Exhibit No.:	
Issue(s):	Class Cost of Service/ Rate Design/ Tariff Issues
Witness/Type of Exhibit:	Meisenheimer/Rebuttal
Sponsoring Party:	Public Counsel
Case No.:	ER-2007-0002

REBUTTAL TESTIMONY

OF

BARBARA A. MEISENHEIMER

Submitted on Behalf of the Office of the Public Counsel

AMERENUE
(RATE DESIGN)

CASE NO. ER-2007-0002

February 5, 2007

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	)))))	**Case No. ER-2007-0002**

AFFIDAVIT OF BARBARA A. MEISENHEIMER

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Barbara A. Meisenheimer, of lawful age and being first duly sworn, deposes and states:

1. My name is Barbara A. Meisenheimer. I am Chief Utility Economist for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Barbara A. Meisenheimer

Subscribed and sworn to me this 5th day of February 2007.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

JERENE A. BUCKMAN
My Commission Expires
August 10, 2009
Cole County
Commission #05754036

Jerene A. Buckman
Notary Public

My Commission expires August 10, 2009.

REBUTTAL TESTIMONY
OF
BARBARA MEISENHEIMER

AMERENUE
CLASS COST OF SERVICE AND RATE DESIGN

CASE NO. ER-2007-0002

Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. Barbara A. Meisenheimer, Chief Utility Economist, Office of the Public Counsel, P. O. 2230, Jefferson City, Missouri 65102.

Q. HAVE YOU TESTIFIED PREVIOUSLY IN THIS CASE?

A. Yes, I submitted direct testimony on cost of service and rate design issues on December 29, 2006.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to present Public Counsel's updated class cost of service (CCOS) studies. I will also response to the cost of services studies and the direct testimony of other parties.

Q. IN PREPARATION OF YOUR TESTIMONY, WHAT MATERIALS DID YOU REVIEW?

A. I have reviewed the direct testimony rate design testimony of the Staff, Noranda Aluminum Inc., Missouri Industrial Energy Consumers (MIEC), AARP and AmerenUE.

I. CLASS COST OF SERVICE STUDY AND RATE DESIGN UPDATES

Q. HAVE YOU UPDATED YOUR CLASS COST STUDIES?

A. Yes. I have updated my CCOS studies to reflect modification I have made since the filing of direct testimony. The first change corrects a computational error that affects the Payroll related allocations in my studies. The second modification adjusts the assignment of distribution plant costs. I sought clarification on this issue from the Company regarding work papers referenced in the Company's direct cost study. I did not received the DR responses in time to consider all changes that may be necessary based on the DR responses but I was able to obtain some of the information from testimony filed by the Company in a previous case. I have incorporated the information I obtained. The next change corrects the allocation factors for Accounts 360-Land & Land Rights, 361-Structures & Improvements and 362-Station Equipment. Finally, I have modified the allocator used to allocate transmission related costs. In direct testimony I argued that transmission plant costs can be equitably allocated on the same basis as production plant. I continue to believe that this is generally a reasonable assumption in allocating transmission related costs. However, making such an assumption coupled with a Time of Use (TOU) based production demand allocator raises additional question about the allocation. Using an alternative 12CP allocator for transmission related costs has minimal impact on my cost of

service study results and I have decided to switch to the 12CP allocator to minimize the contested issues related to class cost of service.

Q. DO YOU ANTICIPATE FURTHER UPDATES TO YOUR STUDIES?

A. Yes. The Staff has informed me that there may be changes in the revenues assigned to the classes. I will adjust my studies if the Staff revenue adjustments significantly affect the revenue allocations in my studies. I may also update my studies if I receive DR responses from the Company.

Q. DID THE MODIFICATIONS DESCRIBED ABOVE HAVE A SIGNIFICANT IMPACT ON YOUR CCOS STUDY RESULTS?

A. The correction to the Payroll related allocations had a significant affect on the allocation of costs between Residential and LTS. The other modifications had a smaller impact.

The updated CCOS study results are illustrated in Schedule REB BAM-1 and Schedule REB BAM-2. Schedule REB BAM-1 illustrates the results of the study for which I used a time of use (TOU) allocator to assign demand related production costs and associated expenses. Schedule REB BAM-2 illustrates the results of the study for which I used an Average and 3 Coincident Peak (A&3CP) allocator to assign demand related production costs and associated expenses. The tables below summarize for each class the current percent of revenue as well as the amount and percentage change from current revenues required to equalize the rates of return.

Table 1. Updated CCOS Results (TOU Production Allocator)

	Residential	SGS	LGS	SPS	LPS	LTS
Class Revenue %	41.93%	11.36%	21.51%	9.40%	8.47%	7.33%
Revenue Neutral Shift	($2,640,984)	($15,892,564)	($28,802,148)	$4,245,242	$31,857,133	$11,233,321
% Change	-0.30%	-6.64%	-6.58%	2.29%	20.05%	8.28%

Table 2. Updated CCOS Results (A&3CP Production Allocator)

	Residential	SGS	LGS	SPS	LPS	LTS
Class Revenue %	42.94%	11.47%	21.28%	9.18%	8.15%	6.98%
Revenue Neutral Shift	$31,947,592	($11,961,258)	($36,724,369)	($3,370,116)	$21,033,882	($925,731)
% Change	3.62%	-5.00%	-8.39%	-1.82%	13.24%	-0.68%

Q. HOW DO YOU RECOMMEND THAT THE COMMISSION ACCOMMODATE FACTORS SUCH AS AFFORDABILITY, RATE IMPACT, AND RATE CONTINUITY IN DETERMINING RATE DESIGN?

A. In direct testimony, I recommended that the Commission adopt a rate design that balances movement toward cost of service with rate impact and affordability considerations. To reach this balance, I recommended that in cases where the existing revenue structure departs greatly from the class cost of service, the Commission should impose, at a maximum, class revenue shifts equal to one half

of the "revenue neutral shifts" indicated by Public Counsel's Class Cost of Service studies. Revenue neutral shifts are shifts that hold overall company revenue at the existing level but allow for the share attributed to each class to be adjusted to reflect the cost responsibility of the class. In addition to moving half way to the revenue neutral shifts, I recommend that if the Commission determines that an overall increase in revenue requirement is necessary in this case, then no customer class should receive a net decrease as the combined result of: (1) the revenue neutral shift that is applied to that class, and (2) the share of the total revenue increase that is applied to that class. Likewise, if the Commission determines that an overall decrease in revenue requirement is necessary, then no customer class should receive a net increase as the combined result of: (1) the revenue neutral shift that is applied to that class, and (2) the share of the total revenue decrease that is applied to that class.

Q. BASED ON YOUR UPDATED CCOS RESULTS WHAT ARE YOUR RECOMMENDATIONS ON CLASS REVENUE RESPONSIBILITY?

A. If the Commission determines that an overall reduction in revenue requirement is appropriate in this case, it would allow an opportunity for movement toward cost of service without imposing significant detriment on classes that are currently below cost of service. In the case of a reduction I recommend that the Commission approve a reduction for classes paying in excess of class cost of service in order to move toward equalizing the class rates of return. If the reduction exceeds the amount necessary to accomplish equal rates of return, then the remaining reduction should be applied to all classes on an equal percentage basis.

If instead the Commission determines that a significant increase is appropriate then in order to mitigate rate shock I recommend that the Commission approve revenue neutral shifts that move classes no more than half way to the cost of service with the condition that no customer class should receive a net decrease as the combined result of: (1) the revenue neutral shift that is applied to that class, and (2) the share of the total revenue increase that is applied to that class.

As I described above, the Staff has informed me that there may be significant changes in the assignment of current class revenues. For this reason, I have not developed a specific recommendation on the class revenue responsibility Public Counsel proposes. Once the Staff provides updated revenues I will be able to provide a specific recommendation.

Q. BASED ON YOUR UPDATED CCOS RESULTS WHAT CUSTOMER CHARGES DO YOU RECOMMEND?

A. My CCOS studies suggest the average customer cost recoverable in a customer charge is about $6 for the Residential class and about $10.30 for the Small General Service Class. I do not anticipate significant changes in these calculations in future study updates. The current customer charges exceed these costs so I recommend that there be no increase in the Residential or SGS customer charges in this proceeding.

II. COMPARISON OF CLASS COST OF SERVICE STUDIES

Q. PLEASE COMPARE THE RESULTS OF THE PARTIES' CLASS COST STUDIES.

A. Table 4 provides a comparison of each party's revenue neutral increase or decrease as a percentage of the current revenue used by the party.

Table 4. Comparison of Revenue Neutral
Rate Revenue Increase/Decrease Percentages

	RES	SGS	LGS	SPS	LPS	LTS
OPC TOU	-0.30%	-6.64%	-6.58%	2.29%	20.05%	8.28%
OPC A&3CP	3.62%	-5.00%	-8.39%	-1.82%	13.24%	-0.68%
Staff Case 3	0.44%	-7.52%	-4.11%	15.67%	10.92%	0.44%
Company*	5.57%	-6.94%	-8.27%	-4.33%	11.32%	-4.94%
MIEC COS 4	14.1%	-3%	-11.6%	-12.8%	-3.1%	-26.6%
MIEC COS 5	11.8%	-4.2%	-10.7%	-10.2%	1%	-19.9%
* Calculated from Warwick Schedule 1						

Staff's results appear in the direct testimony of David Roos. The MIEC results appear in the direct testimony of Maurice Brubaker. AmerenUE's results were derived from Company witness Warwick's direct testimony work papers. The OPC results appear in this testimony.

III. RESPONSE TO OTHER PARTIES DIRECT TESTIMONY

Q. DO YOU HAVE ANY RESPONSE AT THIS TIME TO THE STAFF'S CCOS STUDY RESULTS OR RATE DESIGN RECOMMENDATION?

A. I understand based on discussions with Staff that it intends to update its cost of service study to reflect anticipated class revenue adjustments. I have reviewed the work papers underlying Staff's CCOS study and with the exception of the treatment of the cost of primary distribution facilities and my use of an alternative TOU production allocator, I found the majority of allocations to be similar. I believe that it is likely that the treatment of revenue is the primary cause of difference between the Staff CCOS study results and my own. Therefore, I will not comment on the Staff CCOS study at this time.

In the direct testimony of James Busch, he recommends that revenue neutral shifts be adopted that move classes to within 5% of class cost of service and that any change in revenue requirement should be made subsequently on an equal percentage basis. He bases his recommendation on recognition that CCOS studies should be used as a guide in setting rates. He further recommends that all rate elements be adjusted on an equal percentage basis.

I agree with Mr. Busch that CCOS studies should be used as a guide in setting rates. I further support tempered movement toward cost of service when class costs vary significantly from cost of service or when other considerations such as rate impact or affordability outweigh the need to move toward costs. Mr. Busch indicates that the Staff believes a revenue requirement reduction is appropriate in this case. If the Commission agrees then I would recommend that the Commission approve reducing the revenues of classes paying in excess of

class cost of service. While in the case of a reduction Public Counsel might be willing to move classes closer to cost than 5%, we would not oppose the recommendation. In the case of a significant increase in revenue requirement such as that proposed by the Company, a more moderate movement toward cost of service would be appropriate.

With the exception of the customer charge, in the case of a revenue requirement increase, Public Counsel would support increasing the Residential and SGS rate elements on an equal percent basis. My CCOS study results indicate that an increase in the customer charge is not necessary. Keeping the customer charge as low as possible encourages customers to initiate service. Also, given that the Company has requested up to 12-month recovery of the minimum charges that a customer voluntarily disconnecting service would have otherwise paid, increasing the customer charge unnecessarily will increase the cost of reconnection following voluntary termination of service.

Q. DO YOU OPPOSE THE COMPANY PROPOSAL TO BILL CUSTOMERS WHO VOLUNTARILY TERMINATE SERVICE FOR LESS THAN 12 MONTHS?

A. Yes. Imposing such a charge limits a customer's ability to avoid paying for services they choose not to use.

Q. WHAT ARE THE PRIMARY DIFFERENCES BETWEEN YOUR CCOS RESULTS AND THOSE OF THE COMPANY AND MIEC?

A. I believe that there are two main factors that contribute to the differences between my study results and those of the Company and MIEC. The first is the allocation of Primary costs for certain distribution plant accounts. The third is the use of

weighted versus unweighted customer numbers for allocating certain customer related costs.

Q. COULD YOU ELABORATE ON THE FIRST FACTOR?

A. Yes. All the parties that prepared a CCOS study, including OPC, functionalized distribution costs in Accounts 364 (Poles Towers and Fixtures), 365 (Overhead Conductors & Devices), 366 (Underground Conduit) and 367 (Underground Conductors & Devices) in a manner that recognizes a distinction between primary and secondary voltage. All parties, except OPC, then classified both primary and secondary distribution as having a customer related component as well as a demand related component. I also allocated secondary distribution based on both a customer and demand component, but I allocated primary distribution based only on demand.

Q. WHY SHOULD THE PRIMARY PORTION OF THESE ACCOUNTS AND RELATED EXPENSES NOT BE CHARACTERIZED AS CUSTOMER RELATED?

A. Page 20 of the NARUC Manual defines customer related cost as costs directly related to the number of customers. I believe that the Primary portions of these distribution costs do not reasonably satisfy this definition. First, as I explained in direct testimony, many of the distribution costs associated with providing service to electric utility customers are not directly associated with or reasonably assignable to a particular class with precision. For example, with the exception of service drops and meters, most of the facilities between the utility customer's point-of-service and the distribution substation are shared facilities. Since no portion of such facilities is directly related to the number of customers, the associated costs are best classified as demand related, rather than customer

related. When a new customer is connected to the system, both customer counts and customer density change but the system may not need any new poles, conduits, conductors or transformers to serve the customer. In other words, unlike meters that increase directly with the number of customers, the addition of a new customer will not necessarily cause new investment in poles, conduits, conductors or even transformers. Second, the more removed facilities are from the customer the more flexible they are likely to be in serving the demand of different customers and the less appropriate it is to characterize the associated cost as customer related.

Q. DO YOU SUPPORT THE ZERO-INTERCEPT METHOD AS A REASONABLE METHOD FOR IDENTIFYING A PORTION OF DISTRIBUTION COSTS AS CUSTOMER RELATED?

A. No. Although I did use some results of the Company's distribution study and zero-intercept method to split cost between Primary and Secondary and to develop a customer related portion for allocating secondary customer costs, I do not believe the zero-intercept method produces a portion of costs that can reasonably be defined as customer related.

The zero-intercept method seeks to identify that portion of plant related to a zero-load hypothetically representing a system that has no demand related cost component. Typically, the cost of each type of plant (measured on the vertical axis) is plotted against its capacity (measured on the horizontal axis). An equation representing the relationship between cost and capacity is derived typically through regression analysis. This relationship is projected back to where the capacity is zero. The cost at a capacity of zero is assumed to be the customer related portion of costs. The obvious flaw in the method is that it does not derive or prove a direct relationship between the number of customers and

investment in the particular type of plant. In addition to failing to derive a direct relationship between customer numbers and costs, there is no reasonable justification for hypothesizing the existence of a distribution system the purpose of which is to make power and energy available to customers who are assumed not to be able to receive some minimal level of power or energy. Furthermore, in deriving the equation that describes the relationship between capacities and costs, analysts must choose the form of the relationship they believe exists: linear, convex or some other shape. This choice affects where the "zero-intercept" occurs and may be strongly influenced by the relationship between higher capacity facilities and their corresponding costs. This can be one reason the minimum-intercept method may produce unreliable results such as a negative intercept indicating negative cost at zero-load. From a mathematical perspective, I do not believe a zero- intercept method proves that any portion of cost is customer related. It is simply a method for calculating a portion of cost that can be arbitrarily assigned as customer related if the analyst believes a portion should be. For the reasons described above I believe that it is more reasonable to assign a portion of Secondary costs as customer related so I, like the other cost witnesses, used the zero-intercept results for allocating Secondary costs. Since I do not agree that Primary costs can reasonably be assigned on a customer basis, I did not use the Company's zero-intercept method for assigning any portion of Primary costs as customer related and instead allocated them on a demand basis.

Q. DO YOU AGREE WITH AARP WITNESS RON BINZ WITH RESPECT TO HIS CRITICISMS OF THE ZERO-INTERCEPT METHOD?

A. Yes. I agree with Mr. Binz testimony regarding the shortfalls of the zero-intercept method.

Q. WHAT IS YOUR RESPONSE TO THE MODIFICATIONS TO THE COMPANY CCOS STUDY PROPOSED BY MR. BINZ ON BEHALF OF AARP.

A. Mr. Binz testimony offers a number of modifications to address deficiencies in the Company's class cost of service study that would result in a more reasonable allocation of costs to smaller customers. I am in substaintial agreement with Mr Binz on the rationale for his proposed modifications to the production and distribution cost allocators.

Q. IN ADDITION TO ALLOCATING A PORTION OF PRIMARY COST ON A CUSTOMER BASIS, ARE THERE OTHER REASONS YOU BELIEVE COMPANY'S CLASS COST OF SERVICE STUDY DISPROPORTIONATELY ASSIGNS COSTS TO THE RESIDENTIAL AND SGS CLASSES?

A. Yes. I believe the distribution costs are disproportionately assigned to residential and SGS customers because the Company allocates customer related costs on the basis of unweighted customer numbers. The Company allocates the customer portion of poles, overhead and underground conductors and conduit in a manner that results in each residential customer being allocated the same customer related cost as a Lowes or Walmart store taking service as a Large General Service customer even though the Lowes or Walmart likely is served by poles that can sustain heavier lines, by higher capacity conductors and more likely by underground conduit. This customer allocation method coupled with the use of a 1NCP method of allocating primary and secondary demand related costs too heavily assigns costs to small low use customers.

The Company's zero intercept method also appears to exacerbate the over assignment of costs to small customers due to the technique used for pricing out

the physical plant. Upon reviewing testimony filed by the expert that conducted the Company distribution study it appears that the Company's study is based on "reproduction cost" as opposed to booked costs. My understanding of the description of this technique is that it factors up booked costs to reflect the cost of current replacement. I believe that this technique results in a further layer of disproportionate cost assignment to Residential and SGS customers when coupled with the unweighted customer allocations and 1NCP demand related allocations.

Q. DO YOU AGREE WITH MR. BRUBAKER'S CRITICISM OF THE COMPANY'S USE OF THE FOUR HIGHEST NONCOINCIDENT PEAKS IN DEVELOPING ITS A&4NCP PRODUCTION ALLOCATOR?

A. No. While I recommend the use of an Average and 3 Coincident Peak method for allocating production costs, if an A&E production allocator is to be used, I believe the Company's decision to use the highest annual NCPs is appropriate. On page 49 of the NARUC *Electric Cost Allocation Manual* it states that the required data for the A&E method "are the **annual maximum** and average demands for each customer class and the system load factor." Limiting the choice of the NCPs to the summer months disproportionately attributes costs to classes that use more in those months. Table 3 shown in Schedule REB BAM-3 illustrates the difference in the Company's and Mr. Brubaker's proposals for selecting the NCP months. The months shown in the bold box correspond to the 3 summer month NCP values. The shaded boxes correspond to the 4 highest annual NCPs. Only one of the highest NCPs for the Large Power Service occurred in the summer months and none of the Large Transmission Service NCPs are captured in the 3 summer months. On the other hand, the summer

period includes the three highest NCPs for both the Residential and Small General Service classes resulting in a disproportionate assignment of cost to these classes.

Q. DOES MR BRUBAKER'S CHOICE OF THE THREE SUMMER MONTH NCP METHOD RESULT IN A HIGHER ALLOCATOR THAN WOULD RESULT FROM SELECTING THE THREE HIGHEST NCPS ON AN ANNUAL BASIS?

A. Yes. Table 4 shown in Schedule REB BAM-3 illustrates the difference in the A&E allocators derived from using the three summer month NCPs and the three highest annual NCPs. Limiting the NCP selection to the summer months produces a lower allocation of costs to the Large Power Class and Large Transmission classes while increasing the allocation to smaller users.

Q. DO YOU AGREE WITH MR. BRUBAKER'S CONCLUSION THAT OFF SYSTEM SALES REVENUE SHOULD BE ALLOCATED ON THE BASIS OF KWH?

A. No. To allocate off system sales revenue on energy alone as Mr. Brubaker suggests would ignore that plant investment is a component of the cost of generating off-system sales volumes. On the other hand, both the Average & Excess and Average & Peak methods incorporate both a component that reflects average annual energy loads by class as well as a component that reflects peak periods. Using one of these production allocators to assign off system sales revenue does ensure that both fixed and variable aspects of the cost to generate off system sales revenues are reflected in the allocation.

Q. THE COMPANY HAS PROPOSED A NUMBER OF CHANGES TO THE SERVICES, SERVICE RATES AND TERMS AND CONDITIONS CONTAINED IN ITS TARIFF. DO YOU HAVE CONCERNS REGARDING THESE PROPOSALS?

A. Yes. I have concerns with a number of the proposed changes.

Q. PLEASE DESCRIBE YOUR CONCERNS.

A. With respect to certain distribution extensions the Company proposes an additional per ft fee that would apply to large lots. I have two concerns related to this proposal. The first is that the applicable fee is not specified in the Company tariff. The second is that while I agree that larger lots may result in higher cost it is not clear that the property owner caused the costs. It may be that line is run along a stretch of frontage to serve not only the property owner but also six other households further down the block.

The Company also proposes programs that discount services to certain customers. The High Load Factor Discount for LPS, The Economic Redevelopment Rider and Development and Retention Riders provide a discount to certain classes. Public Counsel does not oppose such discounts if they are funded by shareholders.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

OPC CCOS Study Summary TOU Production Allocator

		TOTAL	RES	SGS	LGS	SPS	LPS	LTS
1	O & M EXPENSES	1,485,173,603	601,173,223	154,121,021	305,256,873	147,857,451	149,240,485	127,524,550
2	DEPREC. & AMORT. EXPENSE	289,611,658	132,461,105	34,742,447	56,778,892	24,633,834	24,603,586	16,391,794
3	TAXES	382,136,516	164,064,526	42,146,145	78,162,824	35,274,256	35,787,188	26,701,578
4								
5	TOTAL EXPENSES AND TAXES	2,156,921,777	897,698,854	231,009,613	440,198,589	207,765,540	209,631,258	170,617,922
6								
7	CURRENT RATE REVENUE	2,040,378,586	883,572,678	239,245,364	437,788,646	185,248,100	158,871,485	135,652,313
8	OFFSETTING REVENUES:							
9	Reveue Credits	622,976,364	233,164,978	63,188,111	135,216,337	65,090,751	66,655,426	59,660,762
10								
11	Total Offsetting Revenues	622,976,364	233,164,978	63,188,111	135,216,337	65,090,751	66,655,426	59,660,762
12								
11	TOTAL CURRENT REVENUE	2,663,354,950	1,116,737,657	302,433,475	573,004,982	250,338,851	225,526,911	195,313,075
12	CLASS % OF CURRENT REVENUE	100.00%	41.93%	11.36%	21.51%	9.40%	8.47%	7.33%
13								
14	OPERATING INCOME	506,433,173	219,038,803	71,423,861	132,806,394	42,573,310	15,895,652	24,695,153
15								
16	TOTAL RATE BASE	5,129,974,972	2,192,027,405	562,510,872	1,053,523,358	474,254,083	483,717,511	363,941,743
17								
18	IMPLICIT RATE OF RETURN	9.87%	9.99%	12.70%	12.61%	8.98%	3.29%	6.79%
19								
20	EQUAL RATE OF RETURN	9.87%	9.87%	9.87%	9.87%	9.87%	9.87%	9.87%
21								
22	REQUIRED OPERATING INCOME							
23	Equalized (OPC) Rates of Return	506,433,173	216,397,819	55,531,297	104,004,246	46,818,552	47,752,785	35,928,474
24								
25	TOTAL COST OF SERVICE	2,663,354,950	1,114,096,673	286,540,911	544,202,834	254,584,092	257,384,044	206,546,396
26	CLASS % of COS	100.00%	41.83%	10.76%	20.43%	9.56%	9.66%	7.76%
27								
28	MARGIN REVENUE REQUIRED							
29	to Equalize Class ROR - Revenue Neutral	2,663,354,950	1,114,096,673	286,540,911	544,202,834	254,584,092	257,384,044	206,546,396
30								
31	COS INDICATED REVENUE NEUTRAL SHIFT	(0)	(2,640,984)	(15,892,564)	(28,802,148)	4,245,242	31,857,133	11,233,321
32	% REVENUE NEUTRAL RATE INCREASE	0.00%	-0.30%	-6.64%	-6.58%	2.29%	20.05%	8.28%
33	CLASS % OF REVENUE AFTER REVENUE SHIFT	100.00%	43.17%	10.95%	20.04%	9.29%	9.35%	7.20%

OPC CCOS Study Summary - A&3CP Production Demand Allocator

		TOTAL	RES	SGS	LGS	SPS	LPS	LTS
1	O & M EXPENSES	1,485,173,603	626,924,864	157,047,929	299,358,677	142,187,718	141,182,435	118,471,979
2	DEPREC. & AMORT. EXPENSE	289,611,658	140,049,380	35,604,924	55,040,862	22,963,125	22,229,108	13,724,259
3	TAXES	382,136,516	176,067,348	43,510,374	75,413,679	32,631,597	32,031,337	22,482,181
4								
5	TOTAL EXPENSES AND TAXES	2,156,921,777	943,041,592	236,163,227	429,813,218	197,782,441	195,442,879	154,678,419
6								
7	CURRENT RATE REVENUE	2,040,378,586	883,572,678	239,245,364	437,788,646	185,248,100	158,871,485	135,652,313
8	OFFSETTING REVENUES:							
9	Reveue Credits	622,976,364	259,946,738	66,232,101	129,082,201	59,194,218	58,275,037	50,246,070
10								
11	Total Offsetting Revenues	622,976,364	259,946,738	66,232,101	129,082,201	59,194,218	58,275,037	50,246,070
12								
11	TOTAL CURRENT REVENUE	2,663,354,950	1,143,519,417	305,477,465	566,870,847	244,442,317	217,146,522	185,898,383
12	CLASS % OF CURRENT REVENUE	100.00%	42.94%	11.47%	21.28%	9.18%	8.15%	6.98%
13								
14	OPERATING INCOME	506,433,173	200,477,824	69,314,238	137,057,629	46,659,876	21,703,643	31,219,963
15								
16	TOTAL RATE BASE	5,129,974,972	2,354,380,854	580,963,816	1,016,337,675	438,508,765	432,914,837	306,869,025
17								
18	IMPLICIT RATE OF RETURN	9.87%	8.52%	11.93%	13.49%	10.64%	5.01%	10.17%
19								
20	EQUAL RATE OF RETURN	9.87%	9.87%	9.87%	9.87%	9.87%	9.87%	9.87%
21								
22	REQUIRED OPERATING INCOME							
23	Equalized (OPC) Rates of Return	506,433,173	232,425,416	57,352,979	100,333,260	43,289,760	42,737,525	30,294,232
24								
25	TOTAL COST OF SERVICE	2,663,354,950	1,175,467,008	293,516,206	530,146,478	241,072,201	238,180,404	184,972,652
26	CLASS % of COS	100.00%	44.13%	11.02%	19.91%	9.05%	8.94%	6.95%
27								
28	MARGIN REVENUE REQUIRED							
29	to Equalize Class ROR - Revenue Neutral	2,663,354,950	1,175,467,008	293,516,206	530,146,478	241,072,201	238,180,404	184,972,652
30								
31	COS INDICATED REVENUE NEUTRAL SHIFT	(0)	31,947,592	(11,961,258)	(36,724,369)	(3,370,116)	21,033,882	(925,731)
32	% REVENUE NEUTRAL RATE INCREASE	0.00%	3.62%	-5.00%	-8.39%	-1.82%	13.24%	-0.68%
33	CLASS % OF REVENUE AFTER REVENUE SHIFT	100.00%	44.87%	11.14%	19.66%	8.91%	8.82%	6.60%

Table 3. Non-Coincident Peak (NCP) @ Generation (Converterd to MWh)						
Month	Residential	SGS	LGS	SPS	LPS	LTS
Apr-05	2049	727	1372	609	669	480
May-05	2598	829	1506	733	701	480
Jun-05	3960	984	1632	711	621	480
Jul-05	4386	1004	1765	728	730	478
Aug-05	4187	979	1690	735	684	473
Sep-05	3855	939	1689	735	692	464
Oct-05	2888	887	1647	739	713	474
Nov-05	2489	718	1365	606	568	479
Dec-05	3069	753	1419	606	552	482
Jan-06	2771	678	1257	577	533	482
Feb-06	3124	707	1308	595	540	482
Mar-06	2549	687	1218	579	499	482

Table 4. Average & Excess Allocator		
Class	*3 Summer NCP*	*3 High NCP*
RES	47.16%	46.70%
SGS	11.23%	11.14%
LGS	19.52%	19.59%
SPS	8.42%	8.50%
LPS	7.94%	8.30%
LTS	5.72%	5.77%