Exhibit No.:

. Issues:

Seasonal Cost of Service

Witness:

Hong Hu

Sponsoring Party:

MO PSC Staff Type of Exhibit: Direct Testimony

Case No.:

ER-2004-0570

Date Testimony Prepared:

October 4, 2004

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

DIRECT TESTIMONY

DEC 2 8 2004

OF

Missouri Public Service Commission

HONG HU

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2004-0570

Jefferson City, Missouri October 2004

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In The Matter Of The Tariff Filing Of The) Empire District Electric Company To) Implement A General Rate Increase For) Retail Electric Service Provided To) Customers In Its Missouri Service Area)
AFFIDAVIT OF HONG HU
STATE OF MISSOURI)) ss COUNTY OF COLE)
Hong Hu, of lawful age, on her oath states: that she has participated in the preparation of the following Direct Testimony in question and answer form, consisting of
Hong Hu Subscribed and sworn to before me thisday of October, 2004.
Notary Public
My commission expires DAWN L. HAKE Notary Public - State of Missouri County of Cole County of Cole My Commission Expires Jan 9, 2005

1		DIRECT TESTIMONY
2 3		OF
4 5		HONG HU
6		
7 8		THE EMPIRE DISTRICT ELECTRIC COMPANY
9 10		CASE NO. ER-2004-0570
11 12	Q.	Please state your name and business address.
13	A.	My name is Hong Hu and my business address is Missouri Public Service
14	Commission	, P. O. Box 360, Jefferson City, Missouri 65102.
15	Q.	Are you the same Hong Hu that previously filed direct testimony in this
16	case?	
17	A.	Yes, I am.
18	Q.	What is the purpose of your testimony?
19 20	Α.	The purpose of my Direct Testimony is to present the Staff's Seasonal
21	Cost-of-Serv	rice study results.
22	Q.	What is a seasonal cost-of-service study?
23	Α.	Basically, a seasonal cost-of-service study is an extension to a class cost-
24	of-service st	udy, which further allocates class cost of service to the summer and winter
25	seasons. A	seasonal cost-of-service study can provide guidance in designing seasonally
26	differentiate	d rates for each customer class.
27	Q.	How did you allocate class cost of service into different seasons?
28	Α.	I allocated costs to the seasons on the same bases that costs were allocated
29	to the custo	omer classes, e.g., if certain costs were allocated to the classes based on
30	number of	customers, those same costs were allocated to the seasons based on the

number of customers in each season. For the costs that were allocated on number of customers, I simply allocated the same amount of cost to each month because, on an annualized basis, each month has the same number of customers. For demand-related costs, I used the capacity utilization method describe below to allocate the costs to each month. I allocated the energy-related costs to each month based upon the monthly kWh sales of each customer class. I summed the costs for June, July, August and September to determine the summer costs, and summed the costs for the remaining months to determine the winter costs.

- Q. Please describe the capacity utilization method.
- A. I believe that the proper view of cost causality recognizes that certain equipment and facilities are sized to serve the maximum level of demand, but are utilized throughout the entire year. The capacity utilization method first identifies the proportion of capacity that is utilized each month, and then spreads the corresponding increment of cost into the months when these portions of capacity are actually being used. In this manner, each month would be allocated appropriate costs that correspond to only the proportion of the capacity that is being utilized in that month.
- Q. Is the seasonal cost-of-service study based on the Staff's class cost-of-service study that you filed on September 20, 2004?
- A. The seasonal cost-of-service study is based on an update of the Staff's previously filed CCOS. The input data has been updated to reflect updated revenue, sales and loads for the General Power Service rate class in the Large General Service CCOS class, updated load data for the Large Power Service CCOS class, and use of the capacity utilization method for the allocation of capacity related production and transmission cost.

•	Direct Testimony of Hong Hu
1	The results of the Staff's updated CCOS study are shown in Schedule 1. The seasonal
2	allocation of these costs by functional category is shown in Schedule 2.
3	Q. As a part of the seasonal class cost-of-service study, did you further
4	classify the costs?
5	A. Yes. Staff witness Janice Pyatte requested that I further classify each
6	functional cost category into the following components to provide information she
7	needed for designing rates: Fixed, Variable and Energy-related. This classification is
8	shown on Schedule 3.
9	Q. Does this conclude your Direct Testimony?
10	A. Yes.

STAFF CLASS COST-OF-SERVICE RESULTS

(Revenue Neutral)
EMPIRE DISTRICT ELECTRIC
CASE NO. ER-2004-0570

	FUNCTIONAL CATEGORY									
200-			RES	SGS	LGS	LPS	SC	Other	TOTAL	% OF TOTAL
PRODUCTION	CAPACITY		\$40,115,750	\$9,951,411	\$25,323,495	\$13,530,422	\$1,217,525	\$0	\$90,138,603	34.93%
PRODUCTION	ENERGY		\$32,401,742	\$8,336,218	\$23,053,992	\$13,868,820	\$1,323,280	\$0	\$78,984,053	30.61%
TRANSMISSION	CAPACITY		\$8,380,839	\$2,079,013	\$5,290,494	\$2,826,727	\$254,361	\$0	\$18,831,434	7.30% 3.44%
DISTRIBUTION	SUBSTATIONS	DEMAND	\$4,378,380	\$1,069,172	\$2,388,107	\$981,463	\$72,718	\$0	\$8,889,839	3,44%
DISTRIBUTION	POLES AND CONDUCTORS	PRI. FEEDER - DEMAND	\$4,149,535	\$1,013,289	\$2,263,288	\$930,165	\$0	\$0	\$8,356,277	3.24%
DISTRIBUTION	POLES AND CONDUCTORS	PRI. TAP -CUSTOMER .	\$3,903,579	\$878,450	\$189,907	\$10,830	, \$0	\$0	\$4,982,768	1.93%
DISTRIBUTION	POLES AND CONDUCTORS	SEC. CUSTOMER	\$2,860,227	\$643,657	\$136,515	\$992	\$0	\$0	\$3,641,391	1.41% 3.76%
DISTRIBUTION	POLES AND CONDUCTORS	PRI. TAP - DEMAND	\$4,820,493	\$1,177,133	\$2,629,249	\$1,080,568	\$0	\$0 \$0	\$9,707,443 \$4,179,958	1.62%
DISTRIBUTION	POLES AND CONDUCTORS	SEC. DEMAND	\$2,396,625	\$585,240	\$1,128,327	\$69,765	\$0	30	\$4,178,800	1.02 %
DISTRIBUTION	TRANSFORMERS	SEC. CUSTOMER	\$3,542,027	\$1,122,299	\$238,167	\$0	\$0	\$0	\$4,902,494	1.90% 0.97%
DISTRIBUTION	TRANSFORMERS	DEMAND	\$1,473,020	\$345 ,215	\$694,933	\$0	\$0	\$0	\$2,513,168	0.97%
DISTRIBUTION	CUSTOMER INSTALLATIONS		\$0	\$929,217	\$107,182	\$1,680	\$48	\$0	\$1,038,128	0.40%
DISTRIBUTION	SERVICES		\$4,303,675	\$1,057,360	\$686,462	\$0	\$0	\$0	\$6,047,497	2.34% 1.64%
DISTRIBUTION	METERS		\$2,901,047	\$944 ,712	\$329,090	\$66,879	\$2,090	\$0	\$4,243,818	1.0476
	CUSTOMER DEPOSITS		(\$320,491)	(\$165,720)	(\$92,498)	\$0	\$0	\$0	(\$578,708)	
	METER READING		\$1,714,658	\$385,862	\$83,417	\$4,757	\$149	\$0	\$2,188,843	0.65%
	BILLING, SALES, SERVICE		\$3,754,535	\$636,167	\$73,522	\$1,043	\$33	\$0	\$4,465,301	1.73%
	ASSIGNED LGS/LPS/SC		\$0	\$0	\$104,627	\$1,485	\$48	\$0	\$106,159	0.04%
	ASSIGNED RES/SGS		\$4,014,695	\$592,917	\$0	\$0	\$0	\$0	\$4,607,612	1.79%
	EXCESS FACILITY		\$85	\$2,787	\$257,824	\$560,181	\$683	\$0	\$821,561	. 0.32%
	TOTAL		\$124,790,423	\$31,584,400	\$64,886,101	\$33,935,777	\$2.870.933	\$0	\$258,067,633	100.00%
%			48.36%	12.24%	25.14%	13.15%	1.11%	0.00%	100%	
	RATE REVENUE		\$110,644,795	\$31,220,119	\$63.842.339	\$30,585,036	\$2,421,236	\$4,412,733	\$243.126,257	
Aŭ	ocate Rate Revenues for Others	I	\$2,133,808	\$540.066	\$1,109,496	\$580,272	\$49,090	(\$4,412,733)	\$0	
And	OCATE PORE Revenues for Others		\$2,133,600	\$3-10,000	\$1,105,450	\$000,E72	\$45,030	(04,412,100)	•	
NC	ON RATE REVENUE		\$989,468	\$396,562	\$337,603	\$149,366	\$2,897	\$33,649	\$1,909,544	
	erruptible Credit		(\$152,611)	(\$37,858)	(\$96,338)	(\$51,473)	(\$4,632)	\$0	(\$342,912)	
	System Revenue		\$5,472,511	\$1,357,552	\$3,454,581	\$1,845,793	\$166,092	\$0	\$12,296,529	
	cess Facility Revenue		\$0	\$3,220	\$342,677	\$696,075	\$864	\$0	\$1,042,837	
	le of Emission		\$14,514	\$3,734	\$10,326	\$6,212	\$593	\$0	\$35,379 \$0	
Allo	ocale Non Rate Revenues for Others		\$16,271	\$4,118	\$8,460	\$4,425	\$374	(\$33,649)	3 0	
	TOTAL REVENUE	T	\$119,118,755	\$33,487,513	\$69,009,145	\$33,815,706	.\$2,636,515	\$0	\$258,067,633	
%			46.16%	12.98%	26.74%	13.10%	1,02%	0.00%	100%	
RI	EVENUE DEFICIENCY		\$5,671,667	(\$1,903,113)	(\$4,123,044)	\$120,072	\$234,418	\$0	\$0	
%	CHANGE	-	5.13%	-6.10%	-6.46%	0.39%	9.68%	0.00%	0.00%	
										

STAFF CLASS COST-OF-SERVICE RESULTS

(At Staff MidPoint ROR 8.09%)
EMPIRE DISTRICT ELECTRIC

CASE NO. ER-2004-0570

				CASE NO. ER-	2004-0570					
	FUNCTIONAL CATEGORY		RES	SGS	LGS	LPS	SC	Other	TOTAL	% OF TOT
RODUCTION	CAPACITY		\$38,719,951	\$9,605,159	\$24,442,382	\$13,059,640	\$1,175,162	\$0	\$87,002,294	34
RODUCTION	ENERGY		\$32,368,581	\$8,327,686	\$23,030,398	\$13,854,626	\$1,321,926	. \$0	\$78,903,218	31
ANSMISSION	CAPACITY		\$7,898,628	\$1,959,392	\$4,986,093	\$2,664,085	\$239,726	\$0	\$17,747,924	1
ISTRIBUTION	SUBSTATIONS	DEMAND	\$4,149,537	\$1,013,290	\$2,263,289	\$930,165	\$68,917	\$0	\$8,425,198	3
ISTRIBUTION	POLES AND CONDUCTORS	PRI. FEEDER - DEMAND	\$3,946,554	\$963,723	\$2,152,575	\$884,664	\$0	\$0	\$7,947,517	;
STRIBUTION	POLES AND CONDUCTORS	PRI. TAP -CUSTOMER	\$3,713,875	\$835,760	\$180,678	\$10,304	\$0	\$0	\$4,740,616	
STRIBUTION	POLES AND CONDUCTORS	SEC. CUSTOMER	\$2,722,652	\$612,698	\$129,949	\$944	\$0	\$0	\$3,466,243	
ISTRIBUTION	POLES AND CONDUCTORS	PRI. TAP - DEMAND	\$4,581,984	\$1,118,890	\$2,499,159	\$1,027,103	\$0	\$0	\$9,227,136	
ISTRIBUTION	POLES AND CONDUCTORS	SEC. DEMAND	\$2,278,839	\$556,477	\$1,072,873	\$66,337	\$0	\$0	\$3,974,526	
ISTRIBUTION	TRANSFORMERS	SEC. CUSTOMER	\$3,336,437	\$1,057,158	\$224,343	\$0	\$0	\$0	\$4,617,938	
ISTRIBUTION	TRANSFORMERS	DEMAND	\$1,387,521	\$325,177	\$654,597	\$0	\$0	\$0	\$2,367,296	
ISTRIBUTION	CUSTOMER INSTALLATIONS		\$0	\$878,731	\$101,359	\$1,589	\$45	\$0	\$981,724	
ISTRIBUTION	SERVICES		\$4,109,637	\$1,009,687	\$855,512	\$0	\$0	\$0	\$5,774,836	
ISTRIBUTION	METERS		\$2,829,959	\$921,563	\$321,026	\$65,240	\$2,039	\$0	\$4,139,826	
	CUSTOMER DEPOSITS		(\$287,931)	(\$148,884)	(\$83,101)	\$0	\$0	\$0	(\$ 519, 9 15)	
	METER READING		\$1,708,818	\$384,547	\$83,133	\$4,741	\$148	\$0	\$2,181,387	
	BILLING, SALES, SERVICE		\$3,736,658	\$633,138	\$73,172	\$1,038	\$32	\$0	\$4,444,039	
	ASSIGNED LGS/LPS/SC		\$0	\$0	\$104,266	\$1,480	\$46	\$0	\$105,791	
	ASSIGNED RES/SGS		\$4,033,634	\$595,714	\$0	\$0	\$0	\$0	\$4,629,348	
	EXCESS FACILITY		\$80	\$2,608	\$241,260	\$524,192	\$839	\$0	\$768,779	
	TOTAL		\$121,235,413	\$30,652,514	\$63,132,962	\$33,096,149	\$2,808,681	\$0	\$250,925,719	100
	K TOTAL		48.32%	12.22%	25.16%	13.19%	1.12%	0.00%	100%	
	SATE SEVENIE		\$110,644,795	\$31,220,119	\$63,842,339	\$30,585,036	\$2,421,236	\$4,412,733	\$243,126,257	
	RATE REVENUE		\$2,132,023	\$539.049	\$1,110,244	\$582,023	\$49,393	(\$4,412,733)	\$0	
,	Allocate Rate Revenues for Others		\$2,132,023	\$539,049	31,110,244	\$302,023	9 43,333	• • •	••	
ł	NON RATE REVENUE		\$989,468	\$396,562	\$337,603	\$149,366	\$2,897	\$33,649	\$1,909,544	
4	nterruptible Credit		(\$152,611)	(\$37,858)	(\$96,338)	(\$51,473)	(\$4,632)	\$0	(\$342,912)	
	OffSystem Revenue		\$5,472,511	\$1,357,552	\$3,454,581	\$1,845,793	\$166,092	\$0	\$12,298,529	
E	xcess Facility Revenue		\$0	\$3,220	\$342,677	\$696,075	\$864	\$0	\$1,042,837	
5	Sale of Emission		\$14,514	\$3,734	\$10,326	\$6,212	\$593	\$0	\$35,379	
4	Allocata Non Rate Revenues for Others		\$16,258	\$4,110	\$8,466	\$4,438	\$377	(\$33,649)	\$0	
	TOTAL REVENUE	I	\$119,116,957	\$33,486,488	\$69,009,899	\$33,817,469	\$2,636,819	\$0	\$258,067,633	
	K TOTAL REVENUE		46.16%	12.98%	26.74%	13.10%	1.02%	0.00%	100%	
			\$2 110 AEE	(\$2,833,974)	(\$5,876,937)	(\$721,321)	\$171,862	\$0	(\$7,141,914)	
	REVENUE DEFICIENCY		\$2,118,456	(\$2,033,974)	(40,010,531)]	(4121,321)	\$171,00Z	- JO	(91,171,314)	
	% CHANGE		1.91%	-9.08%	-9.21%	-2.36%	7.10%	0.00%	-2.94%	

EMPIRE ELECTRIC COMPANY RATE CASE STAFF COST-BASED RATE DESIGN ALLOCATION OF RESIDENTIAL COSTS TO SEASONS

Total Costs		
	Winter	Summer
		\$14,111,896
		\$11,670,638
		\$2,854,999
		\$1,499,871
		\$1,426,502
\$4,581,984	\$2,925,803	\$1,656,181
\$2,278,839	\$1,455,141	\$823,698
\$3,713,875	\$2,475,917	\$1,237,958
\$2,722,652	\$1,815,102	\$907,551
\$1,387,521	\$898,988	\$488,533
\$3,336,437	\$2,224,291	\$1,112,146
\$0	\$0	\$0
\$4,109,637	\$2,739,758	\$1,369,879
\$2,829,959	\$1,886,639	\$943,320
\$1,708,818	\$1,139,212	\$569,606
\$3,736,658	\$2,491,105	\$1,245,553
(\$287,931)	(\$191,954)	(\$95,977)
\$4,033,634	\$2,689,089	\$1,344,545
\$80	\$53	\$27
(\$8,472,162)	(\$5,648,108)	(\$2,824,054)
\$112,763,251	\$72,420,382	\$40,342,869
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\$2,118,456		
	\$3,713,875 \$2,722,652 \$1,387,521 \$3,336,437 \$0 \$4,109,637 \$2,829,959 \$1,708,818 \$3,736,658 (\$287,931) \$4,033,634 \$80 (\$8,472,162) \$112,763,251	Annual Winter \$38,719,951 \$24,608,055 \$32,368,581 \$20,697,943 \$7,898,628 \$5,043,629 \$4,149,537 \$2,649,666 \$3,946,554 \$2,520,052 \$4,581,984 \$2,925,803 \$2,278,839 \$1,455,141 \$3,713,875 \$2,475,917 \$2,722,652 \$1,815,102 \$1,387,521 \$898,988 \$3,336,437 \$2,224,291 \$0 \$0 \$4,109,637 \$2,739,758 \$2,829,959 \$1,886,639 \$1,708,818 \$1,139,212 \$3,736,658 \$2,491,105 (\$287,931) (\$191,954) \$4,033,634 \$2,689,089 \$80 \$53 (\$8,472,162) (\$5,648,108) \$112,763,251 \$72,420,382

1.91%

Required Change in Rate Revenues (%)

EMPIRE ELECTRIC COMPANY RATE CASE STAFF COST-BASED RATE DESIGN ALLOCATION OF SMALL GENERAL SERVICE COSTS TO SEASONS

Γ	Total Costs		
Cost Category	Annual	Winter	Summer
Production - Capacity	\$9,605,159	\$5,685,915	\$3,919,243
Production - Energy	\$8,327,686	\$5,198,193	\$3,129,493
Transmission	\$1,959,392	\$1,081,878	\$877,514
Substations	\$1,013,290	\$559,488	\$453,802
Lines, Poles, Conductors-Primary Feeders-Demand	\$963,723	\$532,119	\$431,603
Lines, Poles, Conductors-Primary Taps-Demand	\$1,118,890	\$617,795	\$501,095
Lines, Poles, Conductors-Secondary-Demand	\$556,477	\$307,259	\$249,218
Lines, Poles, Conductors-Primary Taps-Customer	\$835,760	\$557,173	\$278,587
Lines, Poles, Conductors-Secondary-Customer	\$612,698	\$408,465	\$204,233
Line Transformers-Demand	\$325,177	\$198,166	\$127,012
Line Transformers-Secondary-Customer	\$1,057,158	\$704,772	\$352,386
Customer Installation	\$878,731	\$585,821	\$292,910
Services	\$1,009,687	\$673,125	\$336,562
Meters	\$921,563	\$614,37 <u>5</u>	\$307,188
Meter Reading	\$384,547	\$256,365	\$128,182
Customer Service, Sales & Collections	\$633,138	\$422,092	\$211,046
Customer Deposits	(\$148,884)	(\$99,256)	(\$49,628)
Assigned	\$595,714	\$397,142	\$198,571
Excess Facility	\$2,608	\$1,73 <u>9</u>	\$869
Other Revenues	(\$2,266,369)	(\$1,510,913)	(\$755,456)
Total Costs to be Recovered in Rates	\$28,386,145	\$17,191,714	\$11,194,431
			·
Study Period Rate Revenues	\$31,220,119		
Required Change in Rate Revenues (\$)	(\$2,833,974)		
Required Change in Rate Revenues (%)	-9.08%		

EMPIRE ELECTRIC COMPANY RATE CASE STAFF COST-BASED RATE DESIGN ALLOCATION OF LARGE GENERAL SERVICE COSTS TO SEASONS

	Total Costs		
Cost Category	Annual	Winter	Summer
Production - Capacity	\$24,442,382	\$14,744,275	\$9,698,107
Production - Energy	\$23,030,398	\$14,368,395	\$8,662,003
Transmission	\$4,986,093	\$2,865,724	\$2,120,370
Substations	\$2,263,289	\$1,300,810	\$962,479
Lines, Poles, Conductors-Primary Feeders-Demand	\$2,152,575	\$1,237,178	\$915,397
Lines, Poles, Conductors-Primary Taps-Demand	\$2,499,159	\$1,436,375	\$1,062,784
Lines, Poles, Conductors-Secondary-Demand	\$1,072,873	\$622,669	\$450,205
Lines, Poles, Conductors-Primary Taps-Customer	\$180,678	\$120,452	\$60,226
Lines, Poles, Conductors-Secondary-Customer	\$129,949	\$86,632	\$43,316
Line Transformers-Demand	\$654,597	\$436,398	\$218,199
Line Transformers-Secondary-Customer	\$224,343	\$149,562	\$74,781
Customer Installation	\$101,359	\$67,573	\$33,786
Services	\$655,512	\$437,008	\$218,504
Meters	\$321,026	\$214,017	\$107,009
Meter Reading	\$83,133	\$55,422	\$27,711
Customer Service, Sales & Collections	\$73,172	\$48,781	\$24,391
Customer Deposits	(\$83,101)	(\$55,400)	(\$27,700)
Assigned	\$104,266	\$69,510	\$34,755
Excess Facility	\$241,260	\$160,840	\$80,420
Other Revenues	(\$5,167,561)	(\$3,445,040)	(\$1,722,520)
Total Costs to be Recovered in Rates	\$57,965,402	\$34,921,180	\$23,044,221
Study Period Rate Revenues	\$63,842,339		

Study Period Rate Revenues	\$63,842,339	
Required Change in Rate Revenues (\$)	(\$5,876,937)	
Required Change in Rate Revenues (%)	-9.21%	

EMPIRE ELECTRIC COMPANY RATE CASE STAFF COST-BASED RATE DESIGN ALLOCATION OF LARGE POWER SERVICE COSTS TO SEASONS

	Total Costs		
Cost Category	Annual	Winter	Summer
Production - Capacity	\$13,059,640	\$8,231,704	\$4,827,937
Production - Energy	\$13,854,626	\$8,722,520	\$5,132,107
Transmission	\$2,664,085	\$1,619,232	\$1,044,853
Substations	\$930,165	\$565,355	\$364,810
Lines, Poles, Conductors-Primary Feeders-Demand	\$884,664	\$537,699	\$346,965
Lines, Poles, Conductors-Primary Taps-Demand	\$1,027,103	\$624,274	\$402,829
Lines, Poles, Conductors-Secondary-Demand	\$66,337	\$36,760	\$29,577
Lines, Poles, Conductors-Primary Taps-Customer	\$10,304	\$6,869	\$3,435
Lines, Poles, Conductors-Secondary-Customer	\$944	\$629	\$315
Line Transformers-Demand	\$0	\$0_	\$0
Line Transformers-Secondary-Customer	\$0	\$0	\$0
Customer Installation	\$1,589	\$1,059	\$530
Services	\$0	\$0	\$0
Meters	\$65,240	\$43,493	\$21,747
Meter Reading	\$4,741	\$3,161	\$1,580
Customer Service, Sales & Collections	\$1,038	\$692	\$346
Customer Deposits	\$0	\$0	\$0
Assigned	\$1,480	\$986	\$493
Excess Facility	\$524,192	\$349,461	\$174,731
Other Revenues	(\$3,232,434)	(\$2,154,956)	(\$1,077,478)
Total Costs to be Recovered in Rates	\$29,863,715	\$18,588,939	\$11,274,776
Study Period Rate Revenues	\$30,585,036		
Required Change in Rate Revenues (\$)	(\$721,321)		· · · · · · · · · · · · · · · · · · ·

Study Period Rate Revenues	\$30,585,036	
Required Change in Rate Revenues (\$)	(\$721,321)	
Required Change in Rate Revenues (%)	-2.36%	

EMPIRE ELECTRIC COMPANY RATE CASE STAFF COST-BASED RATE DESIGN ALLOCATION OF SPECIAL CONTRACT COSTS TO SEASONS

Γ	Total Costs		
Cost Category	Annual	Winter	Summer
Production - Capacity	\$1,175,162	\$784,141	\$391,021
Production - Energy	\$1,321,926	\$872,711	\$449,215
Transmission	\$239,726	\$159,387	\$80,339
Substations	\$68,917	\$45,821	\$23,096
Lines, Poles, Conductors-Primary Feeders-Demand	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Taps-Demand	\$0	\$0	\$0
Lines, Poles, Conductors-Secondary-Demand	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Taps-Customer	\$0	\$0	\$0
Lines, Poles, Conductors-Secondary-Customer	\$0	\$0	\$0
Line Transformers-Demand	\$0	\$0	\$0
Line Transformers-Secondary-Customer	\$0	\$0	\$0
Customer Installation	\$45	\$30	\$15
Services	\$0	\$0	\$0
Meters	\$2,039	\$1,359	\$680
Meter Reading	\$148	\$99	\$49
Customer Service, Sales & Collections	\$32	\$22	\$11
Customer Deposits	\$0	\$0	\$0
Assigned	\$46	\$31	\$15
Excess Facility	\$639	\$426	\$213
Other Revenues	(\$215,584)	(\$143,723)	(\$71,861)
Total Costs to be Recovered in Rates	\$2,593,097	\$1,720,305	\$872,792
Study Period Rate Revenues	\$2,421,236		
Required Change in Rate Revenues (\$)	\$171.862	-	

Study Period Rate Revenues	\$2,421,236	
Required Change in Rate Revenues (\$)	\$171,862	
Required Change in Rate Revenues (%)	7.10%	

EMPIRE ELECTRIC COMPANY RATE CASE STAFF COST-BASED RATE DESIGN ALLOCATION OF TOTAL COSTS TO SEASONS

	Total Costs						
Cost Category	Annual	Winter	Summer				
Production - Capacity	\$87,002,294	\$54,054,090	\$32,948,205				
Production - Energy	\$78,903,218	\$49,859,763	\$29,043,455				
Transmission	\$17,747,924	\$10,769,850	\$6,978,074				
Substations	\$8,425,198	\$5,121,140	\$3,304,058				
Lines, Poles, Conductors-Primary Feeders-Demand	\$7,947,517	\$4,827,049	\$3,120,467				
Lines, Poles, Conductors-Primary Taps-Demand	\$9,227,136	\$5,604,246	\$3,622,889				
Lines, Poles, Conductors-Secondary-Demand	\$3,974,526	\$2,421,829	\$1,552,698				
Lines, Poles, Conductors-Primary Taps-Customer	\$4,740,616	\$3,160,411	\$1,580,205				
Lines, Poles, Conductors-Secondary-Customer	\$3,466,243	\$2,310,829	\$1,155,414				
Line Transformers-Demand	\$2,367,296	\$1,533,552	\$833,744				
Line Transformers-Secondary-Customer	\$4,617,938	\$3,078,625	\$1,539,313				
Customer Installation	\$981,724	\$654,483	\$327,241				
Services	\$5,774,836	\$3,849,890	\$1,924,945				
Meters	\$4,139,826	\$2,759,884	\$1,379,942				
Meter Reading	\$2,181,387	\$1,454,258	\$727,129				
Customer Service, Sales & Collections	\$4,444,039	\$2,962,693	\$1,481,346				
Customer Deposits	(\$519,915)	(\$346,610)	(\$173,305)				
Assigned	\$4,735,139	\$3,156,759	\$1,578,380				
Excess Facility	\$768,779	\$512,519	\$256,260				
Other Revenues	(\$19,354,109)	(\$12,902,740)	(\$6,451,370)				
Total Costs to be Recovered in Rates	\$231,571,610	\$144,842,520	\$86,729,090				
Ctudy Davis d Data Davanuas	\$2.42 126 257	1					

Study Period Rate Revenues	\$243,126,257	
Required Change in Rate Revenues (\$)	(\$7,141,914)	
Required Change in Rate Revenues (%)	-2.94%	

CLASSIFICATION OF COSTS RESIDENTIAL

	Total	Costs		Fixed C	osts		Variabl	e Costs		Energ	y Costs	
	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer
Production - Capacity	\$38,719,951	\$24,608,055		\$9,686,711	\$6,457,807	\$3,228,904	\$7,350,068	\$4,420,942	\$2,929,125	\$21,683,173		\$7,953,867
Production - Energy	\$32,368,581	\$20,697,943	_	\$0	\$0	\$0	\$0	\$0	\$0	\$32,368,581	\$20,697,943	
Transmission	\$7,898,628	\$5,043,629	\$2,854,999	\$4,490,974	\$2,993,983	\$1,496,991	\$3,407,654	\$2,049,647	\$1,358,007	\$0	\$0	\$0
Substations	\$4,149,537	\$2,649,666	\$1,499,871	\$2,359,329	\$1,572,886	\$786,443	\$1,790,208	\$1,076,780	\$713,428	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Feeders-Demand	\$3,946,554	\$2,520,052	\$1,426,502	\$2,243,918	\$1,495,945	\$747,973	\$1,702,636	\$1,024,107	\$678,529	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Taps-Demand	\$4,581,984	\$2,925,803	\$1,656,181	\$2,605,208	\$1,736,805	\$868,403	\$1,976,776	\$1,188,997	\$787,778	\$0	\$0	\$0
Lines, Poles, Conductors-Secondary-Demand	\$2,278,839	\$1,455,141	\$823,698	\$1,295,694	\$863,796	\$431,898	\$983,145	\$591,345	\$391,800	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Taps-Customer	\$3,713,875	\$2,475,917	\$1,237,958	\$3,713,875	\$2,475,917	\$1,237,958	\$0	\$0	\$0	\$0	\$0	\$0
Lines, Poles, Conductors-Secondary-Customer	\$2,722,652	\$1,815,102	\$907,551	\$2,722,652	\$1,815,102	\$907,551	\$0	\$0	\$0	\$0	\$0	\$0
Line Transformers-Demand	\$1,387,521	\$898,988	\$488,533	\$988,249	\$658,832	\$329,416	\$399,272	\$240,156	\$159,117	\$0	\$0	\$ 0
Line Transformers-Secondary-Customer	\$3,336,437	\$2,224,291	\$1,112,146	\$3,336,437	\$2,224,291	\$1,112,146	\$0	\$0	\$0	\$ 0	\$0	\$0
Customer Installation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Services	\$4,109,637	\$2,739,758	\$1,369,879	\$4,109,637	\$2,739,758	\$1,369,879	\$0	\$0_	\$0	\$0	\$0	\$0 \$0
Meters	\$2,829,959	\$1,886,639	\$943,320	\$2,829,959	\$1,886,639	\$943,320	\$0_	\$0	\$0	\$0	\$0	\$0
Meter Reading	\$1,708,818	\$1,139,212	\$569,606	\$1,708,818	\$1,139,212	\$569,606	\$0	\$0	\$0	\$0	\$0	\$0
Customer Service, Sales & Collections	\$3,736,658	\$2,491,105	\$1,245,553	\$3,736,658	\$2,491,105	\$1,245,553	\$0	\$0	_\$0	\$0		\$0
Customer Deposits	(\$287,931)	(\$191,954)	(\$95,977)	(\$287,931)	(\$191,954)	(\$95,977)	\$0	\$0	\$0	\$0	\$0	\$0
Assigned	\$4,033,634	\$2,689,089	\$1,344,545	\$4,033,634	\$2,689,089		\$0	\$0	\$0	\$0	\$0	\$0
Excess Facility	\$80	\$53	\$27	\$80	\$53	\$27	\$0	\$0	\$0	\$0	\$0	\$0
Other Revenues	(\$8,472,162)	(\$5,648,108)	(\$2,824,054)	(\$8,472,162)	(\$5,648,108)		\$0	\$0	\$0	\$0	\$0	\$0
Total Costs to be Recovered in Rates	\$112,763,251	\$72,420,382	\$40,342,869	\$41,101,738	\$27,401,159	\$13,700,579	\$17,609,759	\$10,591,975	\$7,017,784	\$54,051,754	\$34,427,249	\$19,624,505

CLASSIFICATION OF COSTS SMALL GENERAL SERVICE

	Total	Costs		Fixed C	Costs		Variabl	e Costs		Energy	Costs	
	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer
Production - Capacity	\$9,605,159	\$5,685,915	\$3,919,243	\$2,657,749	\$1,771,833	\$885,916	\$1,568,520	\$561,702	\$1,006,819	\$5,378,889	\$ 3,352,381	\$2,026,508
Production - Energy	\$8,327,686	\$5,198,193	\$3,129,493	\$0	\$0	\$0	\$0	\$0	\$0	\$8,327,686	\$5,198,193	\$3,129,493
Transmission	\$1,959,392	\$1,081,878	\$877,514	\$1,232,192	\$821,461	\$410,731	\$727,201	\$260,417	\$466,783	\$0	\$0	\$0
Substations	\$1,013,290	\$559,488	\$453,802	\$637,222	\$424,814	\$212,407	\$376,068	\$134,674	\$241,395	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Feeders-Demand	\$963,723	\$532,119	\$431,603	\$606,051	\$404,034	\$202,017	\$357,672	\$128,086	\$229,586	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Taps-Demand	\$1,118,890	\$617,795	\$501,095	\$703,630	\$469,087	\$234,543	\$415,260	\$148,709	\$266,552	\$0	\$0	\$0
Lines, Poles, Conductors-Secondary-Demand	\$556,477	\$307,259	\$249,218	\$349,949	\$233,299	\$116,650	\$206,529	\$73,960	\$132,569	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Taps-Customer	\$835,760	\$557,173	\$278,587	\$835,760	\$557,173	\$278,587	\$0	\$0	\$0	\$0	\$0	\$0
Lines, Poles, Conductors-Secondary-Customer	\$612,698	\$408,465	\$204,233	\$612,698	\$408,465	\$204,233	\$0	\$0	\$0	\$0	\$0	\$0
Line Transformers-Demand	\$325,177	\$198,166	\$127,012	\$264,835	\$176,557	\$88,278	\$60,342	\$21,609	\$38,733	\$0	\$0	\$0
Line Transformers-Secondary-Customer	\$1,057,158	\$704,772	\$352,386	\$1,057,158	\$704,772	\$352,386	\$0	\$0	\$0	\$0	\$0	\$0
Customer Installation	\$878,731	\$585,821	\$292,910	\$878,731	\$585,821	\$292,910	\$0	\$0	\$0	\$0	\$0	\$0
Services	\$1,009,687	\$673,125	\$336,562	\$1,009,687	\$673,125	\$336,562	\$0	\$0	\$0	\$0	\$0	\$0
Meters	\$921,563	\$614,375	\$307,188	\$921,563	\$614,375	\$307,188	\$0	\$0	\$0	\$0	\$0	\$0
Meter Reading	\$384,547	\$256,365	\$128,182	\$384,547	\$256,365	\$128,182	\$0	\$0	\$0	\$0	\$0	\$0
Customer Service, Sales & Collections	\$633,138	\$422,092	\$211,046	\$633,138	\$422,092	\$211,046	\$0	\$0	\$0	\$0	\$0	\$0
Customer Deposits	(\$148,884)	(\$99,256)	(\$49,628)	(\$148,884)	(\$99,256)	(\$49,628)	\$0	\$0	\$0	\$0	\$0	\$0
Assigned	\$595,714	\$397,142	\$198,571	\$595,714	\$397,142	\$198,571	\$0	\$0	\$0	\$0	\$0	\$0
Excess Facility	\$2,608	\$1,739	\$869	\$2,608	\$1,739	\$869	\$0	\$0	\$0	\$0	\$0	\$0 \$0
Other Revenues	(\$2,266,369)	(\$1,510,913)	(\$755,456)	(\$2,266,369)	(\$1,510,913)	(\$755,456)	\$0	\$0	\$0	\$0	\$0	
Total Costs to be Recovered in Rates	\$28,386,145	\$17,191,714	\$11,194,431	\$10,967,977	\$7,311,984	\$3,655,992	\$3,711,593	\$1,329,156	\$2,382,437	\$13,706,575	\$8,550,574	\$5,156,001

CLASSIFICATION OF COSTS LARGE GENERAL SERVICE

1	Total	Costs		Fixed C	osts		Variabl	e Costs		Energy	y Costs	
	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer
Production - Capacity	\$24,442,382		\$9,698,107	\$7,936,363	\$5,290,909	\$2,645,454	\$2,818,285	\$890,253	\$1,928,032	\$13,687,734	\$8,563,113	\$5,124,621
Production - Energy		\$14,368,395	\$8,662,003	\$0	\$0	\$0	\$0	\$0	\$0	\$23,030,398		\$8,662,003
Transmission	\$4,986,093	\$2,865,724	\$2,120,370	\$3,679,474	\$2,452,983	\$1,226,491	\$1,306,619	\$412,741	\$893,878	\$0	\$0	\$0
Substations	\$2,263,289	\$1,300,810	\$962,479	\$1,670,188	\$1,113,458	\$556,729	\$593,101	\$187,351	\$40 <u>5,</u> 749	\$0		\$0
Lines, Poles, Conductors-Primary Feeders-Demand	\$2,152,575	\$1,237,178	\$915,397	\$1,588,487	\$1,058,991	\$529,496	\$564,088	\$178,187	\$385,901	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Taps-Demand	\$2,499,159	\$1,436,375	\$1,062,784	\$1,844,247	\$1,229,498	\$614,749	\$654,911	\$206,876	\$448,035	\$0		\$0 \$0 \$0
Lines, Poles, Conductors-Secondary-Demand	\$1,072,873	\$622,669	\$450,205	\$797,503	\$531,669	\$265,834	\$275,370	\$91,000	\$184,370	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Taps-Customer	\$180,678	\$120,452	\$60,226	\$180,678	\$120,452	\$60,226	\$0	\$0	\$0	\$0	\$0	\$0
Lines, Poles, Conductors-Secondary-Customer	\$129,949	\$86,632	\$43,316	\$129,949	\$86,632	\$43,316	\$0	\$0	\$0	\$0		\$0 \$0 \$0
Line Transformers-Demand	\$654,597	\$436,398	\$218,199	\$654,597	\$436,398	\$218,199	\$0	\$0	\$0	\$0	\$0	\$0
Line Transformers-Secondary-Customer	\$224,343	\$149,562	\$74,781	\$224,343	\$149,562	\$74,781	\$0	\$0	\$0	\$0		\$0
Customer Installation	\$101,359	\$67,573	\$33,786	\$101,359	\$67,573	\$33,786	\$0	\$0	\$0	\$0		\$0
Services	\$655,512	\$437,008	\$218,504	\$655 <u>,512</u>	\$437,008	\$218,504	\$0	\$0	\$0	\$0	02	\$0
Meters	\$321,026	\$214,017	\$107,009	\$321,026	\$214,017	\$107,009	\$0	\$0	\$0	\$0	\$0	\$0 \$0 \$0
Meter Reading	\$83,133	\$55,422	\$27,711	\$83,133	\$55,422	\$27,711	\$0	\$0	\$0	\$0	\$0	\$0
Customer Service, Sales & Collections	\$73,172	\$48,781	\$24,391	\$73,172	\$48,781	\$24,391	. \$0	\$0	\$0		02	\$0
Customer Deposits	(\$83,101)	(\$55,400)	(\$27,700)	(\$83,101)			\$0	\$0	\$0	\$0	\$0	\$0
Assigned	\$104,266	\$69,510	\$34,755	\$104,266	\$69,510	\$34,755	\$0	\$0	\$0	\$0	\$0	\$0 \$0
Excess Facility	\$241,260	\$160,840	\$80,420	\$241,260	\$160,840	\$80,420	\$0	\$0	\$0	\$0	\$0	
Other Revenues	(\$5,167,561)		(\$1,722,520)			(\$1,722,520)		\$0_	\$0	\$0	\$0	\$0
Total Costs to be Recovered in Rates	\$57,965,402	\$34,921,180	\$23,044,221	\$15,034,895	\$10,023,263	\$5,011,632	\$6,212,374	\$1,966,408	\$4,245,966	\$36,718,132	\$22,931,508	\$13,786,624

CLASSIFICATION OF COSTS LARGE POWER SERVICE

	Total	Costs		Fixed C	Costs		Variable	e Costs		Energy	/ Costs	
	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer
Production - Capacity	\$13,059,640	\$8,231,704	\$4,827,937	\$4,668,477	\$3,112,318	\$1,556,159	\$1,077,765	\$380,250	\$697,515	\$7,313,399	\$4,739,136	\$2,574,263
Production - Energy	\$13,854,626	\$8,722,520	\$5,132,107	\$0	\$0	\$0	\$0	\$0	\$0	\$13,854,626	\$8,722,520	\$5,132,107
Transmission	\$2,664,085	\$1,619,232	\$1,044,853	\$2,164,409	\$1,442,940	\$721,470	\$499,676	\$176,292	\$323,383	\$0	\$0	\$0
Substations	\$930,165	\$565,355	\$364,810	\$755,704	\$503,802	\$251,901	\$174,462	\$61,552	\$112,909	\$0	\$0	\$0 \$0
Lines, Poles, Conductors-Primary Feeders-Demand	\$884,664	\$537,699	\$346,965	\$718,737	\$479,158	\$239,579	\$165,928	\$58,542	\$107,386	\$ 0	\$0	\$0
Lines, Poles, Conductors-Primary Taps-Demand	\$1,027,103	\$624,274	\$402,829	\$834,460	\$556,306	\$278,153	\$192,643	\$67,967	\$124,676	\$0	\$0	\$0
Lines, Poles, Conductors-Secondary-Demand	\$66,337	\$36,760	\$29,577	\$45,484	\$30,323	\$15,161	\$20,852	\$6,437	\$14,415	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Taps-Customer	\$10,304	\$6,869	\$3,435	\$10,304	\$6,869	\$3,435	\$0	\$0	\$0	\$0	\$0	\$0
Lines, Poles, Conductors-Secondary-Customer	\$944	\$629	\$315	\$944	\$629	\$315	\$0	\$0	\$0	\$0	\$0	\$0
Line Transformers-Demand	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0
Line Transformers-Secondary-Customer	\$0	\$0	\$0	SO	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Customer Installation	\$1,589	\$1,059	\$530	\$1,589	\$1,059	\$530	. \$0	\$0	\$0	so	\$0	\$0
Services	\$0	\$0	\$ 0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Meters	\$65,240	\$43,493	\$21,747	\$65,240	\$43,493	\$21,747	\$0	\$0	\$0	\$0	\$0	\$0
Meter Reading	\$4,741	\$3,161	\$1,580	\$4,741	\$3,161	\$1,580	\$0	\$0	\$0	\$0	\$0	\$0
Customer Service, Sales & Collections	\$1,038	\$692	\$346	\$1,038	\$692	\$346	\$0	\$0	\$0	\$0	\$0	\$0
Customer Deposits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Assigned	\$1,480	\$986	\$493	\$1,480	\$986	\$493	\$0	\$0	\$0	\$0	\$0	\$0
Excess Facility	\$524,192	\$349,461	\$174,731	\$524,192	\$349,461	\$174,731	\$0	\$0	\$0	\$0	\$0	\$0
Other Revenues	(\$3,232,434)	(\$2,154,956)	(\$1,077,478)	(\$3,232,434)	(\$2,154,956)	(\$1,077,478)	\$0	\$0	\$0	\$0	\$0	\$0
Total Costs to be Recovered in Rates	\$29,863,715	\$18,588,939	\$11,274,776	\$6,564,365	\$4,376,243	\$2,188,122	\$2,131,325	\$751,040	\$1,380,285	\$21,168,025	\$13,461,655	\$7,706,369

CLASSIFICATION OF COSTS SPECIAL CONTRACT

	Total	Costs		Fixed C	osts	- 1	Variabl	e Costs		Energy	Costs	
	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer
Production - Capacity	\$1,175,162	\$784,141	\$391,021	\$491,320	\$327,547	\$163,773	\$25,752	\$16,240	\$9,511	\$658,091	\$440,354	\$217,737
Production - Energy	\$1,321,926	\$872,711	\$449,215	\$0	\$0	\$0	\$0	\$0	\$0	\$1,321,926	\$872,711	\$449,21 <u>5</u>
Transmission	\$239,726	\$159,387	\$80,339	\$227,787	\$151,858	\$75,929	\$11,939	\$7,529	\$4,410	\$0	\$0	\$0
Substations	\$68,917	\$45,821	\$23,096	\$65,485	\$ 43,656	\$21,828	\$3,432	\$2,165	\$1,268	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Feeders-Demand	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Taps-Demand	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lines, Poles, Conductors-Secondary-Demand	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0
Lines, Poles, Conductors-Primary Taps-Customer	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	20
Lines, Poles, Conductors-Secondary-Customer	\$0	\$0]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Line Transformers-Demand	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0
Line Transformers-Secondary-Customer	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Customer Installation	\$45	\$30	\$15	\$45	\$30	\$15	. \$0	\$0	\$0	\$0	\$0	\$0
Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$ 0	\$0		\$0	\$0
Meters	\$2,039	\$1,359	\$680	\$2,039	\$1,359	\$680	\$0	\$0	\$0	\$0	\$0	\$0
Meter Reading	\$148	\$99	\$4 9	\$148	\$99	\$49	\$0	\$ 0	\$0	\$0	\$0	\$0
Customer Service, Sales & Collections	\$32	\$22	\$11	\$32	\$22	\$11	\$0	\$0	\$0	\$0	\$0	62
Customer Deposits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Assigned	\$46	\$31	\$15	\$ 46	\$31	\$15	\$0	SO S	\$0	\$0	\$0	\$0
Excess Facility	\$639	\$426	\$213	\$639	\$426	\$213	\$0	\$0	\$0	\$0	\$0	\$0
Other Revenues	(\$215,584)	(\$143,723)	(\$71,861)	(\$215,584)		(\$71,861)	\$0	\$0	\$0	\$0	\$0	\$0
Total Costs to be Recovered in Rates	\$2,593,097	\$1,720,305	\$872,792	\$ 571,958	\$381,305	\$190,653	\$41,123	\$25,934	\$15,188	\$1,980,017	\$1,313,065	\$666,952

CLASSIFICATION OF COSTS TOTAL

	Total (Costs		Fixed Co	osts		Variabl	e Costs		Energy	Costs	
	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer
Production - Capacity	\$87,002,294	\$54,054,090	\$32,948,205	\$25,440,621	\$16,960,414	\$8,480,207	\$12,840,389	\$6,269,387	\$6,571,001	\$48,721,285	\$30,824,288	\$17,896,996
Production - Energy	\$78,903,218	\$49,859,763	\$29,043,455	\$0	\$0	\$0	\$0	\$0	\$0	\$78,903,218	\$49,859,763	
Transmission	\$17,747,924	\$10,769,850	\$6,978,074	\$11,794,835	\$7,863,224	\$3,931,612	\$5,953,089	\$2,906,627	\$3,046,462	\$0	\$0	\$0 \$0
Substations	\$8,425,198	\$5,121,140	\$3,304,058	\$5,487,927	\$3,658,618	\$1,829,309	\$2,937,271	\$1,462,522	\$1,474,749	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Feeders-Demand	\$7,947,517	\$4,827,049	\$3,120,467	\$5,157,192	\$3,438,128	\$1,719,064	\$2,790,324	\$1,388,921	\$1,401,403	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Taps-Demand	\$9,227,136	\$5,604,246	\$3,622,889	\$5,987,545	\$3,991,697	\$1,995,848	\$3,239,591	\$1,612,550	\$1,627,041	\$0	\$0	\$0 \$0 \$0 \$0
Lines, Poles, Conductors-Secondary-Demand	\$3,974,526	\$2,421,829	\$1,552,698	\$2,488,630	\$1,659,087	\$829,543	\$1,485,896	\$762,742	\$723,154	\$0	\$0	\$0
Lines, Poles, Conductors-Primary Taps-Customer	\$4,740,616	\$3,160,411	\$1,580,205	\$4,740,616	\$3,160,411	\$1,580,205	\$0	\$0	\$0	\$0	\$0	\$0
Lines, Poles, Conductors-Secondary-Customer	\$3,466,243	\$2,310,829	\$1,155,414	\$3,466,243	\$2,310,829	\$1,155,414	\$0	\$0	\$0	\$0	\$0	\$0
Line Transformers-Demand	\$2,367,296	\$1,533,552	\$833,744	\$1,907,681	\$1,271,787	\$635,894	\$459,615	\$261,765	\$197,850	\$0	\$0	\$0
Line Transformers-Secondary-Customer	\$4,617,938	\$3,078,625	\$1,539,313	\$4,617,938	\$3,078,625	\$1,539,313	\$0		\$0	\$0	\$0	\$0
Customer Installation	\$981,724	\$ 654,483	\$327,241	\$981,724	\$654,483	\$327,241	\$0	\$0	\$0	\$0	\$0	\$0
Services	\$5,774,836	\$3,849,890	\$1,924,945	\$5,774,836	\$3,849,890	\$1,924,945	\$0	\$0	\$0	\$0		\$0
Meters	\$4,139,826	\$2,759,884	\$1,379,942	\$4,139,826	\$2,759,884	\$1,379,942	\$0	\$0	\$0	\$0	\$0	\$0
Meter Reading	\$2,181,387	\$1,454,258	\$727,129	\$2,181,387	\$1,454,258	\$727,129	\$0	\$0	\$0	\$0	\$0	\$0
Customer Service, Sales & Collections	\$4,444,039	\$2,962,693	\$1,481,346	\$4,444,039	\$2,962,693	\$1,481,346	\$0	\$0	\$0	\$0	\$0	\$0
Customer Deposits	(\$519,915)	(\$346,610)	(\$173,305)	(\$519,915)	(\$346,610)	(\$173,305)	\$0	\$0	\$0	\$0	\$0	\$0
Assigned	\$4,735,139	\$3,156,759	\$1,578,380	\$4,735,139	\$3,156,759	\$1,578,380	\$0	\$0	\$0	\$0	\$0	\$0 \$0
Excess Facility	\$768,779	\$512,519	\$256,260	\$768,779	\$512,519	\$256,260	\$0	\$0	\$0	\$0	\$0	
Other Revenues	(\$19,354,109)	(\$12,902,740)					\$0	\$0	\$0	\$0	\$0	\$0
Total Costs to be Recovered in Rates	\$231,571,610	\$144,842,520	\$86,729,090	\$74,240,933	\$49,493,955	\$24,746,978	\$29,706,174	\$14,664,514	\$15,041,661	\$127,624,503	\$80,684,051	\$46,940,452