M) Billing Determinants:

Should the level of monthly billing determinants under Service Classification 12(M) fall below the level of normalized 12(M) monthly billing determinants as established in Case No. ER-2012-0166, an adjustment to OSSR shall be made in accordance with the following levels:

- a) A reduction of less than 40,000,000 kWh in a given month- No adjustment will be made to OSSR.
- b) A reduction of 40,000,000 kWh or greater in a given month -An adjustment excluding off-system sales revenue from OSSR will be made equal to the lesser of (1) all offsystem sales revenues derived from all kWh of energy sold off-system due to the entire reduction, or (2) off-system sales revenues up to the reduction of 12(M) revenues compared to normalized 12(M) revenues as determined in Case No. ER-2012-0166.

For purposes of factors FC, PP, E, and OSSR, "hedging" is defined as realized losses and costs (including broker commissions and fees associated with the hedging activities)minus realized gains associated with mitigating volatility in the Company's cost of fuel and purchased power and emission allowances, including but not limited to, the Company's use of futures, options and over-the-counter derivatives including, without limitation, futures contracts, puts, calls, caps, floors, collars, and swaps.

Should FERC require any item covered by factors FC, PP, E or OSSR to be recorded in an account different than the FERC accounts listed in such factors or that are not listed in such factors at all, such items shall nevertheless be included in factor FC, PP, E or OSSR.

I = Interest applicable to (i) the difference between ANEC and B for all kWh of energy supplied during an AP until those costs have been recovered; (ii) refunds due to prudence reviews ("P"), if any; and (iii) all under- or over-recovery balances created through operation of this FAC, as determined in the true-up filings ("T") provided for herein. Interest shall be calculated monthly at a rate equal to the weighted average interest rate paid on the Company's shortterm debt, applied to the month-end balance of items (i) through (iii) in the preceding sentence.

 S_{AP} = kWh during the AP that ended immediately prior to the FAR filing, as measured by taking the retail component of the Company's load settled at its MISO CP node (AMMO.UE or successor node), plus the kWh reductions up to the kWh of energy sold off-system associated with the 12(M) OSSR adjustment above plus the metered net energy output of any Company generating station operating within its

DATE OF ISSUE			DA	TE EFFECTIVE			
ISSUED BY	Warner L.	Baxter	President	& CEO	St.	Louis,	Missouri
	NAME OF C	FFICER	TITLE			ADD	RESS

certificated service territory as a behind the meter resource in MISO.

 S_{RP} = Applicable RP estimated kWh representing the expected retail component of the Company's load settled at its MISO CP node (AMMO.UE or successor node) plus the metered net energy output of any Company generating station operating within its certificated service territory as a behind the meter resource in MISO.

**Indicates Change.

DATE OF ISSUE		DATE EFFECTIVE	
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

	MO.P.S.C. SCHEDULE NO. 5	SHEET NO
CANCEL	LLING MO.P.S.C. SCHEDULE NO. 5	SHEET NO
YLYING TO	MISSOURI SERVICE	AREA
** (Appli	<u>RIDER FA</u> <u>FUEL AND PURCHASED POWER ADJUS</u> icable To Service Provided Between Effective Date Of	<u>C</u> <u>STMENT CLAUSE (CONT'D.)</u> July 31, 2011 And The Day Before The This Tariff)
BF	 The Base Factor, is equal sum of allowable fuel costs plus cost of purchased power and emissions costs and reveres from Off-Sterm OSSR) divided by correst adjusted for applicable loss referred to in the prior ser to determine the revenue recent rate case. The BF applicable to October thm is \$0.01553 per kWh. 	to the normalized value for the (consistent with the term FC), c (consistent with the term PP), enues (consistent with the term System Sales (consistent with the sponding normalized retail kWh as sees. The normalized values stence shall be those values used quirement in the Company's most oplicable to June through BF _{SUMMER}) is \$0.01529 per kWh. The cough May calendar months (BF _{WINTER})
Т	= True-up amount as defined be	elow.
Р	= Prudence disallowance amount	, if any, as defined below.
(VAF) set	forth below is calculated as:	
(VAF) set where:	forth below is calculated as: $FAR = FAR_{RP} + FAR_{RP}$	AR _{RP-1}
(VAF) set where: FAR	<pre>forth below is calculated as: FAR = FAR_{RP} + F. = Fuel and Purchased Power Adju applicable Recovery Period for</pre>	AR _{RP-1} istment rate starting with the pllowing the FAR filing.
(VAF) set where: FAR FAR	<pre>forth below is calculated as: FAR = FAR_{RP} + F. = Fuel and Purchased Power Adju applicable Recovery Period for = FAR Recovery Period rate comp under/over collection during immediately prior to the applicable</pre>	AR _{RP-1} Istment rate starting with the following the FAR filing. Fonent calculated to recover the Accumulation Period that ende Licable filing.
(VAF) set where: FAR FAR _{RP} FAR _{(RP-1}	<pre>forth below is calculated as: FAR = FAR_{RP} + F. = Fuel and Purchased Power Adju applicable Recovery Period for = FAR Recovery Period rate comp under/over collection during immediately prior to the appl immediately prior to the appl = FAR Recovery Period rate comp</pre>	AR _{RP-1} Istment rate starting with the following the FAR filing. For the Accumulated to recover the Accumulation Period that ender licable filing.
(VAF) set where: FAR FAR _{RP} FAR _{(RP-1} To determi the FAR de the follow	<pre>forth below is calculated as:</pre>	AR _{RP-1} Istment rate starting with the collowing the FAR filing. Conent calculated to recover the Accumulation Period that ende licable filing. Conent from other prior FAR _{RP} . dividual Service Classifications, foregoing will be multiplied by (VAF):
(VAF) set where: FAR FAR _{RP} To determi the FAR de the follow Secon Prim Large	<pre>forth below is calculated as:</pre>	AR_{RP-1} Assume that the starting with the following the FAR filing. Donent calculated to recover the Accumulation Period that ender Licable filing. Donent from other prior FAR_RP. dividual Service Classifications, foregoing will be multiplied by (VAF): 1.0575 1.0252 (VAF_TRAN) 0.9917
(VAF) set where: FAR FAR _{RP} FAR _{(RP-1} To determi the FAR de the follow Secon Prim Large The FAR ap rounded to applicable	<pre>forth below is calculated as:</pre>	AR_{RP-1} astment rate starting with the pollowing the FAR filing. ponent calculated to recover the Accumulation Period that ended licable filing. ponent from other prior FAR_RP. dividual Service Classifications, foregoing will be multiplied by (VAF): 1.0575 1.0252 (VAF_TRAN) 0.9917 ice Classifications shall be rged on a \$/kWh basis for each

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DATE OF ISSUE		DATE EFFECTIVE			
ISSUED BY	Warner L. Baxter	President & CEO	St.	Louis,	Missouri
	NAME OF OFFICER	TITLE		ADD	RESS

MO.P.S.C. SCHEDULE NO. 5

SHEET NO.

SHEET NO.

CANCELLING MO.P.S.C. SCHEDULE NO. 5

APPLYING TO

MISSOURI SERVICE AREA

<u>RIDER FAC</u> <u>FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE (CONT'D.)</u> **(Applicable To Service Provided Between July 31, 2011 And The Day Before The Effective Date Of This Tariff)

TRUE-UP

After completion of each RP, the Company shall make a true-up filing on the same day as its FAR filing. Any true-up adjustments shall be reflected in T above. Interest on the true-up adjustment will be included in I above.

The true-up adjustments shall be the difference between the revenues billed and the revenues authorized for collection during the RP.

GENERAL RATE CASE/PRUDENCE REVIEWS

The following shall apply to this FAC, in accordance with Section 386.266.4, RSMo. and applicable Missouri Public Service Commission Rules governing rate adjustment mechanisms established under Section 386.266, RSMo:

The Company shall file a general rate case with the effective date of new rates to be no later than four years after the effective date of a Commission order implementing or continuing this FAC. The four-year period referenced above shall not include any periods in which the Company is prohibited from collecting any charges under this FAC, or any period for which charges hereunder must be fully refunded. In the event a court determines that this FAC is unlawful and all moneys collected hereunder are fully refunded, the Company shall be relieved of the obligation under this FAC to file such a rate case.

Prudence reviews of the costs subject to this FAC shall occur no less frequently than every eighteen months, and any such costs which are determined by the Commission to have been imprudently incurred or incurred in violation of the terms of this rider shall be returned to customers. Adjustments by Commission order, if any, pursuant to any prudence review shall be included in the FAR calculation in P above unless a separate refund is ordered by the Commission. Interest on the prudence adjustment will be included in I above.

**Indicates Change.

DATE OF ISSUE			DATE EFFECTIVE			
ISSUED BY	Warner L. 1	Baxter	President & CEO	St.	Louis,	Missouri
	NAME OF OF	FICER	TITLE		ADD	RESS

.

	[month, day, year])			
Calcul Accu	ation of Current Fuel Adjustment Rate (FAR):	1	Month [)av Vo
1	Actual Net Energy Cost (ANEC) (FC+PP+E-OSSR)	1	s	/ay, ic
2	Net Base Energy Cost (B)	_	Ś	
2.	2 1 Base Factor (BF)	×	\$0.000	00
	2.2 Accumulation Period Sales (Spp))		******	kWh
3.	Total Company Fuel & Purchased Power Difference	=	ŝ	
	3.1 Customer Responsibility	x		95%
4.	Fuel & Purchased Power Amount to be Recovered	==	ŝ	
	4.1 Interest (I)	÷	Ş	
	4.2 True-Up Amount (T)	<u>+</u>	\$	
	4.3 Prudence Adjustment Amount (P)	±		
5.	Fuel and Purchased Power Adjustment (FPA)	=	\$	
6.	Estimated Recovery Period Sales (S_{RP})	<u>.</u>		kWh
7.	Current Period Fuel Adjustment Rate (FAR _{RP})	=		\$/kWh
8.	Prior Period Fuel Adjustment Rate (FAR_{RP-1})	+		\$/kWh
9.	Fuel Adjustment Rate (FAR)	=		\$/kWh
10	Secondary Voltage Adjustment Factor (VAF $_{ m SEC}$)		1.0575	
11.	FAR for Secondary Customers (FAR _{sec})			\$/kWh
12.	Primary Voltage Adjustment Factor (VAFPRT)		1.0252	
13.	FAR for Primary Customers (FAR _{PRI})			\$/kWh
14	Transmission Voltage Adjustment Factor (VAF)		0 0017	
14. 15	FAR for Transmission Customers (FAR)		V.991/	Ś/Wb
10.				<i>y ,</i>

DATE OF ISSUE		DATE EFFECTIVE		
ISSUED BY	Warner L. Baxter	President & CEO	St.	Louis, Missouri
	NAME OF OFFICER	TITLE		ADDRESS

MO.P.S.C. SCHEDULE NO. 5	SHEET NO.
CANCELLING MO.P.S.C. SCHEDULE NO. 5	SHEET NO
APPLYING TO MISSOUR	I SERVICE AREA
FUEL AND FURCHAS **(Applicable To Service Provide Effectiv	<u>RIDER FAC</u> <u>SED POWER ADJUSTMENT CLAUSE</u> d Between July 31, 2011 And The Day Before The e Date Of This Tariff)
APPLICABILITY	
This rider is applicable to kilo customers served by the Company 2(M), 3(M), 4(M), 5(M), 6(M), 7(watt-hours (kWh) of energy supplied to under Service Classification Nos. 1(M), M), 11(M), and 12(M).
Costs passed through this Fuel as reflect differences between actu- including transportation, plus -a Off-System Sales Revenues (OSSR) and Net Base Energy Costs (B), c- herein.	nd Purchased Power Adjustment Clause (FAC) al fuel and purchased power costs, <u>nd emissions costs and revenues</u> , net of (i.e., Actual Net Energy Costs (ANEC)) alculated and recovered as provided for
The Accumulation Periods and Rec following table:	overy Periods are as set forth in the
Accumulation Period (AP)	Recovery Period (RP)
February through May June through September October through January	October through May February through September June through January
AP means the four (4) calendar m revenues subject to this rider w determining the Fuel Adjustment	onths during which the actual costs and ill be accumulated for the purposes of Rate (FAR).
RP means the billing months durin customer usage on a per kWh basi	ng which the FAR is applied to retail s, as adjusted for service voltage.
The Company will make a FAR fili the first billing cycle read dat All FAR filings shall be accompa filing in an electronic format w	ng <u>no later than</u> sixty (60) days prior to e of the applicable Recovery Period above. nied by detailed workpapers supporting the ith all formulas intact.
FAR DETERMINATION	
<u>Sighty Minety</u> five percent (8595) each respective AP will be utili pursuant to the following formula line item on the customers' bill	%) of the difference between ANEC and B fo zed to calculate the FAR under this rider a with the results stated as a separate s.
**Indicates Change.	

DATE OF ISSUE		DATE EFFECTIVE	
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	ການຄ	ADDRESS

UNION ELECTRIC COMPANY ELECTRIC SERVICE MO.P.S.C. SCHEDULE NO. 5 SHEET NO. CANCELLING MO.P.S.C. SCHEDULE NO. 5 SHEET NO. APPLYING TO MISSOURI SERVICE AREA RIDER FAC FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE (CONT'D.) ** (Applicable To Service Provided Between July 31, 2011 And The Day Before The Effective Date Of This Tariff) For each FAR filing made, the FAR_{RP} is calculated as: $FAR_{RP} = [(ANEC - B) \times \frac{3595}{5} + I + \pm P \pm T]/S_{RP}$ ļ Where: ANEC = FC + PP + E - OSSR в = BF x S_{AP} = Fuel costs associated with the Company's generating plants. FC These costs consist of the following: For fossil fuel plants: a١ the following <u>net costs and revenues (including applicable taxes)</u> reflected in Federal Energy Regulatory Commission (FERC) Account Number 501_ (i) for: coal commodity, gas, alternative fuels, fuel additives, Btu adjustments assessed by coal suppliers, quality adjustments related to the sulfur content of coal assessed by coal suppliers, railroad transportation, switching and demurrage charges, railcar repair and inspection costs, railcar depreciation, railcar lease costs, similar costs associated with other applicable modes of transportation, fuel hedging costsincluding over the road diesel hedging, fuel oil adjustments included in commodity and transportation costs, broker-commissions and feesassociated with price hedges, oil costs, ash disposal costs and revenues and expenses, and revenues and expenses resulting from fuel and transportation portfolio optimization activities; and (ii) the following net costs and revenues reflected in FERC Account Number 502 for: consumable costs related to Air Quality Control System (AQCS) operation, such as urea, limestone and powder activated carbon; and (iii) the following net_costs_and revenues reflected in FERC Account Number 547 for: natural gas generation costs related to commodity, oil, transportation, storage, capacity reservation charges, fuel losses, hedging-cests, brokercommissions and fees associated with pricehedges, and revenues and expenses resulting from fuel and transportation portfolio optimization activities; Net cGosts and revenues in FERC Account Numberb) 518 (Nuclear Fuel Expense). **Indicates Change.

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DATE EFFECTIVE DATE OF ISSUE President & CEO St. Louis, Missouri ISSUED BY Warner L. Baxter NAME OF OFFICER ΠÜĖ ADDRESS

	MO.P.S.C. SCHEDULE NO. 5	SHEET NO
CANCELL	NG MO.P.S.C. SCHEDULE NO. 5	SHEET NO
PPLYING TO	MISSOURI SER	VICE AREA
**(Applic	<u>RIDE</u> FUEL AND PURCHASED POWER A able To Service Provided Betw Effective Date	<u>R FAC</u> DJUSTMENT CLAUSE (CONT'D.) Sen July 31, 2011 And The Day Before The Of This Tariff)
	For-purposes of factor F losses and costs minus r mitigating volatility in but not limited to, the over-the counter derivat calls, caps, floors, col	C, hedging is defined as realized calized gains associated with the Company's cost of fuel, includir Company's use of futures, options and ives including futures contracts, put lars, and swaps.
РР	Net cGosts and revenue in FER 555, 565, and 575, inclu excluding MISO administr under MISO Schedules 10, charges for contracts wi transmission costs incur electricity shall be inc insurance premiums in FE power insurance to the in base rates. Additional reduced by expected repl qualifying as assets und Principles.	s for of purchased power reflected C Account Numbers ding those associated with hedging, h ative fees arising 16, 17, and 24, and excluding capacit th terms in excess of one(1) year. Or red for the purchase or cale of luded. Also included in factor "PP" a RC Account Number 924 for replacement xtent those premiums are not reflected ly, costs of purchased power will be acement power insurance recoveries er Generally Accepted Accounting
Е	Net Emission costs and r emissions allowances in 509, t including those as	evenues for SO ₂ and NO _x Accounts 411.8, 411.9, and sociated with hedging.
OSSR	<u>NetAll</u> revenues in FER <u>associated with hedging</u> .	C Account 447, including those
**Indicates	Change.	

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DATE OF ISSUE_____ DATE EFFECTIVE______ ISSUED BY_____Warner L. Baxter President & CEO St. Louis, Missouri NAME OF OFFICER TITLE ADDRESS

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	P.S.C. SCHEDULE NO. 5	SHEET NO.	
CANCELLING MO.	P.S.C. SCHEDULE NO. 5	SHEET NO.	
PLYING TO	MISSOURI SERVICE AN	REA	<u>.</u>
<u>FUEL</u> **(Applicable	<u>RIDER FAC</u> <u>AND PURCHASED POWER ADJUSTM</u> To Service Provided Between July Effective Date Of This	ENT CLAUSE (CONT'D.) 7 31, 2011 And The Day Before The 3 Tariff)	
Adjus Deter	tment For Reduction of Servio	ce Classification 12(M) Billing	
Shoul Class month 0166, the f	d the level of monthly billin ification 12(M) fall below th ly billing determinants as es an adjustment to OSSR shall following levels:	ng determinants under Service ne level of normalized 12(M) stablished in Case No. ER-2012- be made in accordance with	
a) A	reduction of less than 40,00 -No adjustment will be made	0,000 kWh in a given month to OSSR.	
b) A	reduction of 40,000,000 kWh -An adjustment excluding off OSSR will be made equal to a system sales revenues derive off-system due to the entire sales revenues up to the red compared to normalized 12(M) Case No. ER-2012-0166.	or greater in a given month E-system sales revenue from the lesser of (1) all off- ed from all kWh of energy sold e reduction, or (2) off-system duction of 12(M) revenues prevenues as determined in	
For purpos realized associated with mitic power and Company's including floors, c	ses of factors FC, PP, E, and losses and costs (including b d with the hedging activities gating volatility in the Comp emission allowances, includi use of futures, options and , without limitation, futures pllars, and swaps.	OSSR, "hedging" is defined as roker commissions and fees)minus realized gains associated any's cost of fuel and purchased ng but not limited to, the over-the-counter derivatives contracts, puts, calls, caps,	< (Formatted: Indent: Left: 0.81*
Should FEI recorded factors of nevertheld	RC require any item covered b in an account different than r that are not listed in such ess be included in factor FC,	y factors FC, PP, E or OSSR to be the FERC accounts listed in such factors at all, such items shall PP, E or OSSR.	← · {Formatted: Indent: Left: 0.81"
I = In fo co re ba de In we te th	terest applicable to (i) the or all kWh of energy supplied sts have been recovered; (ii) views ("P"), if any; and (iii lances created through operat termined in the true-up filin terest shall be calculated mo- ighted average interest rate erm debt, applied to the month rough (iii) in the preceding	difference between ANEC and B during an AP until those refunds due to prudence i) all under- or over-recovery tion of this FAC, as gs ("T") provided for herein. Onthly at a rate equal to the paid on the Company's short- h-end balance of items (i) sentence.	
S _{AF} ≓ kW fi Cc su en	h during the AP that ended in ling, as measured by taking (mpany's load settled at its f ccessor node), plus the kWh p oray model offunctor pagedid	unediately prior to the FAR the retail component of the MISO CP node (AMMO.UE or reductions up to the kWh of red with the 12(M) OSSR	

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ISSUED BY	Warner L.	Baxter	President & CEO	St	. Louis, Missouri	
	NAME OF C	OFFICER	τητε		ADDRESS	

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certificated service territory as a behind the mater resource in MISO.

 $S_{RP} = Applicable RP estimated kWh representing the expected retail component of the Company's load settled at its MISO CP node (AMMO.UE or successor node) plus the metered net energy output of any Company generating station operating within its certificated service territory as a behind the meter resource in MISO.$

**Indicates Change.

DATE OF ISSUE _____ OATE EFFECTIVE ______ ISSUED BY _____ Warner L. Baxter _____ President & CEO ______ St. Louis, Missouri ______ NAME OF OFFICER ______ NTLE _____ ADDRESS

Line Purchases provide Augustrative CLAUSE (CONT D.) THELARD PURCHASES FORMER AUGUSTRATIVE CLAUSE (CONT D.) **(Applicable To Bernet Former Augustrative CLAUSE (CONT D.) **(Applicable To Bernet Former		LING MO.P.S.C. SCHEDULE NO		
 ID represent its 20.701225 per kMh. Ine be applicable to occuber. Formatted: Subscript T = True-up amount as defined below. P = Prudence disallowance amount, if any, as defined below. The FAR, which will be multiplied by the Voltage Adjustment Factors (VAP) set forth below, applicable starting with the following RP is calculated as: FAR = FAR₈₂ + FAR₈₂₋₁ where: FAR = Fuel and Purchased Power Adjustment rate starting with the applicable Recovery Period following the FAR filing. FAR₈₇ = FAR Recovery Period rate component calculated to recover under/over collection during the Accumulation Period that ended immediately prior to the applicable filing. FAR₁₈₇₋₁₉ = FAR Recovery Period rate component from other prior FAR₂₂. To determine the FAR applicable to the individual Service Classifications, the FAR determined in accordance with the foregoing will be multiplied by the following Service (VAF₅₀₀) 1.0575 Primary Voltage Service (VAF₅₀₀) 1.0575 Primary Voltage Service (VAF₅₀₀) 1.0575 Primary Voltage Service (VAF₅₀₀) 0.9917 The FAR applicable to the individual Service Classifications shall be rounded to the nearest \$0.00001 to be charged on a \$/kWh basis for each applicable kWh billed. 	**(Appli BF	RIDER FAC <u>RIDER FAC</u> <u>FUEL AND PURCHASED POWER ADJUSTME</u> cable To Service Provided Between July <u>Effective Date Of This</u> = <u>The Base Factor, \$0.01586 per }</u> <u>Commission's order is</u> equal to for the sum of allowable fuel c FC}, plus cost of purchased pow PP), <u>plus_and the cost of emiss</u> (consistent with the term E), 1 Sales (consistent with the term E), 1 Sales (consistent with the term corresponding <u>normalized test</u> , applicable losses. The normali prior sentence shall be those v revenue requirement in the Comp The BF applicable to June throw	ANT CLAUSE (CONT'D.) 31, 2011 And The Day Before The Tariff) Wh determined by the- the normalized test year-value costs (consistent with the term rer (consistent with the term ions costs and revenues less revenues from Off-System h OSSR) divided by rear-retail kWh as adjusted for zed values referred to in the ralues used to determine the bany's most recent rate case. Igh September calendar months	
 T = True-up amount as defined below. P = Prudence disallowance amount, if any, as defined below. The FAR, which will be multiplied by the Voltage Adjustment Factors (VAF) set forth below, applicable starting with the following RP is calculated as: FAR = FAR₈₂ + FAR₈₂₋₁ where: FAR = Duel and Purchased Power Adjustment rate starting with the applicable Recovery Period following the FAR filing. FAR = FAR Recovery Period rate component calculated to recover under/over collection during the Accumulation Period that ended immediately prior to the applicable filing. FAR_(gr-1) = FAR Recovery Period rate component from other prior FAR₈₂. To determine the FAR applicable to the individual Service Classifications, the FAR determined in accordance with the foregoing will be multiplied by the following Voltage Service (VAF₁₂₀) 1.0575 1.0252 Large Transmission Voltage Service (VAF₁₂₀₀) 0.9917 The FAR applicable to the individual Service Classifications shall be rounded to the nearest \$0.00001 to be charged on a \$/KWh basis for each applicable KWh billed. 		through May calendar months (BF	gringer) is \$0.01553 per kWh.	
 P = Prudence disallowance amount, if any, as defined below. The FAR, which will be multiplied by the Voltage Adjustment Factors (VAF) set forth below, <u>opplicable starting with the following RP</u> is calculated as: FAR = FAR_{RP} + FAR_{RP-1} where: FAR = Fuel and Purchased Power Adjustment rate starting with the applicable Recovery Period following the FAR filing. FAR_{gP} = FAR Recovery Period rate component calculated to recover under/over collection during the Accumulation Period that ended immediately prior to the applicable filing. FAR_(gr-1) = FAR Recovery Period rate component from other prior FAR_{RP}. To determine the FAR applicable to the individual Service Classifications, the FAR determined in accordance with the foregoing will be multiplied by the following Voltage Service (VAF_{stol}) 1.0575 Primary Voltage Service (VAF_{stol}) 1.0575 Primary Voltage Service (VAF_{stol}) 0.9917 The FAR applicable to the individual Service Classifications shall be rounded to the nearest \$0.0001 to be charged on a \$/KWh basis for each applicable kWh billed. 	T	= True-up amount as defined below		
 FAR = Fuel and Purchased Power Adjustment rate starting with the applicable Recovery Period following the FAR filing. FAR_{FP} = FAR Recovery Period rate component calculated to recover under/over collection during the Accumulation Period that ended immediately prior to the applicable filing. FAR_(RP-1) = FAR Recovery Period rate component from other prior FAR_{RP}. To determine the FAR applicable to the individual Service Classifications, the FAR determined in accordance with the foregoing will be multiplied by the following Voltage Service (VAF_{FRC}) 1.0575 <pre>Primary Voltage Service (VAF_{FRC}) 1.0252 Large Transmission Voltage Service (VAF_{FRC}) 0.9917</pre> The FAR applicable to the individual Service Classifications shall be rounded to the nearest \$0.00001 to be charged on a \$/kWh basis for each applicable kWh billed. 	(VAF) set calculated	forth below , applicable starting w as: FAR = FAR _{RP} + FAR _{RP}	-1	
FAR _{PP} = FAR Recovery Period rate component calculated to recover under/over collection during the Accumulation Period that ended immediately prior to the applicable filing. FAR _(RP-1) = FAR Recovery Period rate component from other prior FAR _{RP} . To determine the FAR applicable to the individual Service Classifications, the FAR determined in accordance with the foregoing will be multiplied by the following Voltage Adjustment Factors (VAF): Secondary Voltage Service (VAF _{SEC}) 1.0575 Primary Voltage Service (VAF _{FRI}) 0.9917 The FAR applicable to the individual Service Classifications shall be rounded to the nearest \$0.00001 to be charged on a \$/kWh basis for each applicable kWh billed.	where: FAR	= Fuel and Purchased Power Adjust applicable Recovery Period follo	ment rate starting with the owing the FAR filing.	
<pre>FAR(RF-1) = FAR Recovery Period rate component from other prior FARRF. To determine the FAR applicable to the individual Service Classifications, the FAR determined in accordance with the foregoing will be multiplied by the following Voltage Adjustment Factors (VAF): Secondary Voltage Service (VAFFER) 1.0575 Primary Voltage Service (VAFFER) 0.9917 The FAR applicable to the individual Service Classifications shall be rounded to the nearest \$0.00001 to be charged on a \$/kWh basis for each applicable kWh billed.</pre>	$\operatorname{FAR}_{\operatorname{FP}}$	= FAR Recovery Period rate component under/over collection during the immediately prior to the application	ent calculated to recover ≥ Accumulation Period that ended able filing.	Formatted: Indent: Hanging: 0.75*
To determine the FAR applicable to the individual Service Classifications, the FAR determined in accordance with the foregoing will be multiplied by the following Voltage Adjustment Factors (VAF): Secondary Voltage Service (VAF _{SEC}) 1.0575 Primary Voltage Service (VAF _{FRI}) 1.0252 Large Transmission Voltage Service (VAF _{TRAN}) 0.9917 The FAR applicable to the individual Service Classifications shall be rounded to the nearest \$0.00001 to be charged on a \$/kWh basis for each applicable kWh billed.	FAR (RP-1) = FAR Recovery Period rate compone	ent from other prior FAR_{RP} .	
Secondary Voltage Service (VAF _{FRI}) 1.0375 Primary Voltage Service (VAF _{FRI}) 1.0252 Large Transmission Voltage Service (VAF _{TRAN}) 0.9917 The FAR applicable to the individual Service Classifications shall be rounded to the nearest \$0.00001 to be charged on a \$/kWh basis for each applicable kWh billed.	To determi the FAR de the follow	ne the FAR applicable to the indiv termined in accordance with the fo ing Voltage Adjustment Factors (VA	idual Service Classifications, regoing will be multiplied by F):	
The FAR applicable to the individual Service Classifications shall be rounded to the nearest \$0.00001 to be charged on a \$/kWh basis for each applicable kWh billed.	Seco Prim Large	ary Voltage Service (VAF _{sec}) ary Voltage Service (VAF _{sel}) e Transmission Voltage Service (VAF	1.0375 1.0252 (TRAN) 0.9917	
	The FAR ap rounded to applicable	plicable to the individual Service the nearest \$0.00001 to be charge kWh billed.	Classifications shall be d on a \$/kWh basis for each	

DATE OF ISSUE		IVE		
ISSUED BY	Warner L.	Baxter	President & CEO	St. Louis, Missouri
	NAME OF OF	FICER	nne	ADDRESS

**Indicates Change.

DATE OF ISSUE______DATE EFFECTIVE_____ ISSUED BY Warner L. Baxter President & CEO St. Louis, Missouri NAME OF OFFICER TITLE ADDRESS

	MO.P.S.C. SCHEDULE NO. 5		_SHEET NO
CAN	CELLING MO.P.S.C. SCHEDULE NO. 5	<u></u>	SHEET NO.
PPLYING TO	MISSOURI SER	VICE AREA	
** (Ap	<u>RIDER</u> FUEL AND PURCHASED POWER A plicable To Service Provided Betwe Effective Date	<u>LFAC</u> DJUSTMENT CLAUSE (CONT'D en July 31, 2011 And The Da of This Tariff)	<u>.)</u> ay Before The
TRUE-UP			
After control the same reflector includes	ompletion of each RP, the Compa e day as its FAR filing. Any t ed in <u>™T</u> ″ above. Interest on t d in item I above.	ny shall make a true-up rue-up adjustments shall he true-up adjustment wi	filing on be ll be
The true and the	e-up adjustments shall be the d revenues authorized for collec	ifference between the retion during the RP.	evenues billed
GENERAL	RATE CASE/PRUDENCE REVIEWS		
The fol: 386.266 governin RSMo:	owing shall apply to this FAC, 4, RSMo. and applicable Missou g rate adjustment mechanisms e	in accordance with Sect ri Public Service Commis stablished under Section	ion sion Rules 386.266,
The Comp rates to Commissi reference prohibit which ch determin fully re FAC to the	any shall file a general rate be no later than four years a on order implementing or conti- ted above shall not include any ted from collecting any charges arges hereunder must be fully tes that this FAC is unlawful a funded, the Company shall be r ile such a rate case.	case with the effective fter the effective date nuing this FAC. The fou periods in which the Cc under this FAC, or any refunded. In the event nd all moneys collected elieved of the obligatio	date of new of a r-year period mpany is period for a court hereunder are n under this
Prudence frequent determin in viola Adjustme shall be separate adjustme	e reviews of the costs subject ly than every eighteen months, hed by the Commission to have b tition of the terms of this ride ents by Commission order, if an e included in the FAR calculati e refund is ordered by the Comm ent will be included in <u>item "</u> I	to this FAC shall occur and any such costs whic een imprudently incurred r shall be returned to c y, pursuant to any prude on in item "P" above unl issionInterest on the " above.	no less ch are lor incurred ustomers. ence review ess a prudence
**Tadicat	es Change.		
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ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TILE	ADDRESS

HUNG MO.P.S.C. SCHEDULE NO	5 SOURI SERVICE AREA <u>RIDER FAC</u>) POWER ADJUSTMENT CLAUSE "uel Adjustment Rate for [mon month, day, year])		SHEET !	NO		
MISS FUEL AND PURCHASE ole To Calculation of F	OURI SERVICE AREA <u>RIDER FAC</u> <u>POWER ADJUSTMENT CLAUSE</u> Vel Adjustment Rate for [mon month, day, year])					
FUEL AND PURCHASER ble To Calculation of F	RIDER FAC POWER ADJUSTMENT CLAUSE "uel Adjustment Rate for [mon month. day, year])				- .	
ion of Current Fuel a		<u>(CONT'</u> th, da	<u>D.)</u> y, year]	through		
TON OF GUTTONG FOOT	Adjustment Rate (FAR):					
ation Period Ending:		1	ionth, D	ay, Year		
cual Net Energy Cost	(ANEC) (FC+PP+E-OSSR)		\$			
: Base Energy Cost (I	3}	-	\$			
l Base Factor (BF)+	\$0-01586/kWh}	х	\$0.000	00		
Accumulation Perio	od Sales (S _{AP})-)		_xxxxxx	kWh		
tal Company Fuel & Pu	urchased Power Difference	=	\$			
1 Customer Responsi	bility	x		8595%		
el & Purchased Power	Amount to be Recovered	=	\$	_		
i Interest (I)		+	\$			
2 True-Up Amount (T)	±+	\$			
3 Prudence Adjustme:	nt Amount (P)	 ±				
and Purchased Powe	er Adjustment (FPA)	=	\$			
imated Recovery Peri	iod Sales (S_{RP})	÷		kWh		
crent Period Fuel Adj	justment Rate (FAR _{RP})	=		\$/kWh		
lor Period Fuel Adjus	stment Rate (FAR _{RP-1})	+		\$/kWh		
≥l Adjustment Rate (E	'AR)	=		\$/kWh		
condary <u>Voltage</u> Adjus	stment Factor (VAF _{fec})		1.0575			Formatted: Subscript
≥l Adjustment Rate FAF	{ for Secondary					
stomers (FAR _{sec})				\$/kWh		
imary Voltage Adjustr	cent Factor (VAF _{ner})		1,0252		•	Formatted: Space Before: 12 pt
		AR _{prt})				Formatted: Subscript
≿l Adjustment Rato<u>FA</u>F Wh	{ for Primary Customers (F.					
21 Adjustment Rate<u>FAI</u> (Wh Insmission <u>Voltage A</u> d	ijustment Factor <u>(VAF_{ERAN})</u>		0,9917		4 * *	Formatted: Indent: Left: 0.57*, Right: 0. Space Before: 12 pt
	<pre>:ual Net Energy Cost : Base Energy Cost (F : Base Energy Cost (F : Base Factor (BF)++ ? Accumulation Perio :al Company Fuel & Put : al Company Fuel & Put : Customer Responsib >1 & Purchased Power : Interest (I) ? True-Up Amount (T) ? True-Up Amount (T) ? Prudence Adjustment >1 and Purchased Power : imated Recovery Perio crent Period Fuel Adjust ior Period Fuel Adjust >1 Adjustment Rate (F condary <u>Voltage Adjust</u> stomers (FAR_{SEC}) image Moltage Adjust</pre>	<pre>:ual Net Energy Cost (ANEC) (FC+PP+E-OSSR) : Base Energy Cost (B) ! Base Factor (BF)-(\$0-01586/kWh) ? Accumulation Period Sales (S_{AF})</pre>	:ual Net Energy Cost (ANEC) (FC+PP+E-OSSR): Base Energy Cost (B)-: Base Energy Cost (B)-: Base Factor (BF) $(\$0 - 01586/kWh)$ x? Accumulation Period Sales $(S_{AF}) -)$::al Company Fuel & Purchased Power Difference=: Customer Responsibilityx>1 & Purchased Power Amount to be Recovered=1 Interest (I)+? True-Up Amount (T)±+> Prudence Adjustment Amount (P)±->1 and Purchased Power Adjustment (FPA)=:imated Recovery Period Sales (S_{AP}) ÷crent Period Fuel Adjustment Rate (FAR_{AP})=tor Period Fuel Adjustment Rate (FAR_{RP-1})+>1 Adjustment Rate (FAR)=condary Voltage Adjustment Factor (VAF_{FEC})->1 -Adjustment Rate FAR for Secondarystomers (FAR_{SEC})	Lual Net Energy Cost (ANEC) (FC+PP+E-OSSR)\$: Base Energy Cost (B)- \$: Base Energy Cost (B)- \$: Base Factor (BF)-(\$001586/kWh)x \$0.000? Accumulation Period Sales (S_{AP}) -)XXXXXX:al Company Fuel & Purchased Power Difference= \$: Customer Responsibilityx:al Company Fuel & Purchased Power Difference= \$: Customer Responsibilityx:al Customer Responsibilityx:al Customer Responsibilityx:al Customer Responsibilityx:al Customer Responsibilityx:al Customer Responsibilityx:al Purchased Power Amount to be Recovered= \$:al Interest (I)+ \$:al and Purchased Power Adjustment (P) \pm -:al and Purchased Power Adjustment (FPA)= \$:imated Recovery Period Sales (S_{RP}) ÷:imated Recovery Period Sales (S_{RP}) =:condary Voltage Adjustment Rate (FAR_RP)=:condary Voltage Adjustment Factor (VAF_{EEC})1.0575:	Lual Net Energy Cost (ANEC) (FC+PP+E-OSSR)\$: Base Energy Cost (B)- \$: Base Energy Cost (B)- \$: Base Factor (BF)+(\$601586/kWh)x \$0.00000? Accumulation Period Sales $(S_{AF})-$ XXXXXX kWh:al Company Fuel & Purchased Power Difference= \$: Customer Responsibilityx $\$595$ %:al Courter Responsibilityx $\$595$ %:al Customer Responsibilityx $\$595$ %:al A Purchased Power Amount to be Recovered= \$:and Purchased Power Adjustment (P) $\pm-$:al and Purchased Power Adjustment (FPA)= \$:imated Recovery Period Sales (S_{RP}) ÷ kWh:crent Period Fuel Adjustment Rate (FAR_{RP})= \$/kWhior Period Fuel Adjustment Rate (FAR_{RP-1})+ \$/kWh:al Adjustment Rate (FAR)= \$/kWh:condary Voltage Adjustment Factor (VAF_{FEC})1.0575:	Lual Net Energy Cost (ANEC) (FC+PP+E-OSSR)\$: Base Energy Cost (B)- \$: Base Energy Cost (B)- \$! Base Factor (BF) (\$0.01586/kWh)x \$0.00000? Accumulation Period Sales (S_{AF}) -)XXXXXX kWh:al Company Fuel & Purchased Power Difference= \$! Customer Responsibilityx $$595$ %>1 & Purchased Power Amount to be Recovered= \$! Interest (I)+ \$? True-Up Amount (T) \pm + \$? True-Up Amount (T) \pm + \$> Prudence Adjustment Amount (P) \pm ->1 and Purchased Power Adjustment (FPA)= \$:imated Recovery Period Sales (S_{RF}) \div kWhtor Period Fuel Adjustment Rate (FAR_{RF})= \$/kWhel Adjustment Rate (FAR)= \$/kWhel Adjustment Rate (FAR)= \$/kWhcondary Voltage_Adjustment Factor (VAF_{EE0})1.0575el Adjustment Rate FAR for Secondary\$/kWh

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_	NAME OF OFFICER	TILE	ADDRESS