Exhibit No.:		
Issue:	Class Cost of Study, Rate Design, Fuel Adjustment Clause	
Witness:	Kavita Maini	FILED
Type of Exhibit:	Direct Testimony	May 7, 2015
Sponsoring Parties:	MECG	Data Center
Case No.:	ER-2014-0351	Missouri Public
Date Testimony Prepared:	March 9, 2015	Service Commission

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of The Empire District Electric Company of Joplin, Missouri for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company	**File No. ER-2014-0351** Tariff No. YE-2015-0074

Rebuttal Testimony and Schedules of

Kavita Maini

On behalf of

MIDWEST ENERGY CONSUMERS GROUP

March 9, 2015

Protecting Your Bottom Line

KM ENERGY CONSULTING, LLC

MECG Exhibit No. 701
Date 4-17-15 Reporter KAE
File No. ER-2014-0351

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of The Empire District Electric Company for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area	))))	Case No. ER-2014-0351

STATE OF WISCONSIN	)	
	)	SS
COUNTY OF WAUKESHA	)	

AFFIDAVIT OF KAVITA MAINI

Kavita Maini, being first duly sworn, on her oath states:

1. My name is Kavita Maini. I am a consultant with KM Energy Consulting, LLC. having its principal place of business at 961 North Lost Woods Road, Oconomowoc, WI 53066. I have been retained by the Midwest Energy Consumers' Group ("MECG") in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes are my direct testimony and schedules which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2014-0351.

3. I hereby swear and affirm that the testimony and schedules are true and correct and that they show the matters and things that they purport to show.

Kavita Maini

Subscribed and sworn to before me this ___ day of February, 2015.

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of The Empire District Electric Company of Joplin, Missouri for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company	**File No. ER-2014-0351** Tariff No. YE-2015-0074

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BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of The Empire District Electric Company of Joplin, Missouri for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company	)	**File No. ER-2014-0351** Tariff No. YE-2015-0074

Rebuttal Testimony of Kavita Maini

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND OCCUPATION.

A. My name is Kavita Maini. I am the principal and sole owner of KM Energy Consulting, LLC.

Q. PLEASE STATE YOUR BUSINESS ADDRESS.

A. My office is located at 961 North Lost Woods Road, Oconomowoc, WI 53066.

Q. ARE YOU THE SAME KAVITA MAINI WHO HAS PREVIOUSLY FILED DIRECT TESTIMONY IN THIS CASE?

A. Yes, I filed direct testimony on behalf of the Midwest Energy Consumers Group ("MECG"). My direct testimony provided recommendations regarding: (a) the Company's proposed changes to its Fuel Adjustment Clause ("FAC"), (b) class cost of service study, (c) an appropriate allocation approach for any rate increase and (d) rate design for the Large Power and Special Transmission rate schedules.

Q WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A The purpose of my rebuttal testimony is to address: (a) the treatment of interruptible credits used by other parties and (b) class cost of service ("CCOSS") study models used by the Company, OPC and Commission Staff.

II. TREATMENT OF INTERRUPTIBLE CREDITS

Q WHAT IS THE EXISTING TREATMENT OF INTERRUPTIBLE CREDIT?

A It is my understanding that Special Transmission Service Schedule SC-P is the only class currently providing interruptible service. There is one customer in this class. As I mentioned in my direct testimony (pages 30-33), the interruptible credits are provided as compensation for the customer forgoing firm service and being available to be curtailed for reliability reasons. These credits are not an economic development or load retention discount. The credits are directly assigned to this class and revenues are imputed as if the contract does not exist. While these credits provide compensation for a service that provides benefits to all customers (i.e., the avoidance or postponement of additional capacity resources), there is some dispute about whether Empire should be allowed to recover these interruptible credits in rates.

Q SHOULD THE REVENUE TREATMENT OBVIATE THE NEED TO RECOGNIZE THE INTERRUPTIBLE NATURE OF SERVICE PROVIDED?

A No. Whether the Company bears the costs of the interruptible credits or whether such costs are allocated to customers (which is typically the case in other jurisdictions), the interruptible nature of the service being provided must be recognized.

Since the interruptible load is treated as firm from this class and assigned fixed generation related costs in the class cost of service study, revenues should also be adjusted to be consistent with this approach. OPC and Commission Staff assume for costing purposes that the interruptible load is firm. However, with respect to calculating net operating income and rate of return earned from each class, both parties utilize actual revenues which includes a deduction of the interruptible credits. This treatment is inconsistent because the method of using actual revenues implies that the interruptible load is receiving non-firm service (because credits are deducted from the revenue) whereas the costs are allocated as if the load is firm. Instead, the revenues needed to be firmed up by using the revenue prior to deducting the interruptible credit to coincide with the treatment of the interruptible load as firm in the CCOSS.

Failure to use revenues that assume firm service (as for costing purposes) results in a mismatch between costs and revenues and significantly understates the rate of return earned from this class. This is why I made the revenue adjustment to Schedule SC-P in my calculations of the class rates of return[1]. (See my direct testimony, Page 24). I treated SC-P's load as firm and accordingly firmed up the revenues when calculating the income and rate of return.

While I do not support OPC's recommended CCOSS options as discussed further below, I calculated the impact of firming up Schedule SC-P's revenues (i.e., using the revenues prior to deducting the interruptible credit) on this class' rate of return for OPC's AED12CP method. OPC's results using the AED12CP method

[1] Since the existing method consists of the Company bearing the cost of the interruptible credit, I did not allocate these costs to other classes.

indicate that Schedule SC –P has a below average rate of return of 5.27%. (See witness Dismukes testimony, Schedule DED-2). Firming up these SC-P revenues results in a rate of return of 10.6% that is well above the average earned rate of return.[2] Since Schedule SC-P actually has an above average rate of return, this would necessarily impact if and to what extent the revenue deficiency should be apportioned to this class. I will provide similar adjustments to Commission Staff's later in this testimony.

III. CLASS COST OF SERVICE STUDIES

1. Correction from Direct Testimony

Q PRIOR TO DISCUSSING THE VARIOUS ISSUES, PLEASE EXPLAIN WHAT CORRECTION YOU WISH TO MAKE TO YOUR DIRECT TESTIMONY?

A In calculating the AED6NCP class factors, I inadvertently utilized the kWh sales without losses. Since the demand numbers included losses, I should have also utilized energy sales that included losses. Schedule KM-1RT shows the comparison of the allocators between what I submitted in direct testimony and the revised allocators. As can be observed, the allocators are generally the same (differences are 0.04% or less) and therefore, I have not attempted to rerun the CCOSS.

[2] The firmed up revenue of $3.895 million is calculated as $3.528 million + $365,712 (interruptible credit shown as a negative in the Company's revenue proof workpapers). This essentially results in increasing the class operating income by $365,712 to $725.018. Using OPC rate base allocated to Schedule SC-P of $6,816,080 yields a rate of return of 10.6%.

2. **Empire CCOSS**

a. ***Production Plant***

Q YOU INDICATED IN YOUR DIRECT TESTIMONY THAT EMPIRE HAS MISAPPLIED THE AED12CP METHOD. PLEASE EXPLAIN.

A Witness Overcast indicated that he used the AED12CP method. Both OPC and I noticed a problem in his application of that methodology. As described in my direct testimony, the AED method consists of two components: (1) the average demand which is calculated by dividing the energy usage of each class by the number of hours in a year and (2) the excess demand which is calculated as the difference between the class maximum peak or peaks and the average demand. The average component is then weighted by the system load factor and the excess component is weighted by 1 minus the system load factor.

The following are problems associated with Empire's application of the AED method:

a. The average component calculated by the Company used kWh usage without losses;

b. System load factor was incorrectly calculated by dividing average demand by 12CP instead of 1CP;[3]

c. The Company subtracted the average demand component from system 12CP to calculate the system excess portion of AED. However, in calculating the excess portion by class, the excess portion used each class' proportion of 1NCP to system

[3] See NARUC Manual page 82; also, note that in OPC's and Staff's direct testimony, both use 1CP to calculate the load factor.

1NCP multiplied by the system excess. By utilizing the total NCP, Empire double-counted the average demand – once as part of calculating the average demand in the first step and then again as a subset of the total NCP. This method is a form of the peak and average method and has been rejected by the Commission in the past as I discuss later in this testimony.

Q. PUTTING ASIDE THE PROBLEMS IN EMPIRE'S APPLICATION OF THE A&E METHODOLOGY, DO YOU AGREE WITH EMPIRE'S UTILIZATION OF THE 12 CP VERSION OF THIS ALLOCATOR?

A. No. Even if these issues were corrected, I do not agree that utilizing the 12CP version of the A&E methodology is a reasonable basis for assigning costs since it does not accurately assign costs to cost causers. As explained in my direct testimony, the predominant peaks contribute to the need for constructing generation infrastructure. In Empire's case, this should consider the predominant summer and winter months. In its analysis, however, Empire considers all 12 monthly peaks. Witness Overcast indicates that the 12CP approach is valid because demand on system capacity should incorporate outages in addition to system peaks. However, the Company has not provided any evidence to substantiate this claim. Further, when asked to provide actual reserve margins by month to ascertain the impact of outages on reserve margins, the Company indicates that it does not have such information (see response to MECG 8.3). I used a conservative approach by choosing three representative summer and winter peaks respectively.

3. OPC CCOSS

a. Production Plant

Q PLEASE EXPLAIN WHAT METHOD(S) OPC USED TO ALLOCATE FIXED PRODUCTION PLANT COSTS AND DESCRIBE YOUR CONCERNS.

A OPC provided two options for consideration namely, AED12CP (correcting the Company's calculation of the excess portion) and Average and Peak using 12CP (A&P12CP).[4] While OPC corrected the Company's AED12CP double counting problem by subtracting the average portion from each class' 12CP demand and weighting the average and excess class portions by the system load factor and 1-system load respectively, as explained above, I disagree with their methodologies focus on 12 monthly coincident peaks.[5]

Q. PLEASE EXPLAIN THE AVERAGE AND PEAK ALLOCATION METHODOLOGY?

A. Like the A&E method, OPC's A&P12CP method consists of two components as well. There is an average energy usage component calculated by dividing energy consumption by 8,760 hours in a year. This energy component is weighted by the system load factor. The significant difference between the AED and A&P method is in calculating the second component. Instead of using the difference between the peak and average demand as the second component, the A&P12CP method uses total peak

[4] The terms Average and Peak and Peak and Average are used interchangeably. In its previous decision in the Ameren rate case, the Commission expressly referred to this methodology as the Peak and Average and then rejected its use.
[5] OPC's calculation has a slight error in that the 1CP demand number used is not at the Generator.

demand (12CP). This approach has a double counting problem because the allocator results in counting average usage twice – once when calculating the average portion and then again as a component or subset of 12CP.[6]

As mentioned earlier, because of this problem with double counting class energy usage (average demand), this method has been previously been rejected by the Commission. Furthermore, by counting the average demand twice, it results in allocating more costs to high load factor classes than appropriate – classes that contribute large amounts to the average usage but not peak. Thus, this method does not result in the proper assignment of cost to classes as it does not follow cost causation.

As was explained in the Commission's decision in case ER-2010-0036, there is a significant difference between AED and Peak and Average methodologies:

> 13. To recognize that pattern of usage, the Average and Excess method separately allocates energy cost based on the average usage of the system by the various customer classes. It then allocates the excess *(emphasis added)* of the system peaks to the various customer classes by a measure of that class' contribution to the peak. In other words, the average and excess costs are each allocated to the customer classes once. *(emphasis added)*
>
> 14. The Peak and Average method, in contrast, initially allocates average costs to each class, but then, instead of allocating just the excess of the peak usage period to the various classes to the cost causing classes, the method reallocates the entire peak usage to the classes that contribute to the peak. Thus, the classes that contribute a large amount to the average usage of the system but add little to the peak, have their average usage allocated to them a second time. Thus, the Peak and Average method double counts the average system usage, *(emphasis added)* and for that reason is unreliable.

[6] The workpapers showing the calculations of the AED12CP and P&A12CP indicate that the average system demand is 497,545 KW in the AED12CP and 501,010 KW in the P&A12CP. These numbers should be the same. It appears that the lower numbers are used for the LP class in the AED12CP calculation relative to the P&A12CP calculation. (See OPC Workpapers)

Thus, I recommend that neither of OPC's CCOSS studies be adopted or used for revenue deficiency apportionment purposes.

b. Distribution Plant

Q DID OPC HAVE ANY OTHER RECOMMENDATIONS REGARDING THE COMPANY'S CCOSS?

A Yes, OPC recommends that the Minimum Distribution System (MDS) methodology used by the Company to allocate Distribution Plant FERC Accounts 364-368 be replaced by 100% demand based allocation. I do not agree with this recommendation. Distribution Accounts FERC 364-368 consist of poles, overhead lines, underground conduit and lines and line transformers. The MDS methodology is widely used in the industry and recognizes that a certain amount of minimum distribution infrastructure is required to connect customers to the system irrespective of that customer's demand.

Under the MDS methodology, this minimum amount of distribution infrastructure is allocated on a per customer basis, while the portion of cost above minimum is allocated on demand. Thus, from a cost causation standpoint, to the extent that the utility incurs a distribution cost simply to connect a customer to its system, regardless of that customer's size, it is appropriate to assign the cost of these minimal facilities to rate schedules on the basis of the number of customers, rather than on the kW demand of the class. The NARUC Manual states:

> "The customer portion of distribution facilities is that portion of costs which varies with the number of customers. Thus, the number of poles, conductors, transformers, services and meters are directly related to the number of customers on the utility's system."

See page 90 of the NARUC Manual

Thus, it cannot be assumed, as OPC does, that 100% of the costs are to be based on demand.

Q WHAT ARE YOUR RECOMMENDATIONS REGARDING OPC'S CCOSS?

A Due to the concerns discussed above, I recommend that OPC's CCOSS results and subsequent recommendations not be adopted or utilized for revenue deficiency apportionment purposes.

4. **Commission Staff CCOSS**

Q WHAT TIME PERIOD DID COMMISSION STAFF USE TO CALCULATE THE VARIOUS CCOSS RELATED ALLOCATORS?

A Commission Staff used data from September 2013 to August 2014 to derive its results whereas the Company used Calendar Year 2013. OPC and I relied on the Company's CCOSS data. Therefore, the results are not directly comparable. Nevertheless, I can provide comments on the Staff's methodology and still draw certain conclusions from its results.

Q WHAT METHOD(S) DID COMMISSION STAFF ANALYZE TO ALLOCATE PRODUCTION RELATED COSTS?

A Commission Staff's preferred method is the Base and Intermediate Peak method (BIP) although Staff also provided the results of Modified BIP and AED4NCP.

Q PLEASE EXPLAIN THE BIP METHOD.

A The BIP method consists of three non-weighted components:

- Fixed production related costs associated with base load generation are allocated to classes based on average demand;
- Fixed production related costs associated with intermediate generation are allocated on the basis of 12CP minus average demand; and
- Fixed production related costs associated with peaking generation are allocated on the basis of 4CP minus intermediate demand

Q PLEASE COMMENT ON STAFF'S DETAILED BIP APPROACH.

A Staff's BIP method is not a conventionally used method in the industry. Since this approach allocates 100% of the base load plant related fixed costs on the basis of average energy usage, it ignores the fact that base load plant has capacity value and therefore should be allocated on the basis of a measure of peak demand. Put another way, the implied assumption here is that investment in base load generation is not caused by need for capacity. However, this assumption is flawed because the Company's coal plants such as Asbury for example, are assigned accredited capacity by SPP.

Furthermore, the average energy usage does not translate to base load usage. When applying the BIP method, base load usage is generally regarded as usage with a 100% load factor meaning that it is present all 8760 hours of the year. However, average energy usage is not present all the time. Staff calculated the average demand at 506 MWs (sum of each class' kWh sales divided by 8760). Using the hourly data

provided in Staff workpapers, I estimated that 56% of the time, the retail usage is less than 506 MWs. This means that there is an over allocation of base load capacity costs than is appropriate. This ultimately results in assigning a disproportionate amount of costs to high load factor classes. It appears that nearly $685 million of the $805 million or 85% of the total fixed production costs were allocated on the basis of this base load component. (See Staff CCOSS and Rate Design Report, page 21, BIP Installed Capacity Cost Allocator).

Q WHAT DO THE RESULTS OF THE DETAILED BIP STUDY INDICATE?

A The CCOSS results indicate that, in spite of utilizing such a punitive method to high load factor classes, the LP class is contributing significantly more revenues than it costs Empire to serve this class. According to Staff's BIP methodology and calculation of revenue neutral adjustments, a revenue neutral adjustment of -10.23% (i.e., negative adjustment) will result in matching LP revenues with cost to serve. (See Staff CCOSS and Rate Design Report, page 8, Table 2). This result is likely occurring due to the current revenue from the LP class being $9 million or 17% higher than what the Company provided in its CCOSS model as well as lower overall system operating expenses. Staff's Schedule SC-P's result indicates a positive revenue neutral adjustment of 2.23%. However, after firming up the revenues as was done for OPC's CCOSS AED12CP results, I followed Staff's method of calculating revenue neutral adjustments to arrive at 6.92% meaning a revenue neutral decrease in rates. Schedule KM – 2RT shows the revisions for Schedule SC-P. The rest of the data in this Schedule is from Staff's CCOSS and Rate Design Report, Table 2, page 8. Instead of

using the rate revenue of $3,775,876 for Schedule SC-P as provided in Staff's Report, I firmed up this class' revenue by adding $365,712, which is the interruptible credit to this class.

Q WHICH OF STAFF'S CCOSS METHODS CAN BE CONSIDERED REASONABLE?

A Staff's Average and Excess option using 4NCP is a reasonable option.[7] As discussed earlier, Staff used data from September 2013 to August 2014 to derive its results. A review of monthly load data during this period shows two distinct summer and two winter peaks for this time period. The results of this method indicate a revenue neutral adjustment of -10.7% for the LP class and a -2.54% for Schedule SC-P.[8] After firming up revenues, the revenue neutral adjustment for Schedule SC-P is -11.2%. This means that, according to Staff's A&E approach, the LP class should receive a 10.7% revenue neutral decrease in rates and the SC-P class should receive a 11.2% revenue neutral decrease in rates (after correcting for the interruptible credits) prior to applying revenue deficiency adjustments.

The result for Schedule SC-P using Staff's AED4NCP also demonstrates the punitive nature of the Detailed BIP method. In the Detailed BIP method, Schedule

[7] Staff's excess portion used each class' 4 maximum or non-coincident peaks throughout the year. A more appropriate method is to use the 4 non-coincident peaks for the four months that have the predominant peaks. In this case, there are some slight differences in the results and are not significant.

	RG	CB	SH	TEB	GP	LP	Praxair	PFM	Lighting
STAFF A&E 4NCP	50.24%	8.17%	2.40%	8.81%	17.28%	11.16%	0.86%	0.02%	1.07%
MECG A&E4NCP	50.28%	8.08%	2.33%	9.10%	17.3%	10.84%	0.90%	0.02%	1.16%

[8] I calculated the revenue neutral adjustments by applying the same method used by Staff of deducting the revenue deficiency of 1.39% from the each class' CCOSS results. Table 3 on page 10 of Staff's Report shows LP class at negative 9.33% and Schedule SC-P, Praxair at negative 1.15% after incorporating Staff's revenue deficiency.

SC-P was at a positive revenue neutral adjustment (+2.23%) whereas in Staff's AED 4NCP method, it is a negative revenue neutral adjustment (-2.54%), an overall change of 4.77% without firming up revenues to account for the interruptible credit adjustment.

5. Overall CCOSS Implications

Q EVEN THOUGH DIRECT COMPARISONS BETWEEN STAFF'S AND MY CCOSS RESULTS CANNOT BE MADE DUE TO DIFFERENT TIME PERIODS, ARE THERE ANY GENERAL CONCLUSIONS THAT CAN BE DRAWN?

A Yes. There is significant under recovery from the Residential class. Staff's and my results indicate a double digit revenue neutral increase in rates to match residential revenues with Empire's cost to serve this class. In fact, despite the flaws in its methodologies, OPC also observed that the residential class was below its cost of service and that the relative rate of return for this class had decreased since the last rate case.

Staff's and my results also show that the LP class should get a negative revenue neutral adjustment. Staff's results show a significantly larger negative revenue adjustment than my results – as mentioned earlier, I believe this is in large part due to the 17% increase in current revenue and lower overall system operating expenses used in Staff's CCOSS compared to the Empire CCOSS data that I used.

It is important that the interruptible nature of the service being provided by Schedule SC-P be recognized and revenues be firmed up in order to calculate the operating income and rate of return.

Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A Yes.

Schedule KM-1RT

CORRECTION IN AED6NCP CALCULATION TO ACCOUNT FOR LOSSES IN SALES

A&E6NCP Calculation in Direct Testimony

Line No:	AED6NCP	Total	Res Gen	Comm	Comm SH	Gen Pow	Special Transmission Service	Tot.Elec. Bldg	Feed Mill	Large Pow	Misc Lts	Street Lts	Private Lts	Spec Lts
			0	1	2	3	4	5	6	7	8	9	10	11
1	MO System Peak	886,552	415,821	86,409	17,453	161,021	6,988	73,575	110	125,159	17	0	0	0
2	Average of 6 NCP	916,362	460,414	76,534	20,020	143,926	8,267	76,746	176	120,333	17	5,060	3,931	940
3	Sales	4,065,905,721	1,693,510,298	309,429,188	88,784,630	845,841,313	59,768,807	367,584,161	428,398	667,895,731	132,876	18,192,223	13,706,480	631,615
4	Load Factor	52.4%												
5	1 minus Load Factor	47.6%												
6	Average Demand	464,144	193,323	35,323	10,135	96,557	6,823	41,962	49	76,244	15	2,077	1,565	72
7	Excess Demand	452,218	267,091	41,211	9,885	47,369	1,444	34,784	127	44,089	1	2,983	2,366	868
8	Average Demand (%) weighted by load factor	52.4%	21.81%	3.98%	1.14%	10.89%	0.77%	4.73%	0.01%	8.60%	0.00%	0.23%	0.18%	0.01%
9	Excess Demand (%) weighted by 1 - load factor	47.6%	28.14%	4.34%	1.04%	4.99%	0.15%	3.66%	0.01%	4.65%	0.00%	0.31%	0.25%	0.09%
10		100.00%	49.95%	8.33%	2.18%	15.88%	0.92%	8.40%	0.02%	13.25%	0.00%	0.55%	0.43%	0.10%

A&E6NCP Calculation using Sales with losses

Line No:	AED6NCP	Total	Res Gen	Comm	Comm SH	Gen Pow	Special Transmission Service	Tot.Elec. Bldg	Feed Mill	Large Pow	Misc Lts	Street Lts	Private Lts	Spec Lts
			0	1	2	3	4	5	6	7	8	9	10	11
1	MO System Peak	886,552	415,821	86,409	17,453	161,021	6,988	73,575	110	125,159	17	0	0	0
2	Average of 6 NCP	916,362	460,414	76,534	20,020	143,926	8,267	76,746	176	120,333	17	5,060	3,931	940
3	Sales	4,369,329,558	1,830,406,392	334,442,114	95,961,598	911,000,365	61,198,402	397,298,085	463,028	703,256,028	143,617	19,662,804	14,814,453	682,672
4	Load Factor	56.3%												
5	1 minus Load Factor	43.7%												
6	Average Demand	498,782	208,951	38,178	10,955	103,995	6,986	45,354	53	80,280	16	2,245	1,691	78
7	Excess Demand	417,580	251,463	38,356	9,066	39,930	1,281	31,392	123	40,053	0	2,815	2,239	862
8	Average Demand (%) weighted by load factor	56.3%	23.57%	4.31%	1.24%	11.73%	0.79%	5.12%	0.01%	9.06%	0.00%	0.25%	0.19%	0.01%
9	Excess Demand (%) weighted by 1 - load factor	43.7%	26.34%	4.02%	0.95%	4.18%	0.13%	3.29%	0.01%	4.20%	0.00%	0.29%	0.23%	0.09%
10		100.00%	49.91%	8.32%	2.19%	15.91%	0.92%	8.40%	0.02%	13.25%	0.00%	0.55%	0.43%	0.10%

Difference in Direct – Rebuttal

Line No:	AED6NCP	Total	Res Gen	Comm	Comm SH	Gen Pow	Special Transmission Service	Tot.Elec. Bldg	Feed Mill	Large Pow	Misc Lts	Street Lts	Private Lts	Spec Lts
1	Rebuttal	100.00%	49.91%	8.32%	2.19%	15.91%	0.92%	8.40%	0.02%	13.25%	0.00%	0.55%	0.43%	0.10%
2	Direct	100.00%	49.95%	8.33%	2.18%	15.88%	0.92%	8.40%	0.02%	13.25%	0.00%	0.55%	0.43%	0.10%
3	Line 1 - Line 3		-0.04%	0.00%	0.00%	0.03%	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%

Schedule KM-2RT

SUMMARY RESULTS OF STAFF'S BIP CCOSS WITH FIRMED UP REVENUES FOR SCHEDULE SC-P

STAFF DETAILED BIP										
Description	MO Adjusted Jurisdictional	Residential	CB	SH	TEB	GP	LP	SC-Praxair	PFM	Lighting
CLASS COST OF SERVICE	$461,911,654	$228,810,301	$42,401,259	$10,567,927	$36,214,243	$78,574,534	$55,027,865	$3,855,117	$71,032	$6,389,373
CURRENT RATE REVENUE	$460,916,827	$209,600,623	$43,607,782	$10,693,614	$38,437,069	$85,675,743	$61,140,407	$4,141,588	$114,652	$7,871,060
CURRENT OTHER REVENUE	-$5,198,861	-$2,525,215	-$374,788	-$123,087	-$479,478	-$905,070	-$701,797	-$57,571	-$625	-$31,230
STAFF REVENUE ABOVE (BELOW) COS	-$6,193,689	-$21,734,894	$831,914	$2,599	$1,743,853	$6,201,655	$5,404,546	-$136,818	$43,000	$1,450,460
MECG REVISED: IMPACT OF FIRMED UP REVENUE USING STAFF REVENUE DEFICIENCY								$228,900		
% CHANGE NEEDED TO BRING CLASS REVENUE TO COST-OF-SERVICE REVENUE DEFICIENCY - STAFF	1.3900%	10.37%	-1.91%	-0.02%	-4.54%	-7.24%	-8.84%	3.62%	-37.50%	-18.43%
% REVENUE NEUTRAL CHANGE PRIOR TO STAFF DEFICIENCY ADJUSTMENT - STAFF	LESS 1.39%	8.98%	-3.30%	-1.41%	-5.93%	-8.63%	-10.23%	2.23%	-38.89%	-19.82%
% REVENUE NEUTRAL CHANGE PRIOR TO STAFF DEFICIENCY ADJUSTMENT - MECG		8.98%	-3.30%	-1.41%	-5.93%	-8.63%	-10.23%	-6.92%	-38.89%	-19.82%