COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTUCKY UTILITIES COMPANY FOR AN ADJUSTMENT OF BASE RATES

CASE NO. 2009-00548

ATTORNEY GENERAL'S PRE-FILED TESTIMONY

Comes now the intervenor, the Attorney General of the Commonwealth of

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Kentucky, by and through his Office of Rate Intervention, and files the following

testimony in the above-styled matter.

Respectfully submitted, JACK CONWAY ATTORNEY GENERAL

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APR 23 2010

PUBLIC SERVICE COMMISSION

Certificate of Service and Filing

Counsel certifies that an original and ten photocopies of the foregoing were served and filed by hand delivery to Jeff Derouen, Executive Director, Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40601; counsel further states that true and accurate copies of the foregoing were mailed via First Class U.S. Mail, postage pre-paid, to:

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this 3 day of April, 2010 m

Assistant Attorney General

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

APPLICATION OF KENTUCKY UTILITIES COMPANY FOR AN ADJUSTMENT OF ITS BASE RATES

)) CASE NO. 2009-00548)

PREPARED DIRECT TESTIMONY AND SCHEDULES

OF

GLENN A. WATKINS

ON BEHALF OF THE

KENTUCKY OFFICE OF THE ATTORNEY GENERAL

APRIL 23, 2010

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I. <u>INTRODUCTION</u>

Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
А.	My name is Glenn A. Watkins. My business address is James Center III, 1051
	East Cary Street, Suite 601, Richmond, VA 23219.
Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
A.	I am a Principal and Senior Economist with Technical Associates, Inc., which is
	an economic and financial consulting firm with offices in Richmond, Virginia.
Q.	ON WHOSE BEHALF ARE YOU TESTIFYING?
A.	I am testifying on behalf of the Office of Rate Intervention of the Kentucky Office
	of Attorney General ("OAG").
Q.	PLEASE DESCRIBE YOUR PROFESSIONAL QUALIFICATIONS.
A.	Except for a six-month period during 1987 in which I was employed by Old
	Dominion Electric Cooperative as its forecasting and rate economist, I have been
	employed by Technical Associates continuously since 1980.
	During my career at Technical Associates, I have conducted marginal and
	embedded cost of service, rate design, cost of capital, and load forecasting studies
	involving numerous electric, gas, water/wastewater, and telephone utilities, and have
	provided expert testimony in Alabama, Arizona, Georgia, Kansas, Kentucky, Maine,
	Maryland, Massachusetts, Michigan, North Carolina, New Jersey, Ohio, Illinois,
	Pennsylvania, Vermont, Virginia, South Carolina, Washington, and West Virginia. I
	hold an M.B.A. and B.S. in economics from Virginia Commonwealth University. I am a
	member of several professional organizations as well as a Certified Rate of Return
	Analyst. A more complete description of my education and experience is provided in my
	Schedule GAW-1 to my testimony.
	А. Q. А. Q. А.

30 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

	А.	Technical Associates has been retained by the OAG to evaluate the
2		reasonableness of Kentucky Utility Company's ("KU" or "Company") proposed weather
3		normalization adjustment, class cost of service study (CCOSS), proposed distribution of
4		revenues by class, and residential rate design. The purpose of my testimony, therefore, is
5		to comment on KU's proposals on these issues and to present my findings and
6		recommendations based on the results of the studies I have undertaken on behalf of the
7		OAG.
8		
9	II.	WEATHER NORMALIZATION
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11	Q.	IS KU PROPOSING A WEATHER NORMALIZATION ADJUSTMENT FOR ITS
12		ELECTRIC OPERATIONS IN THIS CASE?
13	A.	Yes. Consistent with KU's last several rate increase applications, the Company is
14		proposing a weather normalization adjustment for this case.
15		
j	Q.	HAS THIS COMMISSION EVER APPROVED AN ELECTRIC WEATHER
	•	
17	C ¹	NORMALIZATION ADJUSTMENT?
17 18	A.	NORMALIZATION ADJUSTMENT? To the best of my knowledge, this Commission has not approved an electric
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18	-	To the best of my knowledge, this Commission has not approved an electric
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18 19 20	A.	To the best of my knowledge, this Commission has not approved an electric weather normalization adjustment.
18 19 20 21	A.	To the best of my knowledge, this Commission has not approved an electric weather normalization adjustment. WHAT EFFECT DOES KU'S PROPOSED WEATHER NORMALIZATION
18 19 20 21 22	А. Q.	To the best of my knowledge, this Commission has not approved an electric weather normalization adjustment. WHAT EFFECT DOES KU'S PROPOSED WEATHER NORMALIZATION HAVE ON ITS REQUESTED INCREASE?
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 18 19 20 21 22 23 24 25 26 	А. Q.	To the best of my knowledge, this Commission has not approved an electric weather normalization adjustment. WHAT EFFECT DOES KU'S PROPOSED WEATHER NORMALIZATION HAVE ON ITS REQUESTED INCREASE? In this particular rate case, KU's proposed weather normalization has the effect of reducing its requested revenue increase. That is, as a result of Mr. Seelye's proposed methodology and analysis, he concludes that actual test year sales and revenues were less than what would be expected under a more normal weather pattern. Specifically, Mr.
 18 19 20 21 22 23 24 25 26 27 	А. Q.	To the best of my knowledge, this Commission has not approved an electric weather normalization adjustment. WHAT EFFECT DOES KU'S PROPOSED WEATHER NORMALIZATION HAVE ON ITS REQUESTED INCREASE? In this particular rate case, KU's proposed weather normalization has the effect of reducing its requested revenue increase. That is, as a result of Mr. Seelye's proposed methodology and analysis, he concludes that actual test year sales and revenues were less than what would be expected under a more normal weather pattern. Specifically, Mr. Seelye's proposed weather adjustment results in an increase to test year revenue of

Q.DOYOU AGREEWITHMR.SEELYE'SPROPOSEDWEATHER2NORMALIZATION ADJUSTMENT?

3 4 A.

5 Q. PLEASE EXPLAIN.

No.

Although a portion of Residential and Commercial electricity usage is sensitive to 6 A. 7 temperature for heating and cooling, over the course of an entire year, short term 8 increased sales (due to colder than average temperatures in winter and warmer than 9 average temperatures in summer) are generally offset by short-term weather conditions in 10 the opposite direction. Furthermore, and unlike weather sensitive natural gas sales that 11 are entirely weather dependent for heating load, electricity serves both heating and 12 cooling (air conditioning) load. As such, even if a winter is somewhat milder than 13 normal (and heating sales are less than expected), the following summers are often 14 somewhat more severe than normal (and cooling sales are more than expected). Under 15 these conditions, an electric utility's energy sales are evened out over the course of an entire year. For this reason, many, if not most, state utility Commissions do not) 17 recognize weather normalization for ratemaking purposes.

In this case, Mr. Seelye has developed a methodology that evaluates whether individual monthly sales are greater than or less than an outside band of weather normalcy. If an individual month's expected heating degree days (HDD) or cooling degree days (CDD) fall outside of Mr. Seelye's band of what would be expected under relatively normal weather conditions, that month's sales are adjusted upward or downward.

The flaw in Mr. Seelye's logic is that each month's analysis and determination of weather normalcy is independent and mutually exclusive of all other months within the same heating or cooling season.

Mr. Seelye's Exhibit 12 shows how his monthly sales adjustments are determined. Using Mr. Seelye's definition of KU's cooling season running from May 1 through September 30 as an example, we see that the month of May is evaluated to determine if that single month's weather pattern was outside of a band of normal weather. In this instance, the weather in May 2009 was not deemed to be abnormally warm (outside the

band of normalcy), such that no adjustment was made to actual May sales. The same was
true for June, August, and September 2009. However, Mr. Seelye determined that the
month of July 2009 was cooler than normal (and outside of his normalcy band) so this
month's sales were adjusted upward. Although Mr. Seelye's mutually exclusive analysis
is conducted on a month by month basis, one could also apply the same logic on a
weekly, daily, or even hourly basis.

7 The flaw in using any of the sub-sets (partial periods) of an entire heating or 8 cooling season is that while a short-term period may fall outside of Mr. Seelye's weather 9 normalcy band such as more severe weather than expected, the remaining sub-sets 10 (partial periods) within the same overall heating or cooling season may have been 11 somewhat milder than average and hence not subject to adjustment. However, when 12 these somewhat milder sub-sets (partial periods) are consolidated, we find that the entire heating or cooling season overall cannot be said to be abnormal. For example, consider 13 14 the following hypothetical example: suppose July was abnormally cool and its weather 15 pattern (CDD) fell outside of Mr. Seelye's band of normalcy; i.e., subject to adjustment. j Also assume that June, August, and September were just marginally warmer than average 17 such that these month's did not fall outside of the normalcy bands. Even though the total 18 cooling degree days over the entire summer period (cooling season) were the same as the 19 historical average (cooler July, yet somewhat warmer June, August and September), Mr. 20 Seelye's approach would result in a weather adjustment (an increase to sales) simply 21 because one month of the entire season was beyond a range of normal weather.

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Q. WHAT WAS THE ACTUAL COOLING SEASON EXPERIENCE DURING THE TEST YEAR?

A. Mr. Seelye defines KU's cooling season as May through September. I disagree with the inclusion of May for reasons that I will explain later. For the test year months of June through September (2009), the 30-year average cooling degree days are 1,087. The standard deviation of this 30-year average, is 188. As such, using Mr. Seelye's banding approach of defining a range of normal weather, a normal weather range is between 899 CDD's and 1,275 CDD. The actual cooling degree days during the June through September 2009 (test-year) period were 905 which is within the "normal" band. As such,

, one may not conclude that the test year cooling season was cooler (milder) than the range of expected normal weather and hence, no sales adjustment should be made. It should be 2 3 noted that the above determination is based on a subjective banding definition of plus or minus one standard deviation from the thirty-year average. What this means is that about 4 5 68% of observations are expected to fall within the plus or minus one standard deviation and would be considered as the limits of normalcy. The remaining 32% would be 6 7 considered "abnormal" under Mr. Seelye's approach. Although there are no established 8 parameters as to exactly what percentage should be considered to fall within an expected 9 normal range, extremes are often defined as those that are expected to occur less than 5% 10 of the time. This 5% level of significance is by statistical definition approximately plus 11 or minus two standard deviations. As such, if the definition of normal weather is 12 expanded from 68% (plus or minus one standard deviation) to 95% (plus or minus two 13 standard deviations) we see that the test year experience falls even more within a band of 14 normalcy.

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In my opinion, there is no reason for this Commission to alter its long standing practice of not considering weather adjustments for electric utilities.

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18 Q. MR. SEELYE INCLUDED THE MONTH OF MAY AS A COOLING SEASON 19 20

MONTH IN HIS ANALYSIS. SHOULD THIS MONTH BE INCLUDED AS A "COOLING MONTH"?

21 No. May is considered a shoulder month. Days in May can be cool or fairly A. 22 warm such that these months are comprised of heating degree days and cooling degree 23 days. As such, heating and air conditioning loads are not predictable in May. To 24 illustrate, consider Mr. Seelye's Exhibit 12. On average, May has 109 HDDs throughout 25 the month and 88 CDDs. Indeed, May tends to have more heating load than air 26 conditioning load, yet, Mr. Seelye has modeled usage in May as a "cooling" month.

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28 III. **CLASS COST OF SERVICE**

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30 Q. PLEASE EXPLAIN THE CONCEPT OF A CLASS COST OF SERVICE STUDY ("CCOSS"). .

A. First, I note that there are two general types of cost of service studies used for public utility ratemaking: marginal cost studies; and embedded, fully allocated cost studies. KU has utilized a traditional embedded cost of service concept in this case for purposes of establishing its overall retail revenue requirement, as well as for its class cost of service study ("CCOSS"). As such, I will limit my explanation to embedded class cost of service studies.

7 Embedded cost of service studies are often referred to as fully allocated cost 8 studies. This is because the vast majority of an electric utility's plant investment serves all customers, and the majority of expenses are incurred in a joint manner such that these 9 costs cannot be specifically attributed to any individual customer or group of customers. 10 11 To the extent that certain costs can be specifically attributable to a particular customer (or 12 group of customers), these costs are often directly assigned in a CCOSS. However, the vast majority of KU's Production, Transmission, and Distribution plant and expenses are 13 14 incurred jointly to serve all (or most) customers. These joint costs are then allocated to 15 rate classes. It is generally recognized that to the extent possible, joint costs should be j allocated to classes based on the concept of cost causation; i.e., costs are allocated based 17 on specific factors that cause costs to be incurred by the utility. Although cost analysts 18 generally strive to abide by the concept of cost causation to the greatest extent practical, some costs (particularly overhead costs), cannot be attributed to specific exogenous 19 20 factors and must be subjectively assigned or allocated to rate classes. With regards to 21 those costs in which cost causation can be attributed, cost of service experts often disagree as to what is the most cost causative factor; e.g., peak demand, energy usage, 22 23 number of customers, etc.

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Q. PLEASE EXPLAIN HOW CCOSS RESULTS SHOULD BE USED IN THE RATEMAKING PROCESS.

A. Although there are certain principles used by all cost of service analysts, there are
often significant disagreements on the specific factors that drive certain costs. These
disagreements can and do arise as a result of the quality of data and level of detail
available from financial records, as well as fundamental differences in opinions regarding
the design or cost causation factors that should be considered to properly allocate costs to

rate schedules or customer classes. Furthermore, and as mentioned earlier, cost causation
 factors cannot be realistically ascribed to some costs such that subjective decisions are
 required. In this regard, two different cost studies conducted for the same utility and
 time period can, and often do, yield different results. As such, regulators should consider
 CCOSS results as one of many tools in assigning revenue responsibility.

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7 Q. PLEASE EXPLAIN HOW YOU PROCEEDED WITH YOUR ANALYSIS OF 8 KU'S CCOSS.

9 The process in which I conducted my analysis in this case was identical to how I A. 10 evaluate all CCOSSs. First, I reviewed the structure and organization of the Company's 11 CCOSS sponsored by Mr. Seelye. Once the basic structure was understood, I reviewed 12 the accuracy and completeness of the primary drivers (allocators) used to assign costs to 13 rate schedules and classes. Next, I reviewed Mr. Seelye's selection of allocators to 14 specific rate base, revenue and expense accounts. Finally, I adjusted certain aspects of 15 the Company's study to better reflect cost causation and cost incidence by rate schedule ś and customer class.

17

18 Q. DID YOU FIND THE COMPANY'S STUDY TO BE MATHEMATICALLY 19 ACCURATE?

- 20 Yes. Perhaps the most fundamental requirement of an embedded CCOSS is that A. 21 the sum of the parts (classes) must equal the whole (system). This is true with respect to 22 the allocation of financial accounts, as well as the various allocation factors. 23 Furthermore, certain costs previously allocated are carried forward for other purposes 24 such as for the development of composite or internal allocators and for the assignment of 25 income taxes. In all regards, I found Mr. Seelye's CCOSS to be mathematically 26 accurate.
- 27
- Q. DID YOUR EXAMINATION RESULT IN ANY DISAGREEMENTS WITH THE
 ASSUMPTIONS OR METHODOLOGIES USED BY MR. SEELYE?

A. Yes. Although I have two material disagreements with Mr. Seelye's CCOSS, my
 ultimate findings are not significantly different from Mr. Seelye's, with the possible
 exception of the time of day rate classes.

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Q. PLEASE PROVIDE A SUMMARY OF MR. SEELYE'S AND YOUR CCOSS FINDINGS.

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A.

The following is a summary comparison of Mr. Seelye's and my class rates of return at current rates:

9		Class ROR At	Current Rates
10	Class	Seelye	Watkins
11	Residential	2.33%	3.34%
12	General Service	9.25%	9.34%
13	All Electric School	2.19%	2.85%
15	Power Service-Secondary	8.29%	6.52%
14	Power Service-Primary	7.87%	6.04%
15	TOD-Secondary	5.66%	3.26%
15	TOD-Primary	6.44%	4.41%
5	Transmission Service	9.73%	6.85%
17	Fluctuating Load	13.11%	16.67%
17	Lighting	9.34%	8.52%
18	Total Company	5.34%	5.34%
19			

20 Q. PLEASE OUTLINE THE TWO MATERIAL DISAGREEMENTS YOU HAVE 21 WITH MR. SEELYE'S CCOSS.

- A. The two substantial disagreements that I have with Mr. Seelye are his "Modified
 Base-Intermediate-Peak" method used to allocate generation costs and his classification
 of distribution facilities between customer-related and demand-related portions.
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A. Generation

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Q. YOU INDICATE THAT ONE OF YOUR DISAGREEMENTS WITH MR. SEELYE IS HIS USE OF WHAT HE REFERS TO AS A MODIFIED BASEINTERMEDIATE-PEAK METHOD TO ALLOCATE GENERATION COSTS. ARE THERE OTHER METHODOLOGIES WHICH MAY BE USED TO ALLOCATE GENERATION- RELATED PLANT AND EXPENSES?

A. Yes. There are several demand allocation methods utilized in the electric industry. The current National Association of Regulatory Utility Commissioners ("NARUC") <u>Electric Utility Cost Allocation Manual</u> discusses at least thirteen embedded demand allocation methods, while Dr. James Bonbright noted the existence of at least 29 demand allocation methods in his treatise, <u>Principles of Public Utilities Rates</u>.

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WHY DO SO MANY GENERATION ALLOCATION METHODS EXIST FOR THE ELECTRIC INDUSTRY?

A. Utilities design and build generation facilities to meet the energy and demand
 requirements of their customers on a collective basis. Because of this, and the physical
 laws of electricity, it is impossible to determine which customers are being served by
 which facilities. As such, production facilities are joint costs; i.e., used by all customers.
 Because of this commonality, production-related costs are not directly known for any
 customer or customer group and must somehow be allocated.

22 If all customer classes used electricity at a constant rate throughout the year, there 23 would be no disagreement as to the proper assignment of generation-related costs: all 24 analysts would agree that energy usage in terms of kWh would be the proper approach to 25 reflect cost causation and cost incidence. However, such is not the case in that KU experiences periods (hours) of much higher demand during certain times of the year and 26 across various hours of the day. Moreover, all customer classes do not contribute in 27 28 equal proportions to these varying demands placed on the generation system. To 29 complicate matters, the electric utility industry is somewhat unique in that there is a 30 distinct energy/capacity trade-off relating to generation costs. That is, utilities design their mix of production facilities (generation and power supply) to minimize the total £

costs of energy and capacity, while also ensuring there is enough available capacity to 1 2 meet peak demands. The trade-off occurs between the level of fixed investment per unit 3 of capacity (KW) and the variable cost of producing a unit of output (kWh). Coal and 4 nuclear units require high capital expenditures resulting in large investments per KW, 5 whereas smaller units with higher variable production costs generally require significantly less investment per KW. Due to varying levels of demand placed on the 6 system over the course of each day, month, and year there is a unique optimal mix of 7 8 production facilities for each utility that minimizes the total cost of capacity and energy; 9 i.e., its cost of service.

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Therefore, as a result of the energy/capacity cost trade-off, and the fact that the service requirements of each utility are unique, many different allocation methodologies have evolved in an attempt to equitably allocate joint production costs to individual classes.

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- 15 Q. PLEASE EXPLAIN.

j A. Total production costs vary each hour of the year. Theoretically, energy and 17 capacity costs should be allocated to classes each and every hour of the year. This would 18 result in 8,760 hourly allocations during non-leap years. Although such an analysis is 19 certainly possible with today's technology, the time and cost necessary for such an 20 undertaking would likely exceed the additional benefits obtained over simpler methods. 21 This is because the analyst does not know precise class loads each and every hour, and 22 subjective decisions must still be made regarding the assignment of fixed investment 23 (capacity costs) to individual hours. With this practical constraint in mind, each method 24 has its strengths and weaknesses regarding its reasonableness in reflecting cost causation 25 as well as the cost and effort required to produce a study.

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27 Q. BRIEFLY DISCUSS THE STRENGTHS AND WEAKNESSES OF COMMON 28 PRODUCTION COST ALLOCATION METHODOLOGIES.

A. A brief description of the most common fully allocated cost methodologies and
attendant strengths and weaknesses are as follows:

Single Coincident Peak ("1-CP")-- The basic concept underlying the 1-CP2method is that an electric utility must have enough capacity available to meet its3customers' peak coincident demand. As such, advocates of the 1-CP method reason that4customers (or classes) should be responsible for fixed capacity costs based on their5respective contributions to this peak system load. The major advantages to the 1-CP6method are that the concepts are easy to understand, the analyses required to conduct a7CCOSS are relatively simple, and the data requirements are significantly less than some8of the more complex methods.

9 The 1-CP method has several shortcomings, however. First, and foremost, is the 10 fact that the 1-CP method totally ignores the capacity/energy trade-off inherent in the 11 electric utility industry. That is, the sole criterion for assigning one hundred percent of 12 fixed capacity costs is the classes' relative contributions to load during a single hour of 13 the year. This method does not consider, in any way, the extent to which customers use 14 these facilities during the other 8,759 hours of the year. This may have severe 15 consequences because a utility's planning decisions regarding the amount and type of Ĵ generation capacity to build and install is predicated not only on the maximum system 17 load, but also on how customers demand electricity throughout the year, i.e., load 18 duration. To illustrate, if a utility had a peak load of 15,000 MW and its actual optimal 19 generation mix included an assortment of nuclear, coal, hydro, combined cycle and 20 combustion turbine units, the total cost of capacity is significantly higher than if the utility only had to consider meeting 15,000 MW for 1 hour of the year. This is because 21 22 the utility would install the cheapest type of plant, (i.e., peaker units) if it only had to 23 consider one hour a year.

24 There are two other major shortcomings of the 1-CP method. First, the results 25 produced with this method can be unstable from year to year. This is because the hour in 26 which a utility peaks annually is largely a function of weather. Therefore, annual peak 27 load depends on when severe weather occurs. If this occurs on a weekend or holiday, 28 relative class contributions to the peak load will likely be significantly different than if 29 the peak occurred during a weekday. The other major shortcoming of the 1-CP method is often referred to as the "free ride" problem. This problem can easily be seen with a 30 1 summer peaking utility that peaks about 5:00 p.m. Because street lights are not on at this

time of day, this class will not be assigned any capacity costs at all and enjoy a free ride on the assignment of generation costs that this class requires.

<u>Summer and Winter Coincident Peak ("S/W Peak")</u> -- The S/W Peak method was developed because some utilities' annual peak load occurs in the summer during some years and in the winter during others. Because customers' usage and load characteristics may vary by season, the S/W Peak attempts to recognize this characteristic. This method is essentially the same as the 1-CP method except that two hours of load are considered instead of one. This method has essentially the same strengths and weaknesses as the 1-CP method, and in my opinion, is only marginally more reasonable than the 1-CP method.

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11 <u>Twelve Monthly Coincident Peak ("12-CP")</u> -- Arithmetically, the 12-CP 12 method is essentially the same as the 1-CP method except that class contributions to each 13 monthly peak are considered. Although the 12-CP method bears little resemblance to 14 how utilities design and build their systems, the results produced by this method better 15 reflect the cost incidence of a utility's generation facilities.

Most electric utilities have distinct seasonal load patterns such that there are high system peaks during the winter and summer months, and significantly lower system peaks during the spring and autumn months. By assigning class responsibilities based on their respective contributions throughout the year, consideration is given to the fact that utilities will call on all of their resources during the highest peaks, and only use their most efficient plants during lower peak periods. Therefore, the capacity/energy trade-off is implicitly considered to a small extent under this method.

The major shortcoming of the 12-CP method is that accurate load data is required by class throughout the year. This generally requires a utility to maintain on-going load studies. However, once a system to record class load data is in place, the administration and maintenance of such a system is not overly cumbersome for larger utilities.

27 <u>Peak and Average ("P&A")</u> -- The various P&A methodologies rest on the 28 premise that a utility's actual generation facilities are placed into service to meet peak 29 load and serve consumers demands throughout the entire year. Hence, the P&A method 30 assigns capacity costs partially on the basis of contributions to peak load and partially on 31 the basis of consumption throughout the year. Although there is not universal agreement

on how peak demands should be measured or how the weighting between Peak and Average demands should be performed, many P&A studies use class contributions to coincident-peak demand for the "peak" portion, while some studies weight the Peak and Average loads based on the system coincident load factor and others give equal weight to energy usage and peak demand.

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The major strengths of the P&A method are that an attempt is made to recognize the capacity/energy trade-off in the assignment of fixed capacity costs, and that data requirements are minimal.

9 Although the recognition of the capacity/energy trade-off is admittedly arbitrary 10 under the P&A method, most other allocation methods also suffer to some degree of 11 arbitrariness.

Average and Excess ("A&E") -- The A&E method also considers both peak 12 13 demands and energy consumption throughout the year. However, the A&E method is 14 much different than the P&A method in both concept and application. The A&E method 15 recognizes class load diversity within a system, such that all classes do not call on the Ĵ utility's resources to the same degree, at the same times. Mechanically, the A&E method 17 weights average and excess demands based on system coincident load factor. Individual 18 class "excess" demands represent the difference between the class non-coincident peak 19 demand and its average annual demand. The classes' "excess" demands are then summed 20 to determine the system excess demand. Under this method, it is important to distinguish 21 between coincident and non-coincident demands. This is because if coincident, instead 22 of non-coincident, demands are used when calculating class excesses, the end result will 23 be exactly the same as that achieved under 1-CP method.

Although the A&E method bears virtually no resemblance to how generation systems are designed, this method can produce fair and reasonable results for many utilities. This is because no class will receive a free-ride under this method, and because recognition is given to average consumption as well as to the additional costs imposed by not maintaining a perfectly constant load.

A potential shortcoming of this method is that customers that only use power during off-peak periods will be overburdened with costs. Under the A&E method, offpeak customers will be assigned a higher percentage of capacity costs because their non-

coincident load factor may be very low even though they call on the utility's resources only during less costly off-peak periods.

Equivalent Peaker ("EP") -- The EP method combines certain aspects of traditional embedded cost methods with those used in forward-looking marginal cost studies. The EP method often relies on planning information in order to classify individual generating units as energy- or demand-related and considers the need for a mix of base load intermediate and peaking generation resources.

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The EP method has substantial intuitive appeal in that base load units that operate with high capacity factors are allocated largely on the basis of energy consumption with costs shared by all classes based on their usage, while peaking units that are seldom used and only called upon during peak load periods are allocated based on peak demands to those classes contributing to the system peak load. However, this method requires a significant amount of data.

Base-Intermediate-Peak ("BIP") -- The BIP method is an accepted allocation 14 15 approach that attempts to recognize the capacity/energy trade-off that actually exists Ĵ within a utility's portfolio of generation assets. A utility's base load units tend to run 17 during all (or most) periods of the year; i.e., both peak load periods as well as to satisfy 18 energy requirements in the most efficient manner possible during minimum demand 19 periods (e.g., during the middle of the night). Because base load units operate regardless 20 of peak requirements, they are most appropriately classified as energy-related. At the 21 opposite end of the spectrum are peaking units, such as combustion turbines. These units 22 operate with high variable costs and are only utilized to help meet peak period demands. 23 As such, peakers are classified as peak demand-related. Intermediate plants (e.g., many 24 combined cycle units) are not as efficient as large base load plants but more efficient than 25 peaking units. For this reason, Intermediate plants are not called upon (dispatched) during periods of minimum (base) load but are dispatched before, and more frequently, 26 27 than peaker units. Therefore, Intermediate plants can be said to serve a dual purpose: 28 partially energy-related and partially demand-related. Intermediate plants are typically 29 classified as partially energy-related and partially demand-related based on their respective capacity or availability factors.¹ In my opinion, the BIP method is an excellent cost allocation approach for many utilities as it captures the actual differences in the capacity/energy trade-off that exist across a utility's generation mix. The BIP method may not be appropriate for utilities that purchase the majority of their energy needs or for utilities with an inefficient mix of generating resources.

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7 Q. MR. WATKINS, YOU HAVE DISCUSSED THE STRENGTHS AND 8 WEAKNESSES OF THE MORE COMMON GENERATION ALLOCATION 9 METHODOLOGIES. ARE ANY OF THESE METHODS CLEARLY INFERIOR 10 IN YOUR VIEW?

11 A. Yes. In my opinion the 1-CP and seasonal CP (such as 4-CP) methods do not 12 reasonably reflect cost causation for integrated electric utilities because these methods 13 totally ignore the utilization of a utility's facilities. Perhaps the simplest way to explain 14 this is to consider that the methodology selected is used to allocate Generation plant 15 investment. Generation investment costs vary from a low of a few hundred dollars per , KW of capacity for high running cost (energy cost) peakers to several thousand dollars 17 per KW for base load nuclear facilities with low running costs. If a utility were only 18 concerned with being able to meet peak load with no regard to running costs, it would 19 simply install inexpensive peakers. Under such an unrealistic system design, plant costs would be much lower than in reality but running costs; i.e., variable fuel costs would be 20 21 astronomical, and would result in a higher overall cost to serve customers. The 1-CP and 22 seasonal CP methods totally ignore this very important fact.

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Q. MR. SEELYE HAS USED WHAT HE REFERS TO AS A MODIFIED BIP METHOD TO ALLOCATE GENERATION COSTS. DID HE CALCULATE THE BIP METHOD IN A REASONABLE MANNER?

A. Mr. Seelye's Modified BIP method does not follow the generally accepted BIP
approach, and in fact, I have never seen Mr. Seelye's method used in any other cases or
utilities. However, I would be reluctant to say his approach is totally unreasonable.

¹ Capacity factor is the ratio of average utilization (output) over a year to peak hour output. Availability factor is the ratio of average utilization during periods when a unit is available for dispatch (i.e., excludes outages) to peak hour output.

Whereas Mr. Seelye's Modified BIP method does allocate a portion of generation facilities based on energy (34.89%) and a portion on peak demands (65.11%), his approach does not reflect the actual mix of supply resources utilized by KU. At this point, it should be noted that KU's and LG&E's generation resources are centrally dispatched. Both Mr. Seelye and I have recognized this combined central dispatch in our allocation studies. When I refer to KU's actual generation resources, I am referring to the joint resources of KU and LG&E and not the individual legal ownership of these plants for booking purposes.

9 The traditional BIP method is a supply-based approach that classifies generation 10 plant between energy-related and demand-related; i.e., it considers the actual supply 11 characteristics of a utility's generation portfolio. These supply based classifications are 12 then allocated to classes based on demand-side criteria (kWh usage and KW peak 13 demand).

14 Mr. Seelye's approach ignores the actual supply-side characteristics of EON's 15 generation portfolio because it only considers relative differences in system usages and 5 demands. In fact, given EON's retail customers combined usage and demand profiles, 17 Mr. Seelye's approach would classify a utility's generation investment exactly the same 18 regardless of its actual portfolio mix of plants. Mr. Seelye's classification would be 19 identical if EON's portfolio mix was comprised entirely of base load units or entirely of 20 peaking units. In my opinion, this assumption (or result) is not consistent with the intent 21 of the BIP method. Namely, to recognize the capacity/energy tradeoff actually present in 22 a system.

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Q.

A.

PLEASE EXPLAIN THE ACTUAL COMPOSITION OF EON'S GENERATION RESOURCES.

26 27 With the addition of Trimble County Unit #2, EON's generation capacity will be about 9,600 MW. The following is a summary of this generation portfolio by Fuel Type:

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2	Fuel	MW Capacity	% Of Total
3	Coal	6,998	73%
4	Gas/Oil Hydro	2,499 113	26%
5	Total	9,610	100%

7 As can be seen above, about 73% of EON's generation comes from very low cost coal 8 plants. Furthermore, the combined KU and LG&E peak native load is about 6,550 MW, 9 which is lower than the capacity of EON's coal plants. This is especially relevant for 10 cost allocation purposes since EON's coal plants tend to be base load plants in nature. 11 That is, they operate with low variable operating expenses per unit (KWH) and have very 12 high availability factors in the 80% to 90% range. This actual mix of generation assets is 13 dissimilar to most electric utilities in the United States which rely on a much higher 14 percentage of intermediate (high variable cost) plants primarily utilizing natural gas for 15 fuel. Indeed, Kentucky ratepayers and shareholders alike are very fortunate to have an 5 abundance of low cost electric energy resources.

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Q. DOES MR. SEELYE'S COST ALLOCATION METHODOLOGY REFLECT THE FACT THAT EON'S GENERATION PORTFOLIO IS COMPRISED PRIMARILY OF BASE LOAD UNITS?

21 A. No.

23 Q. PLEASE EXPLAIN HOW YOU CONDUCTED YOUR TRADITIONAL BIP
24 METHOD.

A. During the discovery phase of this proceeding, KU provided the order of economic dispatch for each of its generation units.² With this information, along with generating plant information provided in EON's 2008 Integrated Resource Plan ("IRP"), such as fuel type, nameplate capacity (MW), annual KWH generation, capacity factors, and availability factors, I was able to separate each generation unit into Base,

 $^{^2}$ Economic Order of dispatch is based on variable running costs. That is, the unit with the lowest running costs (primarily fuel) per unit of KWH output is dispatched first, followed by the next least expensive generation facility, and so forth.

٠ Intermediate, Peak, or Hydro. Base load units are classified as 100% energy-related as 2 they are designed and utilized to meet energy requirements throughout the year; i.e., they 3 are low-cost units that serve energy needs and are not installed to meet short time period 4 peak load requirements. Conversely, peak load (peaker) units are classified as 100% demand-related because of their high cost of output; i.e., they are dispatched and utilized 5 6 only to meet peak load requirements. Intermediate plants operate at higher variable costs 7 per unit than base load units yet are considerably less costly to operate than peak units, 8 and are dispatched during periods of Intermediate demand (higher than base load but 9 lower than peak period loads). I have followed the industry practice of classifying these 10 units between energy and peak demand based on each facility's capacity factor. Finally, I 11 have classified EON's Hydro facilities as 100% energy-related as they are run of the river 12 or flood control facilities and have little or no ability to reliably meet peaking 13 requirements.

14 The results of my BIP generation classification is presented in my Schedule 15 GAW-2. My BIP generation classification study results in the following aggregate 3 generation classification:

82.12%

17.88%

Energy-related:

Demand-related:

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20 IN HIS REBUTTAL TO YOUR CCOSS FINDINGS IN KU'S 2008 RATE CASE **Q**. 21 (CASE NO. 2008-000251), MR. SEELYE INDICATED THAT HE COULD NOT 22 **RECALL EVER SEEING COST OF SERVICE STUDIES THAT ALLOCATE** 23 SUCH LARGE PERCENTAGE (82%) OF PRODUCTION Α AND 24 TRANSMISSION CAPACITY COSTS ON THE BASIS OF ENERGY. ARE YOU 25 AWARE OF OTHER UTILITY STUDIES WITH SIMILARLY HIGH 26 PRODUCTION AND TRANSMISSION PLANT ENERGY CLASSIFICATIONS?

A. Yes. Electric energy produced in the Pacific Northwest is comprised of a high
 percentage of base load hydro generation (primarily from the Columbia River System) as
 well as significant contributions from very large coal facilities in Western Montana
 (Colstrip, MT). As a result of this disproportionate mix of base load generation, all of the
 major investor-owned utilities in this region classify the vast majority of generation and

transmission rate base (capacity costs) as energy-related. In its 2009 rate case, Puget
 Sound Energy sponsored class cost of service study classified its generation and
 transmission assets as 79% energy and 21% demand. Avista's developed 2009 study
 classified generation assets as 76% energy-related, and PacifiCorp's 2009 CCOSS
 classified generation rate base as 88% energy-related.³

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Q. HOW DO THESE LOW ENERGY COST ELECTRIC UTILITIES IN THE PACIFIC NORTHWEST RELATE TO THE COAL DOMINATED GENERATION MIX OF EON?

10 What is important to understand is that neither the Pacific Northwest utilities nor A. 11 EON are "typical" U.S. utilities in terms of generation mix. Ratepayers and shareholders 12 are fortunate to reap the benefit of low energy cost generation for each of these utilities. 13 All ratepayers benefit from the low cost energy produced from their respective base load 14 dominated utility. In turn, all ratepayers should share in the costs required to provide this 15 low cost energy in a proportionate and fair manner. Remembering that base load units Ĵ have a much higher capacity cost per KW than less efficient peaker units, all ratepayers 17 should proportionately share in the fixed costs associated with those base load units that 18 make low cost energy possible. In other words, it is not reflective of cost causation nor is 19 it fair for all customers to reap the benefits of low variable cost output (energy KWH) yet 20 ask certain groups of customers to pay a disproportionate share of the fixed capacity costs 21 that make this low cost energy possible. In my opinion, and as evidenced from the actual 22 cost structure of EON's generation facilities, Mr. Seelye's 35% energy classification does 23 not adequately reflect cost causation nor reasonably assign costs to classes proportionate to the benefits received. 24

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Q. WHAT ARE THE CLASS RATES OF RETURN ON RATE BASE AT CURRENT RATES UTILIZING YOUR TRADITIONAL BIP METHOD TO CLASSIFY GENERATION PLANT?

³ Puget Sound Energy, Washington Utilities and Transportation Commission ("WUTC") Docket No. UE-090704; Avista, WUTC Docket No. UE-090134; and, PacifiCorp, WUTC Docket No. UE-090205.

A. Individual class rates of return utilizing the traditional BIP classification method, compared to Mr. Seelye's Modified BIP are presented below. It should be noted that the following OAG results only reflect adjustments to generation and production costs, they do not reflect my other CCOSS adjustments that I will also explain in my testimony:

5		OAG	Seelye
6		Traditional	Modified
7	Class	BIP	BIP
8	Residential	3.08%	2.33%
9	General Service	9.26%	9.25%
9	All Electric School	3.56%	2.19%
10	Power Service-Secondary	6.92%	8.29%
11	Power Service-Primary	6.42%	7.87%
11	TOD-Secondary	3.58%	5.66%
12	TOD-Primary	4.76%	6.44%
13	Transmission Service	6.85%	9.73%
15	Fluctuating Load	16.67%	13.11%
14	Lighting	8.29%	9.34%
15	Total Company	5.34%	5.34%

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B. <u>Distribution</u>

Q. AS WE MOVE DOWNSTREAM FROM GENERATION THROUGH TRANSMISSION TO THE DISTRIBUTION SYSTEM, HOW HAS MR. SEELYE ASSIGNED DISTRIBUTION COSTS TO RATE SCHEDULES AND CUSTOMER CLASSES?

A. Mr. Seelye has allocated Distribution plant and expenses partially on the basis of
 number of customers and partially on the basis of peak demand. I concur with Mr.
 Seelye's selection of customer and demand allocators for Distribution plant. However,
 there is often controversy regarding the portion of Distribution plant that should be
 allocated on number of customers and the portion that should be allocated on demand.
 This separation between customer-related and demand-related Distribution plant is
 referred to as the classification of Distribution plant.

1Q.PLEASE EXPLAIN THE TERM "CLASSIFICATION OF DISTRIBUTION2PLANT."

3 In the broadest sense, an embedded CCOSS is undertaken using a three-tiered A. First, costs are functionalized as Production, Transmission, Distribution, 4 approach. General, and/or customer. These functionalized costs are then classified as energy, 5 demand, or customer-related. Finally, classified costs are then allocated to individual 6 classes. With respect to the classification of Distribution plant, it is generally recognized 7 that there are no energy-related costs. That is, the distribution system is designed to meet 8 9 localized peak demands. However, largely as a result of differences in customer densities throughout a utility's service area, electric utility Distribution plant often is classified as 10 11 partially demand-related and partially customer-related.

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Q.

WHY IS THE CLASSIFICATION OF DISTRIBUTION PLANT IMPORTANT IN CCOSS ANALYSES?

A. The classification of Distribution plant may be the single most important factor
affecting class rates of return. To illustrate the importance of this issue, consider the
Residential class: whereas this class may account for only 40% to 50% of peak demand,
it is responsible for a much higher percentage of the number of customers. Therefore,
given the level of investment associated with Distribution plant, wide variations in class
rates of return can result from different customer/demand classifications.

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Q. WHY ARE THE DIFFERENCES IN CUSTOMER DENSITIES IMPORTANT IN THE ASSIGNMENT OF DISTRIBUTION COSTS TO INDIVIDUAL CLASSES?

24 A. Possibly the best way to answer this question is by way of example. Consider two 25 different electric utilities: one similar to KU with urban, suburban, and rural service areas and one similar to Consolidated Edison Company, which is mainly urban. With 26 respect to the utility with a rural service area, many miles of conductors and associated 27 plant must be installed in order to serve the demands of relatively few customers. 28 Conversely, many more customers are served on a per mile basis for the urban utility. 29 For the urban utility, it may be fair and reasonable to allocate Distribution plant solely on 30 the basis of peak demands. However, with respect to the utility with a rural service area, .

such an allocation may be unfair if some classes are located mainly in urban or suburban areas, while other classes of customers are located in urban, suburban, and rural areas. As a result, many utilities classify Distribution plant as partially demand- related and partially customer-related. In this manner, a portion of Distribution plant is allocated based on a peak demand, and a portion allocated based on number of customers.

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Q. HOW DOES ONE DETERMINE HOW MUCH DISTRIBUTION PLANT SHOULD BE CLASSIFIED AS DEMAND-RELATED AND HOW MUCH AS CUSTOMER-RELATED?

A. Once the decision is made that Distribution plant should be allocated considering both peak demand and number of customers, there are two generally accepted methods for determining the portions or percentages that should be allocated on each basis. These two methods are known as the minimum size and zero-intercept approaches. Under both methods, a study is conducted for each major plant account within the distribution system. That is, each account is studied and assigned its own customer and demand components.

17 The minimum size method rests on the premise that the minimum, or smallest 18 size, installed equipment makes up the distribution network to connect customers to the 19 distribution system, and that all larger sizes of equipment serve peak demands. In 20 practice, the cost per unit of the smallest sized installed equipment is determined. This 21 minimum cost per unit is then multiplied by the total number units in the system to arrive 22 at a total customer amount. The total customer amount is then divided by the total cost 23 for the account to determine the customer percentage. As the compliment, one minus the 24 customer percentage equals the demand percentage.

The zero-intercept method is similar to the minimum size method, except for the determination of the minimum cost per unit. The zero-intercept method recognizes that even the smallest installed piece of equipment has a demand component, because it too is designed and installed to meet the peak load placed on that equipment. The zerointercept method attempts to arrive at the "theoretical" cost of a piece of plant or equipment capable of carrying zero load. This is accomplished using statistical regression techniques whereby the per unit costs of various sizes of equipment are

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Q.

IS ONE METHOD PREFERRED OVER THE OTHER?

intercept cost then serves as the minimum, or zero size, cost per unit.

In general, I prefer to use the zero-intercept method when possible and A. However, as with most aspects of ratemaking where there is not a appropriate. universally accepted formula, each approach has its advantages and disadvantages. The major criticisms I have regarding the minimum size method is that this method tends to overstate the customer percentage because even the smallest installed size is used to meet some level of peak demand. The primary weaknesses of the zero-intercept method are that more data and a good working knowledge of statistical linear regression analyses are required, and sometimes there is no strong correlation between costs and sizes (capacity) 14 of distribution equipment.

determined and a best fitting line is fitted into an equation form. The point at which the

fitted line intersects the cost axis at zero size is called the zero-intercept. The zero-

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HOW APPROPRIATE IS EITHER METHOD FROM A DESIGN OR **Q**. **OPERATIONAL PERSPECTIVE?**

18 First and foremost, the classification of Distribution plant as partially customer-A. 19 related and partially demand-related results from the view that the allocation of these plant items based solely on peak demands would not be equitable to some classes. I 20 21 emphasize this point, because many analysts "lose sight of the forest for the trees". When 22 classifying individual accounts within Distribution plant, analysts sometimes ignore how 23 a distribution system is actually designed and constructed.

24 There are three major factors the analyst should keep in mind when classifying 25 Distribution plant. First, there are often alternatives across plant and equipment. For 26 example, the need for a particular transformer may be erased if a larger size conductor is 27 used. Alternatively, fewer and smaller poles may be required if lighter conductors are 28 used. Second, and more importantly, is the fact that purchasing economies are usually 29 For example, there are dozens of various types of overhead conductors present. manufactured. However, due to purchasing economies, a utility may only purchase a few 30 different sizes of conductor. This may result in some "over capacity", yet, the total installed cost is less than if every segment of the system is optimally designed. Third,
 most components of the distribution system are somewhat oversized for other reasons
 such as safety, reliability, current looping and growth uncertainty.

Although, these three factors are reflective of how distribution systems are actually designed and installed, neither the minimum size nor the zero-intercept method account for these factors. In fact, the presence of these three factors can seriously skew the results of either method. If the weakness is not captured or recognized, inequitable class allocations may result.

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Q. HOW DID MR. SEELYE CLASSIFY DISTRIBUTION PLANT BETWEEN CUSTOMER-RELATED AND DEMAND-RELATED COMPONENTS?

A. My Seelye claims to have conducted a zero-intercept analysis to develop customer/demand classifications for distribution Overhead lines, underground lines, and transformers. I take exception to Mr. Seelye's reference to his proposed classifications as a "zero-intercept" derived study, and I disagree with his approach.

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Q.

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PLEASE EXPLAIN HOW AN INDUSTRY ACCEPTED ZERO-INTERCEPT STUDY IS CONDUCTED.

19 Under accepted industry practices, which are well documented in various cost A. allocation manuals,⁴ the zero-intercept method is very straight-forward. First, various 20 21 types of equipment are separated by capacity size and type. Next, historical accounting 22 costs are trended by vintage year to reflect cost differences over time. For each size and 23 type of equipment, the total dollars and total units (feet or number of units) are considered as well as the capacity (size) of each type of equipment. Because the overall 24 objective is to estimate the cost of a "zero-size" piece of equipment, total costs are 25 divided by total units (feet or unit) for each type of equipment to derive an average cost 26 27 per foot or per unit. A regression model is then developed based on the following general 28 form:

cost/unit = a + b (size)

⁴ See for example the National Association of Regulatory Utility Commissions ("NARUC") Electric Utility Cost Allocation Manual, 1992, pages 92 through 94.

The resulting intercept (a) produces the estimated cost per unit of a "zero-size" piece of equipment. This estimated zero-size cost per unit is then multiplied by the total units in the system to estimate a zero-size total cost. The ratio of total zero size costs to trended total actual costs represents the percentage of zero-size equipment and serves as the customer percentage.

6 The above industry standard is in stark contrast to Mr. Seelye's method presented 7 in his Seelye Exhibits 21, 22, and 23. Mr. Seelye refers to his approach as a "weighted 8 regression analysis." Although this "weighted regression analysis" is a clever arithmetic 9 exercise, it violates theoretical statistical principles of linear regression and skews his 10 results. Moreover, on page 66 of his direct testimony, Mr. Seelye states:

> "Like most electric utilities, the feet of conductors and number of transformers on KU's system is not uniformly distributed over all sizes of wire and transformer. For this reason, it was necessary to use a weighted regression analysis, instead of a standard least-squares analysis, in the determination of the zero intercept."

It is interesting that Mr. Seelye finds KU's system to be typical of other utilities, yet, his approach varies dramatically from the industry practice that has been used by countless utilities, commissions, and analysts for decades.

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To understand the bias in Mr. Seelye's "weighted regression analysis," we must fully understand the mathematical model he derives. Using Overhead Conductors as an example, consider Mr. Seelye's analysis presented in his Exhibit 21. Although not shown in his exhibit, Mr. Seelye's equation for Overhead Conductors is:

24 (cost per foot x feet^{0.5}) = $0 + 0.75697(\text{feet}^{0.5}) + 0.00366(\text{size x feet}^{0.5})$ 25 Notice that the equation's true intercept is forced to zero. However, if capacity is set to 26 zero, the second term [0.00366(size x feet^{0.5})] becomes zero. If we then ask what is the 27 cost for a foot of a zero size conductor we see that feet^{0.5} = $1^{0.5} = 1$, such that the cost for 28 one foot becomes \$0.75697. This is the zero-intercept used by Mr. Seelye.

To illustrate the bias in Mr. Seelye's analysis, consider the following hypothetical example of his approach for a system "not uniformly distributed over all sizes of wire":

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١			Cost					
2		Total Cost	Per Foot (y)	Capacity (x)	Feet (n)	y(n ^{0.5})	n ^{0.5}	x(n ^{0.5})
3		······································						
4		\$350.00 250.00	3.50 5.00	2.00 4.00	100 50	35 35.355339	$\begin{array}{c} 10.00\\ 7.07 \end{array}$	20.00 28.28
5		62,500.00	6.25	6.00	10,000	625	100.00	600.00
		164.00 \$99.50	8.20 9.95	8.00 10.00	20 10	36.671515 31.464663	4.47 3.16	35.78 31.62
6		<i>\$77.00</i>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10100		011101000	2110	
7								
8		Under the corre	ct, and acce	pted zero-intere	cept method,	the following	regression	equation
9		results:						
10		cost/feet	z = 1.75 + 0.8	805(size)				
11								
12		Therefore, a ze	ro-size cost	is estimated to) be \$1.75 pe	er foot. Using	, the same	data, the
13		following equat	ion is produ	ced using Mr. S	Seelye's appro	oach:		
14		cost per	foot x feet ^{0.5}	5 = 0 + 1.9815(1)	(1000000000000000000000000000000000000	20(size x feet ⁽).5)	
15		I			,		,	
;		Mr. Seelye's a	nnraach resi	ilte in a zero	cost por foot	t of \$1 0815	a compar	ad to the
					cost per 100	ι ΟΙ φΙ.9015 (as compare	
17		industry accepted	ed cost per fo	001 01 \$1.75.				
18								
19	Q.	WHAT ARE	THE RES	SULTS OF I	MR. SEEL	YE'S CLAS	SIFICATI	ON OF
20		DISTRIBUTIO	ON PLANT	?				
21	A.	Mr. See	lye classifies	distribution pl	ant as follow	s:		
22								
23					Perc	entage		
24			Account		Customer	Demai	nd	
25		Overhea	d Conductor	'S	54.45%	45.55	%	
			ound Condu		30.81%	69.19		
26		Line Tra	nsformers		54.37%	45.639	%	
27								
28	Q.	HAVE YOU	UNDERT	AKEN AN	INDEPEND	ENT ANAI	LYSIS O	F THE
29		CLASSIFICA	FION OF E	LECTRIC DI	STRIBUTIC	ON PLANT F	OR KU?	
30	A.	Yes. I	have taken	a traditional z	ero-intercept	approach to t	the analyse	es of KU
1		Accounts 365	(Overhead (Conductors), 30	67 (Undergro	ound Conducto	ors), and 3	68 (Line

Transformers). In my analyses, I have relied on Mr. Seelye's account data provided in Seelye Exhibits 21, 22 and 23, except for one significant revision.

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Q. PLEASE DISCUSS THE SIGNIFICANT REVISION YOU HAVE INCORPORATED IN YOUR ZERO-INTERCEPT ANALYSES OF ACCOUNTS 365, 367 AND 368.

- 7 A. In his regression formulations of "average cost" as a function of "size," Mr. 8 Seelye's representation of "size" for the units of plant is a physical measurement 9 (circular-mils). As an example, with regard to Account 365 (Overhead Conductors), Mr. Seelye's representation of the "size" of 1/0 Conductor and 2/0 Conductor is, respectively, 10 11 105.6 and 133.1. These are the physical sizes of the conductor and not the load carrying 12 capacity of these wires. While I have used Mr. Seelye's 21 categories of KU's various 13 sizes and types of overhead conductors; e.g., average cost, quantity, etc., I have not used 14 Mr. Seelye's representation of "size" in my analyses. I have used the electrical load 15 capability (ampacity) of each size and type of overhead conductor.
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Q. WHY HAVE YOU INCORPORATED THE CAPACITY (AMPACITY) RATHER THAN SIMPLY THE SIZE OF CONDUCTORS IN YOUR ANALYSES?

A. The purpose of the zero-intercept analysis is to calculate the average cost of a zero
 load conductor in order to evaluate the customer portion as I have discussed previously.
 In my zero-intercept analyses, therefore, I have incorporated the ampacity (capacity or
 load capability) of KU's overhead conductors, rather than merely the physical size of
 these conductors.

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Q. HAVE YOU INCORPORATED THIS AMPACITY OR LOAD CAPABILITY IN ALL OF YOUR ZERO-INTERCEPT ANALYSES?

A. Yes. I have incorporated an ampacity measurement for each of the overhead
 conductors and underground conductors and KVA capacity for line transformers in my
 zero-intercept analyses.

Q. PLEASE PROVIDE A COMPARISON OF THE RESULTS OF YOUR ZERO-INTERCEPT ANALYSES TO THAT OF MR. SEELYE'S.

A. The following table summarizes the results of my analyses and that of Mr. Seelye for KU's three electric distribution accounts for which classification analyses were performed:

		Customer Portion		Demand	Portion
		Watkins	Seelye	Watkins	Seelye
	Account 365				
	(Overhead Conductors)	26%	54%	74%	46%
	Account 367				
	(Underground Conductors)	19%	31%	81%	69%
	Account 368				
	(Transformers)	57%	54%	43%	46%
	The details supporting my class	sification of di	istribution pl	ant are provid	ed in my Schedule
	GAW-3 which consists of three	e pages.			
Q.	DO YOU HAVE ANY OTH	ER COMME	NTS REGA	ARDING ZEI	RO-INTERCEPT
	ANALYSES OF KU'S DIST	RIBUTION P	PLANT ACC	COUNTS?	
A.	Yes. While I have use	d the account	data present	ed by Mr. See	lye, as I discussed
	above, I question why the data	a Mr. Seelye	used for his	Overhead Cor	nductors (Account
	365) and Underground Conduc	ctors (Accoun	t 367) analy	ses are exactly	y the same for KU
	and LG&E, and different for	Line Transfor	mers (Accou	int 368). The	e data used for the
	analyses clearly should be dif	ferent between	n KU and L	G&E, and in f	fact, the data were
	different data presented in the	last case.			
Q.	WHAT ARE YOUR CCOS	S RESULTS	USING TH	IESE CUSTO	DMER/DEMAND
	CLASSIFICATIONS?				
А.	My recommended distr	ibution plant	classificatior	ns coupled wit	h a traditional BIP
	approach to classify generation	n resources are	reflected in	my recommen	nded CCOSS. The
	detail of this CCOSS is provide	ed in my Sche	dule GAW-4	and are summ	narized below:
	А. Q .	 Account 367 (Underground Conductors) Account 368 (Transformers) The details supporting my class GAW-3 which consists of three Q. DO YOU HAVE ANY OTH ANALYSES OF KU'S DIST A. Yes. While I have use above, I question why the dat 365) and Underground Condu- and LG&E, and different for analyses clearly should be difficient data presented in the 1 Q. WHAT ARE YOUR CCOS CLASSIFICATIONS? A. My recommended distra approach to classify generation 	WatkinsAccount 365 (Overhead Conductors)26%Account 367 (Underground Conductors)19%Account 368 (Transformers)57%The details supporting my classification of di GAW-3 which consists of three pages.Q.DO YOU HAVE ANY OTHER COMMER ANALYSES OF KU'S DISTRIBUTION PA.Yes. While I have used the account above, I question why the data Mr. Seelye 365) and Underground Conductors (Account and LG&E, and different for Line Transfor analyses clearly should be different between different data presented in the last case.Q.WHAT ARE YOUR CCOSS RESULTS CLASSIFICATIONS?A.My recommended distribution plant approach to classify generation resources are	WatkinsSeelyeAccount 365 (Overhead Conductors)26%54%Account 367 (Underground Conductors)19%31%Account 368 (Transformers)57%54%The details supporting my classification of distribution pl GAW-3 which consists of three pages.57%Q.DO YOU HAVE ANY OTHER COMMENTS REGA ANALYSES OF KU'S DISTRIBUTION PLANT ACCA.Yes. While I have used the account data present above, I question why the data Mr. Seelye used for his 365) and Underground Conductors (Account 367) analy and LG&E, and different for Line Transformers (Accou analyses clearly should be different between KU and LA different data presented in the last case.Q.WHAT ARE YOUR CCOSS RESULTS USING THE CLASSIFICATIONS?A.My recommended distribution plant classification approach to classify generation resources are reflected in	WatkinsSeelyeWatkinsAccount 365 (Overhead Conductors)26%54%74%Account 367 (Underground Conductors)19%31%81%Account 368 (Transformers)57%54%43%The details supporting my classification of distribution plant are provid GAW-3 which consists of three pages.90DO YOU HAVE ANY OTHER COMMENTS REGARDING ZED ANALYSES OF KU'S DISTRIBUTION PLANT ACCOUNTS?A.Yes. While I have used the account data presented by Mr. See above, I question why the data Mr. Seelye used for his Overhead Co 365) and Underground Conductors (Account 367) analyses are exactly and LG&E, and different for Line Transformers (Account 368). The analyses clearly should be different between KU and LG&E, and in the different data presented in the last case.Q.WHAT ARE YOUR CCOSS RESULTS USING THESE CUSTO CLASSIFICATIONS?

•			ROR At Current	Rates
2		Class	OAG Recommended	Seelye
3				
		Residential	3.34%	2.33%
4		General Service	9.34%	9.25%
5		All Electric School	2.85%	2.19%
		Power Service-Secondary	6.52% 6.04%	8.29% 7.87%
6		Power Service-Primary	0.04% 3.26%	5.66%
7		TOD-Secondary TOD-Primary	4.41%	6.44%
8		Transmission Service	6.85%	9.73%
		Fluctuating Load	16.67%	13.11%
9		Lighting	8.52%	9.34%
10		Total Company	5.34%	5.34%
11				
12		As can be seen above, although	there are some differences i	n individual class rates of
13		return, our studies provide relative	ly similar results.	
14				
15	IV.	CLASS REVENUE INCREASE	DISTRIBUTION	
į				
17	Q.	HOW DOES MR. SEELYE	PROPOSE TO DISTRIB	UTE KU'S PROPOSED
18		OVERALL \$135.3 MILLION IN	NCREASE ACROSS RATI	E CLASSES?
19	A.	Mr. Seelye proposes to a	assign varying percentage in	ncreases to the rate class,
20		which he claims predominately	reflects the results of h	is CCOSS. The overall
21		jurisdictional increase of \$135.	3 million represents an 1	1.5% increase in current
22		revenues, whereby Mr. Seelye pro	poses class increases rangin	g from a high of 13.5% for
23		the Residential class and a low of		
24		Seelye's proposed class increases	is provided below along with	n our CCOSS results:
25				
26				
27				
28				
29				
30				
+				

•		KU Proposed Increase			ROR @ Current Rates		
2			\$		% of		
		Class	Millions	%	Average	Seelye	OAG
3					4400/		a a 40 (
4		Residential	\$58.747	13.54%	118%	2.33%	3.34%
		General Service	\$16.388	10.06%	88% 121%	9.25% 2.19%	9.34% 2.85%
5		All Electric School	\$1.149 \$23.088	13.90% 10.53%	92%	2.19% 8.29%	2.83% 6.52%
6		Power Service-Secondary Power Service-Primary	\$8.936	10.33%	89%	7.87%	6.04%
		TOD-Secondary	\$1.075	10.2278	94%	5.66%	3.26%
7		TOD-Primary	\$15.517	11.09%	97%	6.44%	4.41%
8		Transmission Service	\$7.258	9.97%	87%	9.73%	6.85%
		Fluctuating Load	\$1.873	9.87%	86%	13.11%	16.67%
9		Lighting	\$2.065	9.84%	86%	9.34%	8.52%
10		Total Company	\$134.341	11.49%	100%		
11		Other Revenue	\$0.926	8.65%			
12		Total Jurisdictional	\$135.267	11.47%		5.34%	5.34%
13							
14	Q.	IS MR. SEELYE'S	PROPOSED	CLASS	REVENUE	DISTRIBU	TION
15		REASONABLE?					
ĵ	A.	Yes, given the ra	ather narrow rang	e of achiev	ved class rates	of return und	ler my
17		CCOSS and that of Mr. S	Seelye's analysis, a	an across th	e board (equal j	percentage) ir	ncrease
18		would not be unreasonab	ole. However, Mr.	. Seelye doo	es recognize the	e ROR dispar	ity that
19		exists between classes ar	nd makes some mo	ovement to	ward ROR parit	ty. In these re	egards,
20		Mr. Seelye's relative clas	ss revenue increase	es are reaso	nable.		
21		·					
22	Q.	DO YOU HAVE A R	ECOMMENDAT	ION REG	ARDING A C	CLASS REV	ENUE
23	C		BUTION IF TI				
24		INCREASE LESS THA	AN KU'S PROPO	SED \$135.	.3 MILLION I	NCREASE?	
25	A.	Yes. In the ever	nt that this Comm	ission auth	orizes an overa	ll increase le	ss than
26		the \$135.3 request, Mr. \$					
27		proportionately.					
28		proportionatory					
20 29							
29 30							
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V.

RESIDENTIAL RATE DESIGN

3 Q. DOES KU PROPOSE ANY SIGNIFICANT CHANGES TO ITS RESIDENTIAL 4 RATE STRUCTURE?

- 5 Yes. KU proposes to substantially change its Residential rate structure from a A. 6 largely volumetric basis to a much more heavily weighted fixed fee charge per month basis. That is, whereas KU currently collects approximately 12% of its non-fuel base rate 7 8 revenue from fixed monthly customer charges, (88% from energy charges) its proposed changes to rate design would collect approximately 27% of non-fuel base rate revenues 9 10 from fixed customer charges. In order to accomplish this shift in revenue collection, KU proposes to increase its monthly Residential customer charge by 200% from \$5.00 to 11 12 \$15.00 and at the same time, marginally increase its base rate energy charge by 2.2% 13 from 6.424¢ per KWH to 6.566¢ per KWH.
- 14

Q. MR. WATKINS, HAVE YOU IDENTIFIED A PRIMARY OBJECTIVE IN KU'S RESIDENTIAL RATE DESIGN PROPOSAL?

A. Yes. It is clear from the testimony of Mr. Seelye that the primary objective of KU's Residential rate design is to increase revenue collection and profitability associated with fixed monthly customer charges.

20

Q. WHY DOES KU DESIRE MORE RESIDENTIAL REVENUE RECOGNITION FROM CUSTOMER CHARGES?

- A. Fixed monthly customer charges represent guaranteed revenue to KU. This
 guarantee of revenue obviously reduces the risk of KU's operations and provides much
 more assurances of net income available to shareholders.
- 26

Q. DOES MR. SEELYE PROVIDE JUSTIFICATIONS FOR HIS PROPOSAL TO COLLECT SUBSTANTIALLY MORE OF ITS RESIDENTIAL BASE RATE REVENUES FROM FIXED MONTHLY CHARGES?

A. Yes. Mr. Seelye provides two underlying reasons for his rate design proposals.
 Mr. Seelye claims that traditional volumetric based rate design provides a disincentive for

. the Company to promote conservation and because of the high percentage of fixed cost inherent in providing electric service, prices (rate design) should reflect the Company's 2 3 relationship between fixed and variable costs. 4 IS KU CURRENTLY COMPENSATED FOR ITS CONSERVATION EFFORTS? 5 **O**. 6 KU currently has a Demand Side Management surcharge which A. Yes. 7 compensates the Company for its conservation program costs. In fact, not only is KU 8 compensated for its costs to administer conservation efforts, it is also allowed an extra profit incentive over and above the costs of its DSM programs. 9 10 IS KU ALSO COMPENSATED FOR ANY LOST SALES RESULTING FROM 11 **Q**. 12 **ITS CONSERVATION EFFORTS?** 13 Yes. A. 14 15 NOTWITHSTANDING KU'S RECENT DSM INCENTIVES AND ATTENDANT **Q**. RIDERS, HAVE RESIDENTIAL CUSTOMERS BEEN USING j RATE 17 **ELECTRICITY IN A MORE EFFICIENT MANNER OVER THE LAST COUPLE** 18 **OF DECADES?** Absolutely. Virtually all Residential electric appliances are much more energy 19 A. efficient than they were even ten years ago. As a result, the average Residential energy 20 21 consumption per appliance has been declining steadily over the last decade or two. These market-based conservation measures have prevailed in spite of the so-called 22 "disincentives" to conserve energy resources as alluded to by Mr. Seelye. 23 24 HAS THE ELECTRIC UTILITY INDUSTRY BEEN ABLE TO REMAIN 25 Q. FINANCIALLY VIABLE OVER THE YEARS ABSENT A FIXED CHARGE 26 **RATE DESIGN?** 27 28 Yes. For decades the pricing structure of electric utilities have been largely A. 29 volume based. These industries have remained viable and have achieved at the very least, respectable returns on their investments with this volumetric based rate structure. 30

For example, the Value Line group of electric utility companies have achieved the following average rates of return on common equity each year since 2000:

3		Value Line
4		Electric Utility
5	Year	Rate of Return on Common Equity <u>a</u> /
6		Common Equity <u>u</u>
7	2000	11.3%
	2001	12.2%
8	2002	8.4%
9	2003	9.5%
	2004	9.9%
10	2005	10.4%
11	2006	11.0%
	2007	11.2%
12	2008	10.3%
13	2009	9.6%
	10-yr. Avg.	10.3%
14	<u>a</u> / Calculated per s	Schedule GAW-5.

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As such while it is true that the electric utility industry has been faced with declining usage per appliance due to improvements in appliance efficiency, earnings (with revenue calculated largely from volumetric based prices) have been achieved at reasonable levels. These earnings are largely a result of periodic rate increases, cost savings from technological advances, and economies of scale due to mergers.

20 21

22 DOES KU'S PROPOSAL TO COLLECT A SUBSTANTIAL PORTION OF ITS Q. 23 ELECTRIC NON-FUEL REVENUE FROM FIXED MONTHLY CHARGES **COMPORT WITH THE ECONOMIC THEORY OF COMPETITIVE MARKETS** 24 **OR THE ACTUAL PRACTICES OF SUCH COMPETITIVE MARKETS?** 25

26 No. The most basic tenet of competition is that prices determined through a A. 27 competitive market ensure the most efficient allocation of society's resources. Because 28 public utilities are generally afforded monopoly status under the belief that resources are 29 better utilized without the duplication of the fixed facilities required to serve consumers, 30 a fundamental goal of regulatory policy is that regulation should serve as a surrogate for

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Q. PLEASE BRIEFLY DISCUSS HOW PRICES ARE GENERALLY STRUCTURED IN COMPETITIVE MARKETS.

public utility should mirror those of competitive firms to the greatest extent practical.

competition to the greatest extent practical.⁵ As such, the pricing policy for a regulated

A. Economic theory tells us that efficient price signals result when prices are equal to long-run marginal costs. It is well known that in the long-run all costs are variable and, hence, efficient pricing results from the incremental variability of costs even though a firm's short-run cost structure may include a high level of sunk or "fixed" costs or be reflective of excess capacity. Indeed, competitive market-based prices are generally structured based on usage, i.e. volume based pricing.

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Q. PLEASE EXPLAIN HOW THIS THEORY OF COMPETITIVE PRICING SHOULD BE APPLIED TO REGULATED PUBLIC UTILITIES, SUCH AS KU.

A. Due to KU's investment in system infrastructure, there is no debate that many of
its short-run costs are fixed in nature. However, as discussed above, efficient competitive
prices are established based on long-run costs, which are entirely variable in nature.

18 Marginal cost pricing only relates to efficiency. This pricing does not attempt to 19 always address fairness or equity. From a perspective of fair and equitable pricing of a 20 regulated monopoly's products and services, it is generally agreed that payments for a 21 good or service should be in accordance with the benefits received. In this regard, those 22 that receive more benefits should pay more in total than those who receive fewer 23 benefits. With respect to electric usage, the level of energy usage is the most direct, and 24 in my opinion the best indicator of benefits received, such that volumetric pricing 25 promotes the fairest pricing mechanism to customers and to the utility.

The above philosophy is, and has been, the belief of economists, regulators, and the marketplace for many years. As an illustration, consider utility industry pricing in its infancy (1800s). In the beginning, customers paid a fixed monthly fee and consumed as much of the utility commodity/service as they desired (usually water). It soon became apparent that the fixed monthly fee rate schedule was inefficient and unfair. Utilities

James C. Bonbright, et al Principles of Public Utility Rates at 141 (2d ed. 1988).

soon began metering their commodity/service and charging only for the amount actually consumed. In this way, consumers receiving more benefits from the utility than others paid more in total for the utility service because they used more of the commodity.

Furthermore, virtually every capital intensive industry is faced with a high percentage of fixed costs in the short-run. This includes the manufacturing and transportation industries. Prices for competitive products and services in these industries are invariably established on a volumetric basis, including those that were once regulated; e.g., motor transportation, airline travel, and rail service.

9 Accordingly, the position of Mr. Seelye that KU's fixed costs should be recovered 10 through fixed monthly charges, in my view, is incorrect since pricing should reflect long-11 run cost incidence wherein all costs are variable or volumetric in nature, and that users 12 requiring more of KU's products and services pay more than customers who use less of 13 these products and services.

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Q. DO HIGH FIXED CUSTOMER CHARGE RATE STRUCTURES PROMOTE ADDITIONAL CONSUMPTION?

17 High fixed charge rate structures promote consumption because the A. Yes. 18 consumers' price of incremental consumption is less than what an efficient price structure 19 would otherwise be. As discussed in its Order 636, the FERC's adoption of a "Straight Fixed Variable" (SFV) pricing method was a result of national policy (primarily that of 20 21 Congress) to promote the additional use of domestic natural gas by promoting additional 22 interruptible (and incremental firm) gas usage. Furthermore, when Order 636 was issued, 23 the electric industry was actively promoting the need for additional natural gas supplies at 24 lower prices to fuel the need for additional capacity and movement away from its reliance 25 on coal and nuclear generation. As such, the FERC's SFV pricing mechanism greatly reduced the price of incremental (additional) natural gas consumption thereby 26 significantly increasing the demand for, and use of, natural gas in the United States 27 28 subsequent to 1992 (when Order 636 was issued).

FERC Order 636 had two primary goals. The first was to enhance gas competition at the wellhead by completely unbundling the merchant and transportation

functions of pipelines.⁶ The second goal was to encourage the increased consumption . of natural gas in the United States. In the introductory statement of the Order, the FERC 2 3 stated: 4 "The Commission's intent is to further facilitate the unimpeded operation of market forces to stimulate the production of natural gas [and 5 thereby] contribute to reducing our Nation's dependence upon imported 6 7 oil" [Order at 8]. 8 9 With specific regard to the SFV rate design adopted in Order 636, the FERC stated: "Moreover, the Commission's adoption of SFV should maximize pipeline 10 throughput over time by allowing gas to compete with alternate fuels on a 11 timely basis as the prices of alternate fuels change. The Commission 12 13 believes it is beyond doubt that it is in the national interest to promote the use of clean and abundant gas over alternate fuels such as foreign oil. 14 15 SFV is the best method for doing that" [Order at 128-129]. 16 17 The FERC's objective for SFV is diametrically in opposition to a major claimed need for revenue decoupling and/or guaranteed revenue recovery. That is, some natural 18 3 gas LDC companies are advocating SFV Residential pricing by claiming that because retail rates have been historically volumetric based, there has been a disincentive for 20 21 LDCs to promote conservation or encourage reduced consumption of natural gas. As is 22 clearly discussed in the FERC Order, the price signal that results from SFV pricing is 23 meant to promote additional natural gas consumption, not reduce consumption. A rate 24 structure, therefore, that is heavily based on a fixed monthly customer charge sends an 25 even stronger price signal to consumers to use more energy. 26 27 EARLIER IN YOUR TESTIMONY YOU EXPLAINED THAT VOLUMETRIC 0. PRICING PREDOMINATES IN COMPETITIVE MARKETS. IS THERE ANY 28 DATA OR EXPERIENCE REGARDING THE PRICING OF FIXED PUBLIC 29 UTILITY SERVICES THAT HAVE RECENTLY BEEN DEREGULATED? 30 31 Yes. There is a limited amount of data available. Retail electric competition for A. 32 generation services exists in several states. Invariably, customer choice for generation 33 supply is volumetrically priced. However, competition in electric generation alone does 6

⁶ Federal Energy Regulatory Commission, Docket Nos. RM91-11-001 and RM87-34-065, Order No. 636, page 7.

not necessarily provide a good apples-to-apples comparison with bundled electric service or natural gas LDC distribution base rates.

However, Texas has implemented total retail electric competition for consumers for most of the States' ratepayers, including distribution service. Under the Texas model, consumers select their electricity provider for all bundled electric services including generation, transmission, distribution and metering. The customers' selected service provider supplies all services from the generator to the meter box. Electric providers compete for customers and are free to set their own prices and pricing structure.

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Q. HOW ARE COMPETITIVE RESIDENTIAL ELECTRIC RATES STRUCTURED IN TEXAS?

A. Every electric service provider in Texas has a volumetric component within their
 rate structure. With regard to Residential fixed monthly customer charges, there are three
 different pricing structures: those with no fixed monthly charge; those that have a
 minimum bill amount; and, those with traditional fixed monthly customer charges
 (regardless of consumption). The following is a summary of the rate structures regarding
 customer charges for the 30 providers that offer competitive residential electric service in
 Texas:

19		Number Of Providers	Percentage Of Providers
20			
21	No fixed charge	4	13%
22	Fixed charge waived with usage threshold	11	37%
23			
24	Traditional fixed monthly customer charge	15	50%
25	Total	30	100%

27 Of the 15 providers that utilize a traditional fixed monthly customer charge the minimum 28 charge is \$2.15 per month, the maximum customer charge is \$11.69 per month, with an 29 average customer charge of \$6.24 per month. The details supporting these amounts are 30 provided in my Schedule GAW-6.

•		From this data, half of the providers have maintained the traditional fixed monthly
2		customer charge, an eighth of the companies have abandoned fixed charge pricing
3		altogether, and somewhat more than a third of the providers waive any fixed fees once a
4		minimum level of consumption (KWH) is achieved. ⁷ The conclusions that can be drawn
5		from this data are:
6 7 8 9		 half of the competitive service providers (15) have abandoned traditional fixed customer charge pricing in favor of no customer charges at all or waiver of such with reasonably low levels of consumption;
10 11 12 13 14 15		(2) of the 15 providers that continue to utilize a traditional fixed monthly customer charge, variable energy charges recover more than just generation and transmission (i.e., they include a substantial portion of distribution) costs as the maximum customer charge is only \$11.69 with an average customer charge of \$6.24; and,
16 17 18		(3) no competitor relies on fixed customer charge pricing for the majority of its revenue.
19		From this data and analysis, it is clear that when prices for a service identical to KU's
)		electric operations are established based on competition and determined by the market
21		(customers and sellers), the resulting rate structure is similar to that found for most other
22		competitive goods and services, i.e., predominantly based on volumetric pricing, and not
23		fixed charge pricing.
24		
25	Q.	HAS MR. SEELYE CONDUCTED AN ANALYSIS OF COSTS THAT HE
26		CONTENDS SHOULD BE CONSIDERED IN DEVELOPING THE
27		RESIDENTIAL CUSTOMER CHARGE FOR ELECTRIC SERVICE?
28	A.	Yes.
29		
30	Q.	DO YOU AGREE WITH MR. SEELYE'S CUSTOMER COST ANALYSIS?
31	A.	No.
32		
33	Q.	PLEASE EXPLAIN.

⁷ As indicated in the notes to Schedule GAW-6 customer charges are waived with a minimum monthly usage of 500 KWH or 1,000 KWH. For purposes of comparison, KU's average residential customer usage is about 1,200 KWH per month.

Mr. Seelye estimates KU's monthly electric Residential customer "cost" to be A. \$19.86. However, Mr. Seelye's analysis includes a significant level of distribution, 2 administrative, general, and other overhead costs. Electric utilities are in the business of 3 providing electric energy to customers. Administrative, general and other overhead costs 4 5 are a normal cost of business for any enterprise and should be recovered based on the level of service provided (i.e., on a volumetric basis). That is, these costs are incurred in 6 the provision of services rendered. As such, these costs should be recovered in relation to 7 8 the level of services provided.

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Q. HOW ARE ADMINISTRATIVE, GENERAL AND OVERHEAD EXPENSES TYPICALLY RECOVERED IN COMPETITIVE MARKETS?

A. As discussed previously, the pricing structures in competitive markets are
 predominately volumetrically priced. This volumetric pricing recovers all of a business's
 costs: fixed; variable; administrative; general; overhead; profit; etc.

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AS Q. **NOTWITHSTANDING** THE EFFICIENCY REASONS TO WHY **REGULATION SHOULD SERVE AS A SURROGATE FOR COMPETITION,** 17 ARE THERE OTHER RELEVANT ASPECTS TO THE PRICING STRUCTURES 18 IN COMPETITIVE MARKETS VIS A VIS THOSE OF REGULATED 19 20 **UTILITIES?**

Yes. In competitive markets, consumers, by definition, have the ability to choose 21 A. 22 various suppliers of goods and services. Such is obviously not the case with regulated monopoly utilities. Consumers and the market have a clear preference for volumetric 23 pricing. Utility customers are not so fortunate in that the local utility is a monopolist. 24 The only reason utilities are able to achieve pricing structures with high fixed monthly 25 charges is due to their monopoly status. In my opinion, this is a critical consideration in 26 27 establishing utility pricing structures. That is, competitive markets and consumers in the U.S. have demanded volumetric based prices for generations: a regulated utility's pricing 28 structure should not be allowed to counter the collective wisdom of markets and 29 30 consumers simply because of its market power.

Q.HAVE YOU CONDUCTED AN ANALYSIS OF THE COSTS THAT SHOULD BE2CONSIDERED IN DETERMINING KU'S RESIDENTIAL CUSTOMER3CHARGES?

Yes. As I discussed earlier, there is no doubt that the majority of KU's non-fuel 4 A. 5 costs are fixed in the short-run and that efficient, competitive pricing dictates volumetric 6 pricing. However, traditional ratemaking has recognized a minimum level of fixed 7 customer charges to reflect the direct costs of maintaining a customer's account. These direct customer costs include the Company's investment in meters and service lines as 8 well as the operating expenses associated with meter reading, customer service, 9 10 accounting and customer records and collections. I have conducted a traditional direct customer cost analysis for KU which is presented in my Schedules GAW-7. These 11 12 studies indicate a monthly KU customer cost of \$4.59 per month.

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- 14 15

Q. WHAT ARE YOUR RECOMMENDATIONS REGARDING KU'S RESIDENTIAL CUSTOMER CHARGES?

A. Although my customer cost analyses indicate that reductions to KU's Residential customer charge is warranted, in the interest of gradualism and rate continuity I recommend that KU's current Residential customer charge be maintained at the current level of \$5.00 per month.

20

21 Q. DOES THIS COMPLETE YOUR TESTIMONY?

Yes.

22 A.

BACKGROUND & EXPERIENCE PROFILE GLENN A. WATKINS VICE PRESIDENT/SENIOR ECONOMIST TECHNICAL ASSOCIATES, INC.

EDUCATION

1982 - 1988	M.B.A., Virginia Commonwealth University, Richmond, Virginia
1980 - 1982	B.S., Economics; Virginia Commonwealth University
1976 - 1980	A.A., Economics; Richard Bland College of The College of William and Mary,
	Petersburg, Virginia

POSITIONS

Jul. 1995-Present	Vice President/Senior Economist, Technical Associates, Inc.
Mar. 1993-1995	Vice President/Senior Economist, C. W. Amos of Virginia
Apr. 1990-Mar. 1993	Principal/Senior Economist, Technical Associates, Inc.
Aug. 1987-Apr. 1990	Staff Economist, Technical Associates, Inc., Richmond, Virginia
Feb. 1987-Aug. 1987	Economist, Old Dominion Electric Cooperative, Richmond, Virginia
May 1984-Jan. 1987	Staff Economist, Technical Associates, Inc.
May 1982-May 1984	Economic Analyst, Technical Associates, Inc.
Sep. 1980-May 1982	Research Assistant, Technical Associates, Inc.

EXPERIENCE

I. Public Utility Regulation

A. <u>Costing Studies</u> -- Conducted, and presented as expert testimony, numerous embedded and marginal cost of service studies. Cost studies have been conducted for electric, gas, telecommunications, water, and wastewater utilities. Analyses and issues have included the evaluation and development of alternative cost allocation methods with particular emphasis on ratemaking implications of distribution plant classification and capacity cost allocation methodologies. Distribution plant classifications have been conducted using the minimum system and zero intercept methods. Capacity cost allocations have been evaluated using virtually every recognized method of allocating demand related costs (e.g., single and multiple coincident peaks, non-coincident peaks, probability of loss of load, average and excess, and peak and average).

Embedded and marginal cost studies have been analyzed with respect to the seasonal and diurnal distribution of system energy and demand costs, as well as cost effective approaches to incorporating energy and demand losses for rate design purposes. Economic dispatch models have been evaluated to determine long range capacity requirements as well as system marginal energy costs for ratemaking purposes.

B. <u>Rate Design Studies</u> -- Analyzed, designed and provided expert testimony relating to rate structures for all retail rate classes, employing embedded and marginal cost studies. These rate structures have included flat rates, declining block rates, inverted block rates, hours use of demand blocking, lighting rates, and interruptible rates. Economic development and special industrial rates have been developed in recognition of the competitive environment for specific customers. Assessed alternative time differentiated rates with diurnal and seasonal pricing structures. Applied Ramsey (Inverse Elasticity) Pricing to marginal costs in order to adjust for embedded revenue requirement constraints.

GLENN A. WATKINS

- C. <u>Forecasting and System Profile Studies</u> Development of long range energy (Kwh or Mcf) and demand forecasts for rural electric cooperatives and investor owned utilities. Analysis of electric plant operating characteristics for the determination of the most efficient dispatch of generating units on a system-wide basis. Factors analyzed include system load requirements, unit generating capacities, planned and unplanned outages, marginal energy costs, long term purchased capacity and energy costs, and short term power interchange agreements.
- D. <u>Cost of Capital Studies</u> -- Analyzed and provided expert testimony on the costs of capital and proper capital structures for ratemaking purposes, for electric, gas, telephone, water, and wastewater utilities. Costs of capital have been applied to both actual and hypothetical capital structures. Cost of equity studies have employed comparable earnings, DCF, and CAPM analyses. Econometric analyses of adjustments required to electric utilities cost of equity due to the reduced risks of completing and placing new nuclear generating units into service.
- E. <u>Accounting Studies</u> -- Performed and provided expert testimony for numerous accounting studies relating to revenue requirements and cost of service. Assignments have included original cost studies, cost of reproduction new studies, depreciation studies, lead-lag studies, Weather normalization studies, merger and acquisition issues and other rate base and operating income adjustments.

II. Transportation Regulation

- A. <u>Oil and Products Pipelines</u> -- Conducted cost of service studies utilizing embedded costs, I.C.C. Valuation, and trended original cost. Development of computer models for cost of service studies utilizing the "Williams" (FERC 154-B) methodology. Performed alternative tariff designs, and dismantlement and restoration studies.
- B. <u>Railroads</u> -- Analyses of costing studies using both embedded and marginal cost methodologies. Analyses of market dominance and cross-subsidization, including the implementation of differential pricing and inverse elasticity for various railroad commodities. Analyses of capital and operation costs required to operate "stand alone" railroads. Conducted cost of capital and revenue adequacy studies of railroads.

III. Insurance Studies

Conducted and presented expert testimony relating to market structure, performance, and profitability by line and sub-line of business within specific geographic areas, e.g. by state. These studies have included the determination of rates of return on Statutory Surplus and GAAP Equity by line - by state using the NAIC methodology, and comparison of individual insurance company performance vis a vis industry Country-Wide performance.

Conducted and presented expert testimony relating to rate regulation of workers compensation, automobile, and professional malpractice insurance. These studies have included the determination of a proper profit and contingency factor utilizing an internal rate of return methodology, the development of a fair investment income rate, capital structure, cost of capital.

Other insurance studies have included testimony before the Virginia Legislature regarding proper regulatory structure of Credit Life and P&C insurance; the effects on competition and prices resulting from proposed insurance company mergers, maximum and minimum expense multiplier limits, determination of specific class code rate increase limits (swing limits); and investigation of the reasonableness of NCCI's administrative assigned risk plan and pool expenses.

GLENN A. WATKINS

IV. Anti-Trust and Commercial Business Damage Litigation

Analyses of alleged claims of attempts to monopolize, predatory pricing, unfair trade practices and economic losses. Assignments have involved definitions of relevant market areas(geographic and product) and performance of that market, the pricing and cost allocation practices of manufacturers, and the economic performance of manufacturers' distributors.

Performed and provided expert testimony relating to market impacts involving automobile and truck dealerships, incremental profitability, the present value of damages, diminution in value of business, market and dealer performance, future sales potential, optimal inventory levels, fair allocation of products, financial performance; and business valuations.

MEMBERSHIPS AND CERTIFICATIONS

Member, Association of Energy Engineers (1998) Certified Rate of Return Analyst, Society of Utility and Regulatory Financial Analysts (1992) Member, American Water Works Association National Association of Business Economists Richmond Association of Business Economists National Economics Honor Society

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538 538 539 550197 6-00197 551 551 552 552 552 552 552 552 552 552		FPL Gas		VA SCC	PUE-2005-00098	
Conterverses Co	2006	NCCI (WORKERS COMPENSATION MICH INC.	YES	PA. PUC		nevenue requirements/ Alt. Regulation Plan
Conterverses Co	2007	Land of Drived Parts and All ICN INSURANCE)	YES	VA SCC	26210000-11	COST ALLOCATIONS/ RATE DESIGN
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2552 2552 2652 2652 2652 2652 446520 46526 75660 7560 75	2008		YES		n-2008-2029325	Cost Allocations/Rate Design/ Neconstant Date
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26142 00029 100259	5002	Duke Energy of Kentucky (Gool	YES	VA SCC	NS-2000-001-20	Cost Allocations/Rate Design
9 00059 100059	2009	Duke Energy Caminae /Elevaio	YES	Ky, PSC	24100-0000	Workers Compensation Retes
00059 F 00059	2009	PacifiCom	YES	NOTIC		Hate Design
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00059	2002	Puget Sound Energy (Gas)			IE-DOUTDA	
00059 1	2010	Aqua Vincinia, Inc.	YES			Cost Allocations/Rate Design
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ory agencies in which cases that settled prior to testimony. hy prior to 2003 may be incomplete.

Schedule GAW-1 Page 5 of 5

EXPERT AY PROVIDEL J GLENN A. WATKINS

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Kentucky Utilities and Louisville Gas & Electric

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	Generator	Net MWH	Ganoration	Total O		~	Availability					
Clet	Nameplater (NWI)	Produced	Order	I UIAI GROSS	Net	Factor	Factor:	:			Nee Income	
Mill Creek 1 Coal	÷	2 0R0 877		uncavity and	Investment	Avg	Avg	BIIP	Pct Enerny	Prt Domand	Mamisavni Jav	Tuaun
Inimble County 1. Coal	568	3 559 440	- (921301120	554,631,912	5.7.9	85.6	Base	100 00%		CINGY	Vemand
Mill Creek 4 Coal	544	3 506 776	v	- 212'560' /00¢	\$342,381,617	. 89.6	90,1	Base	100 00%	- 2000	219,150,404	80
Mill Creek 3 Coal			, ,	\$204,316,481	\$251,798,310	81.3	87.5	Baed		%nn'h	\$342,381,617	\$0
Mill Creek 2 Coal	•	960'00,'7:	4	\$277,074,472	\$129,748,881	81.2	80		%nn'nn!	0.00%	\$251,798,310	0\$
Ghent 2 Coal	•	2,084,795	2	\$124,822,261	\$43.236.558	502	20.0	odse.	100.001	%00 ⁻ 0	\$129,748,881	\$0
,:		2,362,899	N 7	\$193,971,163	\$77,347,614	60.7 60.7		Dase.	100.00%	0.00%	\$43,236,558	05
•	•	2,950,195	20 a 8 a 8 a .	\$493,607,411	\$271 150 305			Base	100.00%	0,00%	\$77,347,614	9
	258	2,941,478	6	S393.801.651	\$308 887 474	2.40 00	87.9	Base	100.00%	0,00%	\$271,159,395	₽
	164	966,602	11	S79 607 681	471,100,0024	8	.85.1	Base	100.00%	0.00%	\$208 887 124	
	557	3.363,968	1	100,000,000	808,140,414	51.3	. 86.9	Base	100.00%	2000 U	171 JUDIOUT	
	272	1.360.253	i Ç	210,05,4014	\$033,549,718	78	85.5	Base	100.00%			03
Cane Run 5 Coal	209	033 114	2	- 4141, 8U3, UU2	.\$54,133,803	51.2	84	Base			SL/ Abo'ecce	\$0
Green River 4 Coal	114	300,000	<u>4</u>	\$83,964,064	\$29,847,094	38.7	84.7	Intermediate	307007	04.000 PU	\$54,133,803	\$0
Green River 3 Coal	75	7cn'oen		\$44,809,090	\$9,568,636	31.9	85.0	Intermediate	30.1.02	61.30%	\$11,550,825	\$18,296,269
Brown 3 Coal	444	226,460	16	\$20,882,040	\$4.223.762	21.2	0.00	internationale de la constante	31.90%	68.10%	\$3,052,395	\$6,516,241
		1,834,351	17	\$167,769,218	S61 483 147	500			21.20%	78.80%	\$895,438	\$3,328,324
	101	627,235	18	\$51,604,493	S19 980 742	1.75	01.0	Intermediate	52.90%	47.10%	\$32,524,585	\$28 958 562
	114	289,333	19	\$58,239,565	\$10 014 AAE		8	Intermediate	37.70%	62.30%	\$7,525,200	\$17 435 EAD
Combr E	6	68,321		\$26,123,878	SP 142 121	Ť	0.00 0.00	Intermediate	41.00%	59.00%	\$8,164,922	\$11 740 523
	661	43,621	20	\$63.318.704	547 453 510	8.02	81.6	Intermediate	20.90%	79.10%	\$1.283 705	SA 858 ATE
	139	24,504	24	\$59.494.17R	SAA ORS 252	5°2	82.8	Peak	0.00%	100.00%		547 AE3 E40
-	199	38,658	22	\$57 344 07E		9.9	83.4	Peak	0.00%	100.00%	2 5	100 000 144
Tilling County 8 Gas	199	34.284	50		906'910'244	10.4	83.4	Peak	0.00%	100 00%		444,803,030
	199	23,995	3 8	100,400,104	\$42,281,302	8.6	83.4	Peak	0.00%	100,00%	2	\$42,578,406
Inmole County 10 Gas	199	19 030	Į	7/2'sni'7ce	\$42,802,901	7.1	83.4	Peak	2000 U	100,000	D#	\$42,261,302
Brown 6 Gas, Oil	A 17	EUC PE	3 8	\$26,438,142	\$48,466,389	5.5	83.4	Peak	20000	100.00%	20	\$42,802,901
	A 177	40.130	96	\$04,152,496	\$54,834,899	თ	82.2	Peak	2000 U	%00.001	03	\$48,466,389
Brown 8 Gas, Oli	•	201 /04	7	\$65,080,354	\$53,169,501	10.6	82.2	Peak		%nn'nni	\$0	\$54,834,899
Brown 9 Gas, Oli	•.		R) B	\$36,379,638	\$23,135,828	1.4	88	Peak	2000 C	100.00%	80	\$53,169,501
		120'I	67 C	\$48,505,028	\$28,291,775	*~	85.7	Peak	2/00/0	%00'001	\$0	\$23,135,828
Brown 11 Gas, Oil	•	4007 X	3	\$29,531,409	\$16,272,357	0.8	85.7	Peak		%00'001	\$ 0	\$26,291,775
Brown 5 Gas	123		5	\$44,435,742	\$27,303,037	0.5	89.1	Pask	2000 C	%nn.nni	\$0	\$16,272,357
Paddys Run 13 Gas	14	760'7	32	\$47,749,126	\$35,132,623	1.9	89.1	Dool	0.00%	100.00%	\$0	\$27,303,037
Paddys Run 11 Gas	9	207'L	33	\$64,913,860	\$49,849,554	10.3	88.6.	Deak	%00.0	100.00%	80	\$35,132,623
		8 2	34	\$1,609,957	(\$28,342)	0.1	50	Dent of	%00'n	100.00%	\$0	\$49,849,554
Paddys Run 12 Gas		212	35	\$3,249,070	\$1,357,866	6	2	Dout	%nn.n	100.00%	9 9	(\$28,342)
	3 8	D	36	\$3,183,011	(\$213,388)	0.1	20	Dout -	0.00%	100.00%	\$0	\$1,357,866
Haefling 1-3 Gas Oil		137	37	\$1,899,048	(\$31,433)	10	6	and a contract	0,00,0	100.00%	0\$	(\$213.388)
		-639 -	38	\$5,695,570	\$1,417,461	20	8	Deek	0.00%	100.00%	0-\$	(\$31,433)
Ohio Falls 1-8 Hvdro	1 8	00,130	ı	\$12,391,689	\$3,980,168	28.8 DOMe		Liver A	0.00%	100.00%	\$0	\$1,417,461
	3	230,859	•	\$41,596,196	\$33,670,611) é	Hydro	100.00%	0.00%	\$3,980,168	80
Trimble County 2 Coal	838	ĩ	Projected Top 8				1	2006	100.00%	0.00%	\$33,670,611	\$0
				5010 000 000 000								

Source: KU Responses to AG 1-219 through AG1-222

9610 838

Total

₽

\$870,200,000

0.00%

100.00%

Base

89.4

89.7

\$870,200,000 \$3,597,525,357

\$870,200,000

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Kentucky Utilities Overhead Lines Classification

Exclude small Quantities

					Ln	Total				
	Size	Ampacity	Avg cost/ft	Quantity	Avg cost/ft	Cost				
6	26.24	105	0.19	18421	-1.660731	3499.99	Regression	output:		
4	41.74	140	0.24	89519	-1.427116	21484.56	Constant		-1.0112	0.3637823
2	66.36	184	0.67	971519	-0.400478	650917.73	Std Err of Y Est		0.6552882	
1	83.69	212	1.31	88940	0.2700271	116511.4	R Squared		0.590519	
1/0	105.6	242	1.38	39898	0.3220835	55059.24	No. of Observations		14	
2/0	133.1	276	1.44	713507	0.3646431	1027450.1	Degrees of Freedom		12	
3/0	167.8	315	1.6	1954687	0.4700036	3127499.2				
4/0	211.6	357	1.63	112230	0.48858	182934.9	X Coefficient(s)	0.0033942		
266	266	449	1.8	288794	0.5877867	519829.2	Std Err of Coef.	0.0008159		
266.8	266.8	450	1.85	20263	0.6151856	37486.55				
300 MCM	300	492	3.57	9557	1.2725656	34118.49				
397 MCM	397	576	0.86	265460	-0.150823	228295.6				
500 MCM	500	690	6.95	7511	1.9387417	52201.45				
795 MCM	795	884	4	113204	1.3862944	452816				
				4,693,510		6,510,104	Intercept	0.3637823		
							Q	4,693,510		
							Zero load Cost	1,707,416		
							Total Cost	6,510,104		
							Pct Cust	26.23%		

Ampacty Source: Southwire ACSR

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Kentucky Utilities Underground Lines Classification

Excludes Small Quantities

	Size	Ampacity	Avg cost/ft	Quantity	Ln Avg cost/ft	Total Cost				
12	6.53	20	0.17	102463	-1.771957	17418.71	Regression	Output:		Anti-log
6 Cu	26.24	65	0.31	147560	-1.171183	45743.6	Constant		-1.228544	0.2927183
2 Cu	66.36	115	1.4	807125	0.3364722	1129975	Std Err of Y Est		0.479928	
1	83.69	100	0.94	9181	-0.061875	8630.14	R Squared		0.8599632	
1/0	105.6	120	1.35	95476	0.3001046	128892.6	No. of Observations		9	
2/0 Cu	133.1	175	1.44	2768745	0.3646431	3986992.8	Degrees of Freedom		7	
4/0 Cu	211.6	230	2	1164717	0.6931472	2329434				
350 MCM Cu	350	310	2.92	20435	1.0715836	59670.2	X Coefficient(s)	0.0083349		
1000 MCM	1000	445	10.5	10980	2.3513753	115290	Std Err of Coef.	0.0012713		
				5126682		7822047.1				
							Intercept	0.2927183		
							Q	5126682		
							Zero load Cost	1500673.8		
							Total Cost	7822047.1		
							Pct Cust	19.19%		

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Ampacity Source: National Electric Code Table 310-16

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Kentucky Utilities Transformer Classification

OH 1P	Size 5 10 15 25 37.5 50 75	29175 47570 56554 28328 16983	total Cost 4314550 31012170 60170140 90110288 54068636 37198653 18549207	Avg Cost \$718.13 \$1,062.97 \$1,264.88 \$1,593.35 \$1,908.66 \$2,190.35 \$3,002.46	6.9688228 7.1427292 7.3735937	Std Err of Y Est	1001.2193 621.36454 0.9792426 12 10
	100	4013	14796083	\$3,687.04	8.2125787	X Coefficient(s) 26.117105	
	167		11379858	\$5,285.58	8.572738	Std Err of Coef. 1.2024493	
	250		2800673	\$9,063.67	9.112029		
	333			\$10,141.43			
	500	247	3219564	\$13,034.67	9.4753682		
		197654	328999057				97895006 0.6015063
Pad 1P							
	10		385421	\$1,870.98	7.5342154	Regression Output:	
	15		4917831	\$1,922.53			1329.2668
	25		15657585	\$2,082.13			345.20177
	37.5		19453247	\$2,335.88			0.9783264
	50		15797368	\$2,408.14	7.786608	No. of Observations	9
	75		8373425	\$3,140.82		Degrees of Freedom	7
	100		5072149	\$4,133.78			
	167	826	4309855	\$5,217.74	8.55982	X Coefficient(s) 26.976425	

\$8,530.71 9.0514278

926962 \$7,789.60 8.9605444

3866555 \$6,701.14 8.8100322

2465587 \$9,483.03 9.1572588

5849486 \$8,678.76 9.0686342

4987102 \$9,817.13 9.1918841

13409943 \$16,021.44 9.6816829

9043587 \$22,165.65 10.006299 7424485 \$24,027.46 10.086953

6924137 \$34,277.91 10.442256

3959097 \$45,506.86 10.725618

5747487 \$40,475.26 10.608446

858 10072549 \$11,739.57 9.3707203

X Coefficient(s) Std Err of Coef.

40212978 0.5219315

1.5176054

.....

Regression Output:	
Constant	7463.5887
Std Err of Y Est	3292.9146
R Squared	0.947007
No. of Observations	12
Degrees of Freedom	10
X Coefficient(s) 16.0656	
Std Err of Coef. 1.2017925	

37176135 0.4978259

Use Linear		Total	Weighted
	Pct	Cost	Pct
OH 1P	0.6015063	328999057	41.17%
d 1P	0.5219315	77046467	8.37%
ad 3P	0.4978259	74676977	7.73%
Total		480722501	57.26%

250

45

75

112.5 150

225

300

500

750

1000

1500

2000

2500

Pad 3P

361

119

577

260

674

508

837

408

309

202

87

142

4981 74676977

30252 77046467

										Schedule GAW Page 1 of 17	e GAW- f 17	
			Kentt Electric Co: (5	Kentucky Utilities Electric Cost of Service Study (Summary)	łdy							
Acct. No. Account Description	Allocator	Total	Residential	Gen'l Service	All Elec. S Schools	Secondary PS	Primary PS	Sec. TOD TOD	Pri. TOD TOD 1	Retail Transmission	Fluc. Load	Ltg.
Cost of Service Summary – Pro-Forma Total Operating Revenue		\$1,221,660,614	\$467,627,707	\$156,768,038	\$8,700,686 \$229,562,110		\$95,654,199	\$11,626,139 \$143,324,088		\$73,116,058	\$14,701,332	\$20,580,256
Pro-Ecrma Arlinetmente:												
Eliminate Unbilled Revenue	74	(\$3,744,529)	(\$1,429,385)	(\$484,496)	(\$26,674)	(\$707,374)	(\$293,251)	(\$35.734)	(\$436.711)	(\$222.230)	(\$43.993)	(\$64.680)
Mismatch in Fuel Cos Recovery	*	(\$49,848,679)	ల	(\$5,237,328)		(\$9,768,092)	(\$4,288,845)	(\$\$69,620)	(\$7,065,633)	G	(\$902,237)	(\$356,935)
To Reflect a Full Year of the FAC Roll- Demons FCD Demons	43	(\$3,710,701)		(\$386,233)	(\$33,684)	\$39,974	(\$296,317)	(\$993)	(\$539,386)	_		(\$72,086)
To Reflect a full Year of the ECR Roll-	49 750	(392,324,384) \$87 584 103	(354,024,476) \$33,637,125	(\$11,981,422) \$11 667 441	2640,060,/13)(113,090,040) 2640,000,013,000,040,000	(5040,900 (517,90,405) 5640 200 515 315 262	(\$/,2/4,4/U) \$6 803 052	() (08/, 6741) (08/, 6741)	(\$25,227,180) (\$11,022,922) 227,1661 210 176 282	(\$\$0,270,62)) (\$4 714 St	(\$1,592,149) (\$1 202 727	(/.£8,292,14) 255 595 13
Remove Off-System ECR Revenues	64	(\$3,722,927)	(21,387,197)	(\$480,024)	(\$25,914)	(\$704.745)	(\$291.445)	_	(\$441.743)	(\$227.245)	(\$63.788)	(\$63.816)
Eliminate Brokered Sales	*-	(\$256,817)	-	(\$26,982)	(\$1,936)	(\$50,325)	(\$22,096)	(\$2,935)	(\$36,402)	(\$18,020)	(\$4,648)	(\$1,839)
Eliminate DSM Revenue	48	(\$12,940,085)	(\$1	(\$1,061,969)		(\$1,023,304)	(\$218,413)	(\$67,553)	(\$2,709)	(776,977)	\$-0	\$-0
Year End Revenue Adjustment	42	\$9,724,872	(\$3,729,851)	\$12,261,395		(\$1,140,255)	(\$4,224,214)	(\$55*1£6\$)	\$3,132,208	\$3,532,765	S 0	\$927,987
Adjustment for Merger Surecredit	Dir	\$2,800,345	\$1,190,523	\$352,574	\$21,520	\$483,744	\$207,745	\$19,953	\$289,203	\$146,181	\$44,498	\$44,404
Weather Normalized Electric Uperating Revenues	Ð i	\$2,986,579	\$2,362,666	\$264,295	\$12,655	\$241,693	\$93,420	\$11,850	20	20	\$0	\$0
VU i Surecreat Revenues Adiustment for Billion Corrections & Pede Switching	-14 -17	\$42 /************	3	54,074 50	20	(\$2,121)	(\$1,974)	\$0 \$	50 20	S0	<u> </u>	\$336
Adjustment to Late Payment Charge	54 74	(000'00) \$3 141 64	77F 1FF C2	04 04 08 08 08 08 08 08 08 08 08 08 08 08 08	0.5	(000/0010) \$133 507	(V01,004)	Q Q	3U \$84 815	(060'r¢)	2 S	00 777 843
Eliminate ECR, MSR, FAC, & DSM Accruais	74	\$283.654	5108.278	\$36.701	\$2.021	\$53.585	\$22.214	\$2.707	\$33.082	30 516.834	\$3.333	\$4,900
Total Pro-Forma Operating Revenue		\$1,160,847,393	\$436,305,145	\$162,239,353	\$8,162,704 \$215,740,401	215,740,401	\$85,814,427	\$9,833,121 \$137,491,175	137,491,175		1	\$20,836,747
Operating Expenses												
Operation and Maintenance Expenses		\$819,700,590	\$324,329,920	\$91,536,912	\$6,215,941 \$152,090,411	152,090,411	\$63,594,192	\$8,453,436 \$104,083,342	104,083,342	\$50,026,079	\$12,939,943	\$6,430,415
Depreciation and Amoritzation Expenses		\$118,950,010	\$52,624,819	\$13,731,961	\$990,898	\$19,099,786	\$7,935,064	\$1,042,343	\$12,937,041	\$5,581,864	\$1,471,377	\$3,534,858
		(\$258,958)		(\$27,314)	(\$2,115)	(\$48,901)	(\$21,342)	(\$2,760)	(\$34,887)	(\$17,029)	(\$4,489)	(\$1,538)
Property and Other Laxes Gain on Disposition of Allowance		\$19,552,424 /*73 173/	\$8,499,733 /\$76.100	\$2,232,891 /*7 600/	\$162,485 /**E57)	\$3,208,451 /e14 336/	\$1,342,618 /ee 206/	\$175,952 /#036/	\$2,189,829 /**^^ 37?)	\$963,437 /EE 124/	\$253,964 /61 234)	\$523,064 (****)
State and Federal Income Taxes		S72 669 576	\$19	(315 317 971		(014,000) \$18 205 127	(962,04) \$6 708 965	(\$030) \$501 745	(210,014) \$6 167 874	(401,06) \$4 887 008	(+25,14)	(#20\$) (#20\$)
Specific Assignment of Interruptible Credit	Dir	(\$7,430,743)				171 0001010	(\$144,565)	ot and			(\$7.286.178)	
Allocation of Interruptible Credits	32	\$7,430,743	\$3,637,846	\$796,800	\$82,216	\$1,163,086	\$490,290	\$53,077	\$764,127	\$340,083	\$103,218	\$0
Adjustments to Operating Expenses:												
Eliminate mismatch in fuel cost recovery	-	(\$42,231,035)	(\$15.068.485)	(\$4,436,983)	(\$318.333)	(\$8,275,377)	(\$3,633,443)	(\$482.573)	(\$5.985.895)	(\$2.963.194)	(\$764 362)	(\$302.389)
Remove ECR expenses	49	(\$30,178,413)		(\$3,891,124)		(\$5,712,734)	(\$2,362,479)		(\$3,580,813)	(\$1,842,071)	(\$517,071)	(\$517,295)
Reflect full year of ECR roll⊣in	50	\$22,359,078	\$8,587,119	\$2,978,545		\$4,172,043	\$1,736,731	\$189,336	\$2,597,873	\$1,247,004	\$334,101	\$352,892
Eliminate brokered sales expenses	-	(\$6,096)		(\$640)	(\$46)	(\$1,195)	(\$524)	(\$70)	(\$864)	(\$428)	(\$110)	(\$ 44)
Eliminate DSM Expenses	89 9	(\$7,500,349)		(\$615,540)	S-0	(\$593,129)	(\$126,597)	(\$39,155)	(51,570)	(\$1,725)	\$ -0	\$-0
real end Expense aujustment Denreciation artitistment	44	478,085,06¢	(\$24,102,24) ************************************	\$11,124,14 \$1717 000	(cn/.70@)	(3090,121)	(32,000,000,058)	(118,5055)	61/,000 03	\$2,138,150 \$001 £97	20	\$501,049
Labor adjustment	. 22	\$784,464	\$382.883	\$102.054	\$5.960	\$125.053	\$44.727	\$5.967	\$71.554	\$30.359	81625	100'010°
Weather Normalization Expenses	11	\$1,489,506	\$1,079,155	\$103,622	\$6,016	\$209,475	\$80,967	\$10,271	\$0	\$0	\$ 0	\$0
Adjustment for pension/post retir benefit	22	(\$139,829)	(\$68,248)	(\$18,191)	(\$1,062)	(\$22,290)	(\$7,973)	(\$1,064)	(\$12,754)	(\$5,411)	(\$1,411)	(\$1,424)
Adjustment for increase in property insurance	22	\$373,107	\$160,496	\$42,334	\$3,096	\$62,003	\$26,053	\$3,410	\$42,502	\$18,903	\$4,983	\$9,326
Adjustment for increase in liability insurance	52	\$574,184	\$246,982	\$65,147	\$4,765	\$95,415	\$40,092	\$5,247	\$65,405	\$29,090	\$7,668	\$14,352
Adjustment for hazard tree program	ខ	\$3,791,496	64	\$549,665	\$35,718	\$350,460	\$101,301	\$16,216	\$162,663	80	\$0	\$57,197
otorni uamage Agjustment Filminata advortisino evnenses /See Erros. Assimment)	66	(\$1.267,873)		(\$183,807)	(\$11,944) 255 255)	(\$117,194)	(\$33,875)	(\$5,423)	(\$54,394)	S-0	S-0	(\$19,127)
Adjustment for retired mainframe	t g	(104'86'¢) (508'59'5)	(101,000)	(00+'0010) (512-2037	(CAD'CC)	(020,1016)	(100'70¢)	(670'/\$)	(007,026)	(C+4', 44) (Cra cra)	(765,66)	(\$13,609) (\$76,763)
Amortization of rate case expenses	78	\$595.187	(100'ZDCE)	\$66 d65	(+04'00)	(UCC,UT14)	(C20,200)	(671,129) \$6 128	(167'D/C)	(776'54C) (776'536	(000,4114)	(201,102) 84 660
	?							00-1 6 0.0		-	A 1 1 5 1 5	100'14

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Kentucky Utilities Electric Cost of Service Study (Summary)

					Cen'l	All Elec.	Secondary	Primary	Sec. TOD	Pri. TOD	Retail	Fluc.	ŝ
Acct. No.	Account Description	Allocator	Total	Residential	Service	Schools	PS	PS	TOD	10D	Transmission	Load	Ltg
Adjustment for injurtes	Adjustment for injudes and damages account 925 (See Func. Assignmer	66	\$200 710	526 327	LLL (C3	51 666	752 223	C14 015	C1 034	877 964	¢10160	67 681	210 23
Adjustment for EKBC softlement sheres	attement shares	•											
יחחמווומוויה בערי	ictuminant cital yes	-	1.00,057,15	C76'050¢	0+0"/21¢	313,450	3349,789	190,5014	220,398	910,5628	002,0214	\$32,309	\$12,782
Adjustment for MISO Exit Fee	ixit Fee	52	(883,909)	(166'163)	(\$8,848)	(2685)	(\$15,851)	(\$6,918)	(\$895)	(015,112)	(\$5,522)	(\$1,456)	(\$493)
Adjustment for 2008 Wind Storm	ind Storm	39	\$2,454,286	\$1,630,114	\$355,805	\$23,121	\$226,858	\$65,574	\$10,497	\$105,294	\$0	\$0	\$37,024
Adjustment for 2009 Winter Storm	Inter Storm	39	\$11,447,352	\$7,603,225	\$1,659,558	\$107,841	\$1,058,116	\$305,850	\$48,959	\$491.114	50	50	\$172.689
Adjustment for KCCS Asset	Asset	51	\$360,504	\$137,188	\$38,016	\$2,945	\$68,101	\$29.724	\$3,843	\$48.591	\$23,723	\$6.254	\$2.120
Adjustment for CMRG Asset	Asset	51	\$1,940	\$738	\$205	516	\$366	\$160	221	\$261	S128	\$34	SII
Adjustment for SW Power Pool Expense	ver Pool Expense	51	(\$896,454)	(\$341,141)	(\$94,533)	(\$7,323)	(\$169,345)	(\$73,914)	(\$9,557)	(\$120,829)	(\$58,990)	(\$15,551)	(\$5,271)
Adjustment for MISO RSG Settlement	tSG Settlement	52	(\$510,123)	(\$194,125)	(\$53,793)	(\$4,167)	(\$96,365)	(\$42,061)	(\$5,438)	(\$68,757)	(\$33,568)	(\$8,849)	(33,000)
Adjustment to reflect ex	Adjustment to reflect expiration of OMU contract	51	(\$15,673,235)	(\$5,964,366)	(\$1,652,769)	(\$128,024)	(\$2,960,759)	(\$1,292,285)	(\$167,093)	(\$2,112,527)	5	(\$271,885)	(\$92,162)
Adjustment for reversa.	Adjustment for reversal of OMU uncollectible expense	51	\$1,754,505	\$667,668	\$185,016	\$14,331		\$144,662	\$18,705	\$236,482		\$30,436	\$10.317
Adjustment for property	Adjustment for property tax expense (See Func. Assignment)	22	\$1,199,643	\$516,038	\$136,117	\$9,955	\$199,358	\$83,767	\$10,963	\$136,656	\$60,779	\$16,022	\$29,987
Adjustment for reserve	Adjustment for reserve margin demand purchases	36	(\$1,339,238)	(\$592,213)	(\$134,511)	(805,88)	(\$233,020)	(211,563)	(\$12,294)	(\$163,931)	(\$76,001)	(\$24,643)	\$-0
Federal & State Income Tax Adjustment	e Tax Adjustment	25	(\$12,217,289)	(\$7,593,377)	\$260,642	(\$119,403)	5	(\$1,340,157)	(\$261,507)	(\$665,509)	(SE41.541)	(\$259,023)	(\$224,787)
Federal & State Income	Federal & State Income Tax Interest Adjustment	24	(\$545,180)	(\$148,095)	(\$114,918)	(\$2,174)	(\$122,249)	(\$50,332)	(\$3,764)	(\$46,272)	(\$36,663)	\$2,212	(\$22,924)
Prior income tax adjustments	ments	24	\$1,126,171	\$305,918	\$237,385	\$4,491	\$252,528	\$103,970	\$7,776	\$95,584	\$75,735	(\$4,570)	\$47,355
Adjustment for domestic production activities	ic production activities	24	(\$457,757)	(\$124,347)	(\$96,490)	(\$1,826)	(\$102,646)	(\$42,261)	(\$3,161)	(\$38,852)	(\$30,784)	\$1,858	(\$19,248)
Adjustment for tax basi	Adjustment for tax basis depreciation reduction	22	\$1,442,607	\$620,552	\$163,685	\$11,971	\$239,734	\$100,732	\$13,184	\$164,333	\$73,089	\$19,267	\$36,061
Adjustment for 2003 Ice Storm Amortization	e Storm Amortization	39	(\$527,718)	(\$350,505)	(\$76,505)	(\$4,971)	(\$48,779)	(\$14,100)	(\$2,257)	(\$22,640)	S-0	S-0	(\$7,961)
Total Expense Adjustments	<u>9</u>		(\$38,379,137)	(\$17,698,354)	\$5,215,777	(\$321,567)	\$321,567) (\$10,355,726)	(\$7,438,552)	(\$1,332,306)	(\$4,521,370)	(\$1,431,890)	(\$1,176,839)	\$681,691
Total Operating Expenses			\$992,161,332	\$391,009,550	\$128,797,310	\$7,417,115	\$7,417,111 \$181,437,895	\$72,460,374	\$8,890,652	\$8,890,652 \$121,575,583	\$60,344,419	\$6,004,761	\$14,223,678
Net Operating Income - Pro-Forma	ho-Forma		\$168,686,061	\$45,295,595	\$33,442,043	\$745,593	\$34,302,505	\$13,354,054	\$942,470	\$942,470 \$15,915,592	\$11,016,609	\$7,058,531	\$6,613,069
Net Cost Rate Base			\$3,176,812,337 \$1,364,423,244	\$1.364.423.244	\$360.432.846	\$26.298.098	\$26.298.098 \$529.266.665 \$222.269.321	\$222.269.321	\$29,104,299	5362.621.930	\$29,104,299 \$362,621,930 \$161,630,707	\$42,583,286	\$78.181.940
Adjustment to Reflect Depreciation Reserve	reciation Reserve	71	(\$19,212,820)	(\$\$,499,967)	(\$2,217,988)	•	(\$160,050) (\$3,085,000) (\$1,281,672)	(\$1,281,672)	(\$168,359)	(\$168,359) (\$2,089,592)	(\$901.583)	(\$237,657)	(\$570.951)
Cash Working Capital		67	(\$306,067)	(\$124,139)	(\$34,734)		(\$55,982)	(\$23,068)	(\$3,070)	(\$37,687)		(\$4,644)	(\$2.473)
Artiristed Nat Crist Pate Base	828		\$3,157,293,450	\$3,157,293,450 \$1,355,799,138	\$358 180 124	\$28 135 730	\$28 135 730 \$526 125 683 \$220 964 581	S220 964 581	\$28 032 RED	TARN AQA BRN	516	240 240 085	\$77 608 517

8.52%

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RoR

Account Description Allocation Total Residential Genth Allocation Sol Account Description Allocation Total Residential Services				<u>4050</u> 80 08 0- 0	Secondary PS \$6,167 \$13,222 \$7,134,398 \$7,153,817 \$7,153,817 \$7,153,817 \$7,153,817 \$7,153,817 \$7,153,817 \$7,229,453 \$1,722,064 \$1,724,066 \$1,724,066 \$1,724,066 \$1,724,066 \$1,724,066 \$1,724,066 \$1,724,066 \$1,724,066 \$1,724,066 \$1,724,066 \$1,724,066 \$1,724,066 \$1,724,066 \$1,724,066 \$1,744,066 \$1,744,066 \$1,744,066 \$1,744,066 \$1,744,066 \$1,744,066 \$1,744,066 \$1,744,066 \$1,744,066 \$1,744,066 \$1,744,066 \$1,744,066\$1,744,066 \$1,744,066 \$1,744,066\$1,744,066 \$1,744,066 \$1,744,066\$1,744,066 \$1,744,066\$1,744,066 \$1,744,066\$1,744,066 \$1,744,066\$1,744,066 \$1,744,066\$1,744,066 \$1,744,066\$1,746,066 \$1,744,066\$1,746,066 \$1,744,066\$1,746,066\$1,746,066 \$1,746,066\$1,74	Primary PS \$2,553 \$5,485 \$2,952,857 \$2,960,875 \$2,960,875 \$135,174,648	Sec. TOD TOD \$336 \$721 \$388,360 \$388,360 \$388,360 \$389,417 \$389,417 \$389,417 \$389,417 \$389,417 \$389,417 \$389,417 \$389,417 \$389,417 \$389,417 \$389,417 \$388,360 \$386,360 \$386,3000\$300\$300\$300\$3000\$300\$3000\$3000\$30	Pri. TOD TOD 700 84,161 83,940 84,826,289 54,826,289 54,826,289 54,826,289 51,2,45,634 51,2,53,535 51,2,53,545 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,55,555 51,2,5555 51,2,5555 51,2,5555 51,2,5555 51,2,5555 51,2,5555 51,2,5555 51,2,5555 51,2,55555 51,2,555555 51,2,5555555 51,2,5555555555	Retail Transmission 31,777 31,777 33,817 53,817 \$2,060,791 \$2,060,700\$ \$2,060,700\$ \$2,0	Fluc. Load \$468 \$1,006 \$541,746 \$543,472 \$543,220 \$543,472 \$1,117,616 \$1,117,616 \$41,180,047	St. Ltg 1,212 81,212 82,605 51,406,017 51,406,017 51,406,017 51,406,017 51,406,017 51,249,768 51,1,249,768 50,250,000 51,1,249,768 51,1,249,768 51,1,249,768 51,1,249,768 51,1,249,768 51,1,249,768 51,1,249,768 51,1,249,768 51,1,249,768 51,249,768,768,768,768,768,768,778,778,778,778
AE Sea 687 \$17.32 \$4,508 Conversion Conversion Sea 687 \$17.32 \$4,508 Conversion Conversion Sea 687 \$17.32 \$4,508 Conversion Conversion Sea 683.455 \$50,501,91 \$50,501,91 \$50,501,91 Conversion Sec 60,501,91 Sec 60,501,91 \$50,501,91 \$50,501,91 \$50,501,91 Conversion Conversion Sec 60,501,91 \$50,501,91 <td< th=""><th>6 · · · · · · · · · · · · · · · · · · ·</th><th></th><th></th><th>5324 5696 5376,745 5375,745 5375,745 5375,745 5375,745 5375,745 5375,745 5375,745 5375,745 5375,745 5375,745 5375,745 5376,733 5390,739 5319,330,739</th><th>\$6,167 \$13,252 \$7,153,617 \$7,153,617 \$7,153,617 \$7,153,617 \$7,153,617 \$7,153,617 \$7,153,617 \$7,153,514 \$239,453 \$72,421,600 \$12,593,524 \$239,450 \$12,593,524</th><th>\$2,553 \$5,485 \$2,980,875 \$2,980,875 \$2,980,875 \$135,174,648 \$125,67,555 \$135,101 \$126,232 \$131,797,919 \$126,232 \$131,797,919 \$126,232 \$131,797,919 \$126,232</th><th>\$336 \$721 \$388,360 \$389,417 \$17,953,125 \$2,443,062 \$13,665 \$13,665 \$13,665</th><th>\$4,161 \$8,940 \$4,813,188 \$4,826,289 \$35,172,007 \$1,245,634 \$196,735 \$52,385,302</th><th></th><th>\$468 \$1,006 \$1,006 \$543,746 \$543,746 \$543,746 \$543,747 \$1,117,616 \$1,117,616 \$1,110,047</th><th>\$1,212 \$2,605 \$1,405,017 \$1,405,017 \$1,249,768 \$12,200 \$10</th></td<>	6 · · · · · · · · · · · · · · · · · · ·			5324 5696 5376,745 5375,745 5375,745 5375,745 5375,745 5375,745 5375,745 5375,745 5375,745 5375,745 5375,745 5375,745 5376,733 5390,739 5319,330,739	\$6,167 \$13,252 \$7,153,617 \$7,153,617 \$7,153,617 \$7,153,617 \$7,153,617 \$7,153,617 \$7,153,617 \$7,153,514 \$239,453 \$72,421,600 \$12,593,524 \$239,450 \$12,593,524	\$2,553 \$5,485 \$2,980,875 \$2,980,875 \$2,980,875 \$135,174,648 \$125,67,555 \$135,101 \$126,232 \$131,797,919 \$126,232 \$131,797,919 \$126,232 \$131,797,919 \$126,232	\$336 \$721 \$388,360 \$389,417 \$17,953,125 \$2,443,062 \$13,665 \$13,665 \$13,665	\$4,161 \$8,940 \$4,813,188 \$4,826,289 \$35,172,007 \$1,245,634 \$196,735 \$52,385,302		\$468 \$1,006 \$1,006 \$543,746 \$543,746 \$543,746 \$543,747 \$1,117,616 \$1,117,616 \$1,110,047	\$1,212 \$2,605 \$1,405,017 \$1,405,017 \$1,249,768 \$12,200 \$10
54 \$38,857 \$17,332 \$4,508 54 \$63,453 \$57,244 \$9,666 54 \$44,503 \$52,453 \$57,144 \$9,666 54 \$44,503 \$52,14,752 \$5,519,145 \$52,04,752 54 \$54,503,466 \$52,14,752 \$52,04,752 \$52,04,752 22 \$54,513,448 \$55,675,941 \$55,675,941 \$52,657,943 22 \$51,71,17,248 \$536,615,914 \$52,637,949 \$52,514,752 22 \$54,713,448 \$536,615,914 \$52,514,752 \$55,677,495 22 \$51,713,448 \$536,615,914 \$52,514,752 \$55,577,495 22 \$54,713,448 \$536,615,914 \$52,514,775 \$56,577,495 22 \$51,713,148 \$536,615,914 \$52,514,775 \$56,577,495 22 \$54,615,666 \$533,514,125 \$56,577,495 \$56,577,495 23 \$51,512,616 \$513,517,112,117,248 \$56,675,514 \$56,675,514 23 \$513,616,6166 \$13,616,7153 \$56,577,495	6 6 6 7 6			5324 5696 5374,725 5375,745 5375,745 5375,745 5375,745 5375,745 5375,745 5375,745 511,168 521,178 521,178555555555555555555555	\$6,167 \$13,252 \$7,153,817 \$7,153,817 \$57,153,817 \$53,535,740 \$12,2064 \$239,453 \$72,421,600 \$12,593,524 \$748,440,450	\$2,523 \$5,485 \$5,485 \$2,980,875 \$2,980,875 \$14,648 \$125,67,555 \$13,797,919 \$126,232 \$11,797,919 \$126,232 \$11,797,919 \$126,232 \$12	\$336 \$721 \$388,360 \$388,360 \$388,3417 \$388,3417 \$388,3417 \$388,3417 \$388,3417 \$389,417 \$13,665 \$13,665	\$4,161 \$8,940 \$4,813,188 \$4,826,289 \$35,172,007 \$1,245,634 \$196,735 \$52,385,302		\$468 \$1,006 \$541,746 \$543,220 \$543,220 \$4,751,047 \$1,516 \$26,689,277 \$1,117,616 \$41,180,047	\$1,212 \$2,605 \$1,402,200 \$1,405,017 \$1,249,768 \$11,249,768 \$11,249,768 \$11,249,768 \$11,249,768 \$11,249,768 \$11,249,768 \$11,249,768 \$11,249,768 \$11,249,768 \$11,249,768 \$11,249,768 \$11,249,768 \$11,249,768 \$12,200 \$12,200 \$12,200 \$12,200 \$12,200 \$12,200 \$12,200 \$12,200 \$12,200 \$12,200 \$12,200 \$12,200 \$12,200 \$12,200 \$12,200 \$12,200 \$12,200 \$12,005\$10,005\$10,005\$10,005\$10,005\$100\$100\$100\$100
Intamplie Flatt Statistics \$113.32 \$4,958 \$34,503 \$5,50 \$5	6 · · · · · · · · · · · · · · · · · · ·			\$324 \$374,725 \$375,745 \$375,745 \$375,745 \$375,745 \$31,125 \$56,243 \$21,168 \$21,168 \$21,168 \$21,168 \$21,168 \$21,168 \$21,168 \$21,785,876 \$21,785,876 \$21,785,876	\$6,167 \$13,252 \$7,134,398 \$7,153,817 \$7,153,817 \$7,153,817 \$7,153,817 \$7,153,817 \$7,153,517 \$1,722,064 \$1,722,064 \$1,722,064 \$12,593,524 \$12,593,524 \$12,593,524 \$12,593,524	\$2,553 \$5,485 \$2,952,837 \$2,960,875 \$2,960,875 \$135,174,648 \$135,174,648 \$135,174,648 \$135,1755 \$135,101 \$126,232 \$31,797,919 \$5,308,697	\$336 \$721 \$388,560 \$389,417 \$399,417 \$300,417 \$310,417 \$300,417 \$310,417 \$300,417 \$310,417 \$300,417 \$310,417 \$300,417 \$3	\$4,161 \$8,940 \$4,813,188 \$4,826,289 \$535,172,007 \$1,245,634 \$1,245,634 \$1,245,634 \$196,735 \$535,302		\$468 \$1,006 \$541,746 \$543,746 \$543,220 \$5436,472 \$4,751,047 \$151,047 \$151,047 \$1,117,616 \$4,180,047	\$1,212 \$2,605 \$1,405,017\$1,405,017 \$1,405,017 \$1,405,017\$1,405,017 \$1,405,017\$1,405,017 \$1,405,017\$\$1,405,0
0 REMART 51 SEMBAT 51/13.24 50.05 0 REANCERSEAND CONSENTS 54 SEMBAT 51/13.24 50.06 Sub-deal SOFTWARE 50.05.70 55.280.96 55.280.96 Production Plant Sem Pooluction Plant 55.280.96 55.280.96 55.280.96 Number Peak Sam Pooluction Plant 55.280.96 55.280.96 55.280.96 Number Peak Sam Pooluction Plant 55.280.96 55.280.96 55.280.96 Winter Peak Sam Pooluction Plant 55.97.147 516.71.17.248 516.744.502 556.67.705 Winter Peak Sam Pooluction Remeation 2 51.97.148 516.91.17 500.5370.553 526.739.65 Winter Peak 2 59.66.077 590.5370.553 52.60.306.45 51.376.574 Minter Peak 2 51.97.160 59.958.706 51.97.743 51.74.112 Minter Peak 2 50.457.660 59.36.749 51.376.306.45 51.36.73.95 Minter Peak Statter Statter				5324 566 5374525 5375765 5375765 5375,765 56,243 57,757 57,7555 57,7555 57,7555 57,7555 57,7555 57,7555 57,7555 57,7555 57,7555 57,7555 57,75555 57,75555 57	\$6,167 \$13,252 \$7,153,817 \$7,153,817 \$7,153,817 \$7,153,817 \$7,153,817 \$7,153,817 \$5,153,514 \$1,722,064\$1,722,064\$1,722,064\$1,722,064\$1,722,064\$1,722,064\$1,722,064\$1,	\$2,533 \$5,485 \$2,980,875 \$2,980,875 \$135,174,648 \$135,174,648 \$135,174,648 \$135,175,515 \$131,797,919 \$131,797,919 \$53,08,697	\$336 \$721 \$388,360 \$388,360 \$389,417 \$389,417 \$389,417 \$389,417 \$389,417 \$13,662 \$13,662 \$13,662	84,161 88,940 84,826,289 84,826,289 53,172,007 535,172,007 51,246,534 51,246,534 51,246,534 51,246,534 51,245,302 552,385,302		\$468 \$1,006 \$541,746 \$543,220 \$543,220 \$5,4751,047 \$1,516 \$26,575 \$6,689,277 \$1,117,616 \$41,180,047	\$1,212 \$2,605 \$1,405,017 \$1,405,017 \$11,249,768 \$51,249,768 \$51,249,768 \$51,249,768 \$51,249,768 \$52,926 \$52,92
0. SOFTWARE 54 \$44,928,200 \$20,050,794 \$5,214,762 Sub-total Sectors \$36,05,91 \$5,214,762 \$5,203,566 \$5,203,566 \$5,203,566 \$5,203,566 \$5,203,566 \$5,203,566 \$5,203,566 \$5,203,566 \$5,203,567 \$5,203,566 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,561 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,567 \$5,203,467 \$5,203,467 \$5,203,467 \$5,203,467 \$5,203,467 \$5,273,465 \$5,273,465 \$5,273,465 \$5,273,465 \$5,273,465 \$5,273,465 \$5,273,465 \$5,273,465 \$5,273,465 \$5,273,465 \$5,273,465 \$5,273,465 \$5,223,566 \$5,266,567,674 \$5,013,476 \$5,256,366,676 \$5,256,366,676 \$5,256,366,676 \$5,256,366,676 \$5,256,366,676 \$5,256,366,676 \$5,256,366,676	6 6 7 6 7			\$374,725 \$375,745 \$11,842,908 \$3,784,333 \$66,243 \$21,168 \$21,168 \$21,168 \$21,168 \$21,168 \$21,168 \$21,168 \$21,168 \$21,168 \$21,168 \$21,168 \$21,168 \$21,168 \$21,765 \$21,168 \$22,168 \$22,168 \$22,168 \$22,168 \$22,168 \$22,168 \$22,168 \$22,168 \$22,168 \$22,168 \$22,168 \$22,168 \$22,168 \$22,168 \$22,168 \$22,168 \$22,168 \$22,168 \$22,168 \$23,168 \$22,168 \$23,168 \$22,168 \$23,168 \$22,168 \$23,168 \$23,168 \$22,168 \$23,178 \$23,168 \$24,268 \$24,2	57,134,398 57,153,817 530,868,080 553,535,740 51,722,064 5299,453 572,421,600 512,593,524 5448,440,450	\$2,922,837 \$2,980,875 \$135,174,648 \$125,567,555 \$22,567,555 \$756,101 \$126,222 \$31,797,919 \$25,308,697	\$388,360 \$389,417 \$17,953,125 \$2,443,062 \$100,421 \$13,665	54,813,188 54,825,289 54,825,289 5222,692,707 535,172,007 5196,735 5196,735 552,385,302		\$541,746 \$543,220 \$543,220 \$4,751,047 \$1,516 \$26,689,277 \$1,117,616 \$41,180,047	51,402,200 51,406,017 51,1,249,768 562,926 562,926 50 50 50 50 50 50 50 50 50 50 50 50 50
Production Plant Sister 117,248 Sister 17,445,502 Sister 10,506,680 Sister 117,248 Sister 10,506,680 Sister 10,506,680 Sister 11,50,505,680 Sister 11,50,505,614 Sister 11,505,505,614	07			\$11,842,908 \$3,784,333 \$66,243 \$21,168 \$21,1,168 \$2,785,876 \$890,211 \$19,390,739	\$307,868,080 \$53,535,740 \$1,722,064 \$2399,453 \$72,421,600 \$12,593,524 \$448,440,460	\$126,121,1648 \$72,752,555 \$101,6525 \$126,212 \$126,212 \$126,222 \$31,792,919	\$17,953,125 \$2,443,062 \$100,421 \$13,665	\$222,692,707 \$55,172,007 \$1,245,634 \$196,735 \$52,385,302		\$28,436,472 \$4,751,047 \$159,060 \$26,597 \$6,689,277 \$1,117,616	\$11,249,768 \$62,926 \$62,926 \$0 \$2,646,348 \$2,646,348
Beam Production Generation 1 51,571,117,248 5560,591,445 516,506,600 Winter Peak 2 53,42,029,683 516,506,500 356,553,541 256,553,541 256,553,541 256,553,541 256,514,45,502 256,516,73 255,147 Winter Peak 22 53,135,661 239,556,14 2055,147 2555,147 Winter Peak 22 53,413,148 539,530,641 2555,147 Winter Peak 22 530,457,490 536,507,495 556,7495 Winter Peak 22 530,417,48 530,501,415 546,714,95 556,774,95 Under Peak 205 530,417 500,501,47 500,501,47 500,501,47 500,501,47 505,774,95 Under Peak 205 530,417 500,405,531 556,405,584 546,714,95 556,730,591 541,1127 Transmitistion Plant 222,533,680,077 500,451,53 515,413,418 516,413,2418 516,713,148 516,713,148 516,713,148 516,713,148 516,713,148 516,713,148 516,713,1418 516,713,148 516,	69 107			\$11,842,908 \$3,784,333 \$66,243 \$21,168 \$21,785,876 \$890,211 \$19,390,739	5307,868,080 553,535,740 51,722,064 5299,453 572,421,600 512,593,524 5448,440,450	\$135,174,648 \$22,567,555 \$756,101 \$126,232 \$31,797,919 \$5,308,697	\$17,953,125 \$2,443,062 \$100,421 \$13,665	\$222,692,707 \$35,172,007 \$1,245,634 \$1,245,634 \$196,735 \$52,385,302		\$28,436,472 \$4,751,047 \$1,59,060 \$26,575 \$6,689,277 \$1,117,616 \$41,180,047	\$11,249,768 \$0 \$62,926 \$0 \$2,646,348
Winter Peak 22 5-94,202.08.03 51,67,445,502 55,657,941 Base Base 53,661,4 235,614 235,614 235,614 235,614 235,614 236,51,91 Minter Peak 2 51,913,148 535,614 235,614 235,61,43 256,573,941 Other Production Generation 2 51,913,148 536,573,941 536,573,941 536,573,941 536,71,495 556,739,415 536,77,495 556,77,995 556,77,795 556,70,559,106 556,73,591 556,77,995 556,73,591 556,77,995 556,73,591 556,77,995 556,73,591 556,77,995 556,73,591 556,73,591 556,73,591 556,73,591 556,73,591 556,73,591,591 556,73,595,91 <td< td=""><td>, U)</td><td></td><td></td><td>53,784,333 53,784,333 521,168 52,785,876 5890,211 519,390,739</td><td>\$53,533,740 \$1,722,064 \$299,453 \$72,421,600 \$12,593,524 \$48,440,460</td><td>222,567,1522 5756,252 5126,252 799,5097 799,5097</td><td>\$2,443,062 \$100,421 \$13,665</td><td>\$35,172,007 \$1,245,634 \$196,735 \$52,385,302</td><td>•</td><td>54,751,047 54,751,047 51,575 56,689,277 51,117,616 51,117,616</td><td>\$62,926 \$62,926 \$0 \$2,646,348 \$0</td></td<>	, U)			53,784,333 53,784,333 521,168 52,785,876 5890,211 519,390,739	\$53,533,740 \$1,722,064 \$299,453 \$72,421,600 \$12,593,524 \$48,440,460	222,567,1522 5756,252 5126,252 799,5097 799,5097	\$2,443,062 \$100,421 \$13,665	\$35,172,007 \$1,245,634 \$196,735 \$52,385,302	•	54,751,047 54,751,047 51,575 56,689,277 51,117,616 51,117,616	\$62,926 \$62,926 \$0 \$2,646,348 \$0
Other Production Generation 1 58,768,064 53,13,575 \$923,5147 Wintler Peak 32 51,973,148 \$936,614 \$205,147 \$205,147 Other Production Generation 1 5396,563,054 \$131,871,188 \$38,877,495 Unter Peak 32 \$80,477,680 \$393,561,45 \$505,5147 \$305,5147 Unter Peak 32 \$80,477,680 \$393,6115 \$56,7395 \$356,147 Unter Peak 32 \$80,477,680 \$393,6115 \$505,370,853 \$505,370,855 Tausmission Plant \$2,373,889,077 \$903,370,853 \$356,337,856 \$313,371,112 Tausmission Plant \$2,373,889,077 \$903,370,853 \$350,337,856 \$41,371,418 Uote Transmission Plant \$2,413,443,37 \$2,373,889,077 \$903,317,637,418 \$41,1127 Usin Transmission Plant \$51,360,365 \$13,560,357,514 \$41,131,418 \$14,131,418 Distribution Plant \$51,360,366 \$13,604,327 \$256,327,514 \$41,131,418 Distribution Plant Total Transmission Plant \$212,533,1	07			\$66,243 \$21,168 \$2,785,876 \$890,211 \$19,390,739	\$1,722,064 \$299,453 \$72,421,600 \$12,593,524 \$12,593,524	101,8758 2126,812 262,807,919 253,08,697	\$100,421 \$13,665	\$1,245,634 \$196,735 \$52,385,302		\$159,060 \$26,575 \$6,689,277 \$1,117,616 \$1,117,616	\$62,926 \$0 \$2,646,348 \$0
Winter Peak 22 \$1,913,148 \$936,614 \$205,147 0 Ohner Production Generation 1 \$366,5054 \$131,871,188 \$38,50,065 Winter Peak 32 \$60,457,680 \$339,30,115 \$8,677,495 Vinter Peak 32,373,869,077 \$303,370,839 \$5,677,495 Total Production Plant \$2,373,869,077 \$303,370,839 \$5,60,330,643 Transmission Plant \$2,373,869,077 \$303,370,839 \$5,60,330,643 Transmission Plant \$1,341,107 \$1,341,107 \$1,341,107 VittorNA ROPERTY - 500 KV LINE \$1,341,107 \$1,341,107 \$1,41,017,119 VittorNA ROPERTY - 500 KV LINE \$1,344,337 \$2,351,930 \$393,347 Uotation Plant \$413,446,337 \$2,453,594 \$41,31,418 TotAL ACCTS 360-362 \$136,405,584 \$41,31,419 \$14,333,422 Outation Plant \$113,640,531 \$15,433,422 \$14,333,422 Distribution Plant \$100,773,335 \$66,776,719 \$16,931,437 Distribution Plant \$100,773,335 \$14,333,422 \$136,942,233 </td <td>07</td> <td></td> <td></td> <td>\$21,168 \$2,785,876 \$890,211 \$19,390,739</td> <td>\$299,453 \$72,421,600 \$12,593,524 \$440,460</td> <td>5126,3212 512,797,152 55,308,532</td> <td>\$13,665</td> <td>\$196,735 \$52,385,302</td> <td></td> <td>\$26,575 \$6,689,277 \$1,117,616 \$41.180,047</td> <td>\$0 \$2,646,348 \$0</td>	07			\$21,168 \$2,785,876 \$890,211 \$19,390,739	\$299,453 \$72,421,600 \$12,593,524 \$440,460	5126,3212 512,797,152 55,308,532	\$13,665	\$196,735 \$52,385,302		\$26,575 \$6,689,277 \$1,117,616 \$41.180,047	\$0 \$2,646,348 \$0
Outer roomon enteration 1 5565,553,054 5131,371,188 538,360,065 Winter Peak 32 580,457,680 539,389,415 58,657,495 Total Production Plant \$2,373,086,077 \$903,370,389 \$250,330,643 3 Tansmission Plant \$1,411,004,531 \$156,405,584 \$41,31,418 Total Transmission Plant \$1,844,133 \$2,851,393 \$250,306,431 Total Transmission Plant \$1,844,133 \$16,931,437 \$16,931,437 Usin Usin \$118,802,57,514 \$44,131,418 Distribution Plant \$118,802,57,514 \$44,131,418 Distribution Plant \$104,333 \$15,435,902,911 \$16,931,437 Vincinkary Usin \$118,436,866,875 \$16,476,719 \$16,931,437 Distribution Plant Usistonde	40			\$2,785,876 \$890,211 \$19,390,739	\$72,421,600 \$12,593,524 \$440,460	\$31,797,919 \$5,308,697		\$52,385,302		\$6,689,277 \$1,117,616 \$41.180,047	\$2,646,348 \$0
Winter Peak 32 \$30,457,680 \$39,389,415 \$46,27,495 Total Production Plant \$2,373,886,077 \$903,370,839 \$230,330,643 \$ Transmission Plant \$2,373,886,077 \$903,370,839 \$250,330,643 \$ Transmission Plant \$2,373,886,077 \$903,370,839 \$250,330,643 \$ Transmission Plant \$1 \$7,444,337 \$156,405,584 \$41,31,418 Total Transmission Plant \$1 \$7,464,337 \$2,551,930 \$779,112 Total Transmission Plant \$10,716,719 \$16,931,437 \$ \$ Distribution Plant \$113,6405,585 \$61,776,719 \$16,931,437 OVERHEAD LINES \$12,436,686 \$16,931,437 \$ Primary \$12,435,484 \$14,131,418 \$ \$ Customer \$18 \$30,346,553 \$51,767,719 \$ \$ Primary Customer \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	07			\$890,211 \$19,390.739	\$12,593,524 \$448,440,460	\$5,308,697	\$4,223,218			\$1,117,616 \$41.180,047	\$0 50
Total Production Plant \$2.373,689,077 \$903,370,839 \$250,330,643 Transmission Plant \$411,004,531 \$156,405,584 \$43,341,127 Transmission Plant \$1 \$1,41,004,537 \$56,353,645 Transmission Plant \$1 \$1,41,004,537 \$56,353,645 Transmission Plant \$413,446,584 \$43,341,127 URGNUCK YSTEM PROPERTY \$50,004,537 \$555,594 \$41,314,187 URGNUTA REPORTATION \$413,446,337 \$2,555,514 \$41,314,187 Total Transmission Plant \$413,446,337 \$561,776,719 \$16,931,437 Total Transmission Plant \$413,446,388 \$159,257,514 \$41,314,187 Orbit Diant \$413,446,387 \$561,776,719 \$16,931,437 Pirmary Customer \$19 \$544,559,084 \$14,333,492 Primary Customer \$18 \$594,554,259 \$16,4776,31 Vindone 28 \$544,559,084 \$14,333,492 \$13,535,734 Primary Customer 28 \$594,554,259 \$14,4333,492 Customer 28 \$594,554,259 \$14,333,492 \$13,333,492 Pornand Customer 28 \$50,468,751 \$12,435,484 Customer 29 \$16,677,454 \$	40			\$19,390,739	\$448,440,460	027 704 2017	\$574,696	\$8,273,716		\$41.180,047	010 010 010
Tansmission Plant 51 \$411,004,531 \$156,405,584 \$413,341,127 KENTUCKY SYSTEM PROPERTY 51 \$27,404,337 \$2,581,930 \$790,291 VittedNula PROPERTY 51 \$7,404,337 \$2,581,930 \$790,291 VittedNula PROPERTY 5418,498,686 \$159,257,514 \$44,151,416 Distribution Plant \$418,498,686 \$159,257,514 \$44,151,416 Distribution Plant \$418,498,686 \$159,31,437 \$141,321,416 Distribution Plant \$418,498,686 \$153,509,084 \$14,333,492 OUNDLINES \$100,4337 \$61,776,719 \$16,931,437 Primary \$19 \$48,432,23 \$573,599,084 \$14,333,492 Customer 28 \$220,343,535 \$61,776,719 \$16,931,437 Demand Customer 28 \$530,343,537 \$569,468,734 \$573,559,094 Number Customer 28 \$530,343,537 \$560,468,731 \$12,435,484 Demand Customer 29 \$560,468,731 \$13,435,484 \$12,435,484						\$195,731,152	\$25,308,187	\$319,966,102	\$156,211,866		740,800,014
VIRGINIA PROPERTY - 500 KV LINE 51 \$7,484,337 \$2,851,390 \$7,990,291 Total Transmission Plant \$418,496,868 \$159,267,574 \$44,131,418 Distribution Plant \$418,496,868 \$159,267,574 \$44,131,418 Distribution Plant \$418,496,868 \$159,267,574 \$44,131,418 Orbartibution Plant \$418,496,365 \$61,776,719 \$16,931,437 Orbartibution Plant \$418,496,365 \$61,776,719 \$16,931,437 Orbartibution Plant \$488,378 \$61,776,719 \$16,931,437 Orbartine \$28,369,966 \$13,533,492 \$14,333,492 Outsomer \$28,488,4289 \$514,333,492 \$54,333,733,492 Dermand \$28,488,478,937 \$60,468,751 \$12,333,492 Customer \$28,378,937 \$60,468,751 \$12,433,494 UNDEROUND LINES \$18,537,837 \$50,468,751 \$12,435,484 Pinmary \$20,493,362 \$18,344,327 \$13,570,394 Outsomer \$29 \$86,378,937 \$60,468,751 \$12,435,484 Permand <td< td=""><td></td><td>S156 405 584</td><td>201 145 162</td><td>717 72F F\$</td><td>577 640 974</td><td>210 288 252</td><td>745 J81 746</td><td>007 702 353</td><td>577 A45 872</td><td>0CT 0C1 T3</td><td>\$7 416 806</td></td<>		S156 405 584	201 145 162	717 72F F\$	577 640 974	210 288 252	745 J81 746	007 702 353	577 A45 872	0CT 0C1 T3	\$7 416 806
Total Transmission Plant 3418,496,868 \$159,257,574 \$44,131,418 Distribution Plant 512,593,185 \$61,776,719 \$16,931,437 Distribution Plant 28 \$122,593,185 \$61,776,719 \$16,931,437 OVERHEAD LINES 28 \$122,593,185 \$61,776,719 \$16,931,437 Primary 28 \$125,593,084 \$14,333,492 \$143,334,922 Primary 28 \$289,689,615 \$14,333,492 \$143,333,492 Customer 28 \$289,989,615 \$14,333,492 \$14,333,492 Dermand 28 \$289,698,615 \$14,333,492 \$14,333,492 UNDERCOUND LINES 18 \$30,346,356 \$24,197,693 \$4,587,079 Dermand 29 \$86,378,937 \$60,468,751 \$12,435,484 UNDERCROUND LINES 18 \$30,346,323 \$50,346,375 \$14,377,494 \$12,435,484 Primary 29 \$86,378,937 \$60,468,751 \$12,435,484 \$12,435,484 Outomer 29 \$86,378,937 \$60,468,751 \$12,435,484 \$12,435,484 Permand 20 \$25,643,642			\$790,291	\$61,216	\$1,415,721	\$617,921	879,898	\$1,010,129		\$130,005	\$44,069
Distribution Plant 28 \$122,593,165 \$61,776,719 \$16,931,437 \$1 TOTAL ACCTS 360-362 000000000000000000000000000000000000	\$122 \$94		\$44,131,418	\$3,418,442	\$79,056,695	\$34,505,936	\$4,461,644	\$56,407,628	\$27,538,982	\$7,259,734	\$2,460,875
Primary Primary Customer 19 \$94,854,259 \$75,559,084 \$14,323,492 Customer 28 \$288,969,815 \$136,042,223 \$537,236,734 \$3 Secondary 28 \$288,969,815 \$136,042,223 \$537,235,734 \$3 Secondary 29 \$86,378,937 \$60,468,751 \$12,435,484 \$1 UNDERGROUND LINES 29 \$86,378,937 \$60,468,751 \$12,435,484 \$1 Primary 29 \$86,378,937 \$60,468,751 \$12,435,484 \$1 UNDERGROUND LINES 18 \$200,340,356 \$18,834,232 \$31,377,434 \$1 Unstomer 29 \$100,797,434 \$50,793,482 \$13,377,309 \$1 Customer 28 \$100,797,424 \$50,793,482 \$13,921,209 \$1 Demandd 28 \$100,797,424 \$50,793,482 \$13,921,209 \$1 Outstomer 28 \$100,797,424 \$50,793,482 \$13,921,209 \$1 Demandd 50 \$100,79			\$16,931,437	\$1,661,887	\$18,681,681	\$8,320,985	\$897,266	\$13,406,050	20	\$0	\$917,160
Demand 28 S269,969,815 313,6042,223 537,285,734 533 Secondary Customer 28 \$269,969,815 \$13,6042,223 \$37,285,734 533 Secondary Customer 18 \$30,349,356 \$34,197,693 \$4,587,079 \$31,385,734 533 Damand 29 \$56,378,937 \$60,468,751 \$12,435,484 \$13 NribeRGROUND LINES 19 \$530,349,356 \$12,435,484 \$12,443,484 \$12,435,484 \$12,443,484 \$12,443,484 \$12,444 \$12,444 \$12,444 \$12,444 \$12,444 \$12,444 \$12,517,209 \$13,521,209 \$15,517,209 \$15,551,209 \$15,551,209 \$15,551,209 \$16,566,773,482 \$13,921,209 \$12,509,534 \$12,551,209 \$16,566,7734			E1/ 273 /07	667 610	731 077 12	C74 647	¢0 012	611 511	ç	5	53 345 M27
Secondary Secondary Outsomer 18 \$30,349,356 \$34,587,079 Damand 29 \$86,378,937 \$60,468,751 \$12,435,484 \$1 Damand 29 \$86,378,937 \$60,468,751 \$12,435,484 \$1 Primary 29 \$86,378,937 \$60,468,751 \$12,435,484 \$1 Primary 28 \$23,643,842 \$18,834,232 \$3,570,344 \$1 Primary 28 \$100,797,434 \$50,793,482 \$13,921,209 \$1 Customer 18 \$106,872 \$148,197 \$28,093 \$10,077 \$11,077 \$11,077			\$37,285,734	\$3,659,740	\$41,140,051	\$18,324,140	\$1,975,924	\$29,522,269	\$0	05 05	\$2,019,733
Demand 29 \$86,378,937 \$60,468,751 \$12,435,484 \$1 UNDERGROUND LINES 29 \$86,378,937 \$60,468,751 \$12,435,484 \$1 Primary 19 \$22,943,642 \$18,834,232 \$3,570,344 \$1 Untonner 19 \$22,943,642 \$18,834,232 \$3,570,344 \$1 Demand 28 \$100,797,434 \$50,793,482 \$13,921,209 \$1 Secondary 18 \$100,797,434 \$50,793,482 \$13,921,209 \$1 Durand 28 \$100,797,434 \$50,793,482 \$13,921,209 \$1 Outsome 28 \$100,797,434 \$50,793,482 \$13,921,209 \$1 Durand 28 \$100,797,434 \$50,793,482 \$13,921,209 \$1 Durand 28 \$100,797,434 \$50,793,482 \$13,921,209 \$1 Durand 500,793,473 \$100,797,734 \$50,793,734 \$13,973,203 \$13,973,203 \$13,973,203 \$13,973,203 \$13,973,213,993 \$13,973,213,993 \$13,973			\$4 587 070	216 219	102 2273	¢,	(C) (C)	9	U\$	9	CPC 120 13
UNDERGINOUND LINES Primary Customer Demand Secondary Customer Durmord Durmord Durmord Durmord			\$12,435,484	\$1,597,470	\$10,868,940	8	\$562,202	80	20	8	\$446,090
Inter 19 \$22,843,842 \$18,834,232 \$1,570,344 nd 29 \$100,797,434 \$50,793,482 \$1,3,921,209 \$1 ty 28 \$100,797,434 \$50,793,482 \$1,3,921,209 \$1 th \$100,797,434 \$50,793,482 \$1,3,921,209 \$1 \$28,093 th \$100,577 \$1,48,197 \$28,093 \$00 \$28,093											
18 \$100,797,454 \$50,793,482 \$13,921,209 \$1 18 \$165,672 \$148,197 \$28,093 20 \$270,407 \$11,077 \$28,093			\$3,570,344	\$13,091	\$368,704	5 18,606	\$2,197	\$2,869	\$ 0	\$0	\$833,799
18 \$186,872 \$148,197 \$28,093			\$13,921,209	\$1,366,421	\$15,360,279	\$6,841,603	\$737,742	\$11,022,599	\$0	20	\$754,099
			528,093	\$103	\$2,901	50	S17	\$0	\$0	\$0	\$6,561
29 \$742,401 \$354,113 \$114,077	29 \$792,401	\$554,713	\$114,077	S 14,654	202,902	20	\$5,157	\$0	\$0	\$0	\$4,092
18			\$465,686	\$1.708	\$48.091	\$0	\$287	2 0	3 0	S 0	S108.754
29 \$2,324,344 \$1,627,135 \$334,623 \$			\$334,623	\$42,986	\$292,469	\$0	\$15,128	S 0	\$0	\$ 0	\$12,004
18			\$21,828,429	\$80,037	\$2,254,191	20	\$13,431	\$0	\$0	20	\$5,097,695
rd \$108,950,541 \$76,269,787 \$15,684,989 \$2			\$15,684,989	\$2,014,904	\$13,709,093	20	\$709,110	30	20	\$0	\$562,658
27 \$79,642,953 \$65,820,759 \$12,477,423 \$45,715 370 METERS 26 \$63,104,742 \$40,516,336 \$17,828,099 \$128,797			\$12,477,423 \$17,828,099	\$45,715 \$128.797	\$1,288,543 \$4.358.013	\$0 \$211.085	\$10,513 \$14,767	50 532.499	\$0 \$14.703	S0 S442	20 20
ER INSTALLATION 7 \$17,391,895 50 50			\$ 0	20	20	50	S 0	S0	20	205	\$17,391,895
					\$0	2 0	8	30	20	20	\$76,387,118

										Sched Page	Schedule GA ¹ Page 4 of 17	
		Ke Electric C	Kentucky Utilities Electric Cost of Service Study (Rate Base)	Ą								
Acct. No. Account Description	Allocator	Total	Residential	Gen'l Service	All Elec. Schools	Secondary PS	Primary PS	Sec. TOD TOD	Prí. TOD TOD	Retail Transmission	Fluc. Load	st Lig
General Plant Todal General Plant TOTAL COMMON PLANT	2	\$100,246,736 \$0	\$44,738,636	\$11,635,515	\$836,110	\$15,918,733	\$6,588,563	\$866,533	\$10,739,498	\$4,585,689	\$1,208,778	\$3,128,681
106 COMPLETED CONSTR NOT CLASSIFIED 105 PLANT HELD FOR FUTURE USE OTHER	ន ន	\$0 \$8,757,105 \$18,610	\$5,220,606 \$11,094	\$1,228,385 \$2,610	\$76,476 \$163	\$789,478 \$1,678	\$241,586 \$513	\$35,428 \$75	\$\$20 \$\$20	\$105 \$0	88	\$778,985 \$1,655
Construction Work in Progress CWIP Froduction CWIP Transmission CWIP Distribution Plant CWIP General Plant	2 3 2 5	\$911,066,142 \$78,906,686 \$24,269,532 \$11,316,856	\$346,701,366 \$30,027,519 \$14,468,442 \$5,050,545	\$96,073,475 \$8,320,844 \$3,404,359 \$1,313,534	5 7,441,900 \$644,537 \$211,947 \$94,388	\$172,105,312 \$14,905,899 \$2,187,967 \$1,797,066	\$75,118,938 \$6,505,989 \$669,535 \$743,783	\$9,712,936 \$841,229 \$98,186 \$97,823	\$122,798,611 \$10,635,486 \$1,069,910 \$1,212,382	\$59,951,976 \$5,192,391 \$291 \$517,678	\$15,804,339 \$1,368,801 \$1 \$136,459	\$5,357,289 \$463,990 \$2,158,888 \$353,197
Total CWIP		\$1,025,559,216	\$396,247,872	\$109,112,211	\$8,392,773	\$190,996,243	\$83,038,244	\$10,750,174	\$135,716,390	\$65,662,337	\$17,309,607	\$8,333,364
TOTAL PLANT-IN-SERVICE TOTAL UTILITY PLANT		\$4,171,331,504 \$5,196,890,720	\$1,862,918,780 \$2,259,166,652	\$484,373,725 \$593,485,937	\$34,794,626 \$43,187,298	\$661,786,392 \$852,782,636	\$273,819,687 \$356,857,931	\$36,016,660 \$46,766,834	\$446,324,186 \$582,040,576	\$190,412,136 \$256,074,474	\$50,192,225 \$67,501,832	\$130,693,187 \$139,026,552
Accumulated Reserve for Depreciation												
Stearn Production	79	\$873.311.222	5332.333.932	<u> 292.092.155</u>	\$7,133,505	S164.973.204	\$72,005,981	89.310.428	167,209,791	\$57,467,544	S 15,149,401	\$5,135,281
Hydraulic Production	8	\$7,263,053	\$2,763,916	\$765,901	\$59,327	\$1,372,030	\$598,851	\$77,432	\$978,955	\$477,939	\$125,993	\$42,709
Other Production Transmission - Kentucky System Property	5 8	\$123,704,326 \$246.889.065	\$47,075,022 \$93,952,318	\$13,044,832 \$26,034,872	\$1,010,459 \$2,016,674	\$23,368,415 \$46,638,677	\$10,199,630 \$20,356,419	\$1,318,820 \$7 637 100	S16,673,564 S33 277 095	\$8,140,264 \$16 746 337	\$2,145,909 \$4 787 805	\$727,411 \$1 451 767
Transmission - Virginia Property	57	\$4,335,872	SI ,649,993	\$457,225	\$35,417	\$819,070	\$357,500	\$46,225	\$584,413	\$285,319	\$75,215	\$25,496
Distribution General Plant	83	\$512,383,992 \$46,417,368	\$305,461,108 \$20,715,385	\$71,873,607 \$5,387,607	\$4,474,673 \$387,145	\$46,192,858 \$7,370,870	\$14,135,370 \$3,050,710	\$2,072,917 \$401,232	\$22,588,187 \$4,972,723	\$6,151 \$2,123,317	\$185 \$559,702	\$45,578,937 \$1,448,677
TOTAL ACCUMULATED RESERVE FOR DEPRECIATION	8	\$1,824,368,837	\$808,443,061	\$210,824,308	\$15,201,139	\$292,333,232	\$121,365,898	\$15,946,147	\$197,862,884	\$460,365 \$85,207,236	\$121,351 \$22,460,560	\$54,724,372
Net Utility Plant		\$3,372,521,883	\$1,450,723,591	\$382,661,629	\$27,986,159	\$560,449,403	\$235,492,033	\$30,820,687	\$384,177,692	\$170,867,238	\$45,041,271	\$84,302,180
Rate Base Adjustments and Working Capital												
Working Capital Assets Cash Working Capital - Operation and Maintenance Expenses Materials and Supplies	22 62	\$80,258,812 \$105,065,854 \$3 774 595	\$32,552,427 \$46,922,464 \$1,443,778	\$9,108,205 \$12,200,214	\$607,863 \$876,391	\$14,680,051 \$16,668,815	\$6,048,935 \$6,896,862	\$805,096 \$907,173	\$9,882,644 \$11,241,838	\$4,707,485 \$4,796,026	\$1,217,716 \$1,264,222	\$648,389 \$3,291,848
Sub-total	5	\$188,556,251	\$80,918,118	\$21,683,670	\$1,511,209	\$31,861,560	\$13,157,929	\$1,740,172	\$21,470,255	\$9,651.026	\$2,520,823	\$4,041,488
Other Rate Base items <u>Deferred Debits</u> Total Production Plant	2	\$177.451.063	\$67.528.056	\$18.712.517	\$1,449,481	533.521.464	9E1 169 P13	\$1,891.817	123.017.851	\$11.677.025	53.07R.258	51.043.455
Total Transmission Plant Total Distribution Plant	883	\$21,004,011 \$92,743,758	\$7,992,964 \$55,289,805	\$2,214,909 \$13,009,439	\$171,568	\$3,967,771 \$8,361,111	\$1, 731,816 \$2, 558,564	\$375,207	\$2,831,039 \$4,088,561	\$1,382,152 \$1,113	\$364,358 \$33	\$123,509 \$8,249,988
vour veneral rau. Sub-total	8	\$298,216,001	\$133,942,485	\$34,751,339	\$2,489,511	\$46,964,640	\$19,382,712	\$2,551,606	\$31,589,205	\$13,381,284	\$3,527,263	\$2,635,956 \$9,635,956
Accumulated Deferred Investment Tax Credits Production Transmission	5	\$84,045,962 \$4 84 84 871	\$31,983,243 \$1 778	\$8,862,790 \$403	\$686,516 *30	\$15,876,736 \$827	\$6,929,731 ****	\$896,019 \$50	\$11,328,187 \$530	\$5,530,577 \$1052	\$1,457,952 52	\$494,211
	4		011610			7000	100F		0000	1000	105	1

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Kentucky Utilities Electric Cost of Service Study (Rate Base)

	5				Gen'l	All Elec.	Secondary	Primarv	Sec. TOD	Pri. TOD		Retail	Retail Fluc.
Acct. No.	Account Description	Allocator	Total	Residential	Service	Schools	PS Sd	S	TOD	TOD	- 1	Transmission	
1	Transmission VA	52	\$275	\$105	\$29	\$2	\$52	\$23	53	\$37		518	\$18 \$5
	Distribution VA	33	\$0	20	\$0	20	20	20	8	\$0		20	
T	Distribution Plant KY, FERC & TN	ន	\$7,281	\$4,329	\$1,019	\$ 63	\$655	\$200	\$29	\$320		\$0	
~	General	5	\$1,290	\$576	\$150	SII	\$205	\$85	511 S	S138		\$59	69
ŭ	Sub-total		\$84,059,459	\$31,990,030	\$8,864,480	\$686,631	\$15,878,530	\$6,930,424	\$896,113	\$11,329,312		\$5,530,962	\$5,530,962 \$1,458,054
ŗ	Less:												
Q	Customer Advances	89	S2,365,522	\$1,428,726	\$336,198	\$26,193	\$272,003	\$98,441	\$12,841	\$158,070		S0	S0 50
¥	Asset Retirement Obligations	51	\$295,630	\$112,500	\$31,175	\$2,415	\$55,846	\$24,375	\$3,152	\$39,847		519,454	\$19,454 \$5,128
Š	Sub-total		\$2,661,152	\$1,541,226	\$367,373	\$28,608	\$327,849	\$122,816	\$15,993	\$197,916		\$19,454	\$19,454 \$5,128
E	Emission Allowance												
ជ	Emission Allowance	51	\$670,815	\$255,275	\$70,739	\$5,479	\$126,721	\$55,310	\$7,152	\$90,416		\$44,142	\$44,142 511,637
Š	Sub-total		\$670,815	\$255,275	\$70,739	\$5,479	\$126,721	\$55,310	\$7,152	\$90,416		\$44,142	\$44,142 \$11,637
т	TOTAL OTHER RATE BASE		\$379,614,308	\$164,391,288	\$43,248,445	\$3,147,535	\$62,615,321	\$26,190,320	\$3,431,726	\$42,720,600	2	\$18,892,792	8,892,792 \$4,980,188
TOTAL RATE BASE	EBASE		\$3,176,812,337	\$1,364,423,244	\$360,432,846	\$26,298,098	\$529,266,665	\$222,269,321	\$29,104,299	\$362,621,930	\$161	\$161,630,707	,630,707 \$42,583,286

		ū	Kentucky Utilities Electric Cost of Service Study (Expenses)	liities vice Study s)						Scher	Schedule GA Page 6 of 17	
Acct. No. Account Description	Allocator	Total	Residential	Gen'l Service	All Elec. Schools	Secondary PS	Primary PS	Sec. TOD TOD	Pri. TOD TOD	Retail Transmission	Fluc. Load	г <mark>в</mark> .
0 & M Expenses												
SOU OPERATION SUPERVISION & ENGINEERING SOU FILM	90	\$3,326,789	\$1,251,985	\$350,587	\$26,802	\$632,609	\$276,415	\$35,919	\$452,508	\$221,491	\$58,154	\$20,318
	51	\$376,982,496 \$6,792.159	\$134,511,388 \$2,584,720	\$39,607,485 \$716.245	\$2,841,652 \$55,481	\$73,871,557 \$1.283.075	\$32,434,547 \$560.025	\$4,307,771 \$77,412	\$53,434,110 \$915.485	\$26,451,450 5446,953		\$2,699,331 \$10 040
	2 - 1	\$4,213,412	SI,503,390	5442,680	091,152	\$825,639	\$362,510	\$48,147	\$597,216	\$295,639		\$30,170
505 ELECTRIC EXPENSES-Labor ELECTRIC EXPENSES- Other	51	\$4,157,062 \$593.150	\$1,581,948 \$2,11,642	\$438,369 \$62.319	\$33,956	\$116.231	\$342,757	\$44,319 °66 778	\$\$60,312 \$\$4 074	\$273,552 \$41 619		\$24,445 \$4 747
506 MISC. STEAM POWER EXPENSES	. 22	\$12,280,840	\$4,673,408	\$1,295,035	\$100,314	\$2,319,917	\$1,012,576	3130,927	\$1,655,281	\$808,131	\$213,037	\$72,214
	61	56,719,876	\$2,416,968	\$706,334	\$51,165	161,016,18 770,116,18	\$575,253	\$76,167	\$946,846	\$57,543 \$467,972	\$121,016	\$47,079
	<u> </u>	\$4,477,161 \$24,314,917	\$1,703,760 \$8,675,823	\$472,124 \$2,554,635	\$36,571 \$183,283	\$845,760 \$4,764,626	\$369,149 \$2,091,989	\$47,731 \$277,846	\$603,457 \$3,446,436	\$294,616 \$1,706,087	\$77,666 \$440,088	\$26,327 \$174,104
513 MAINTENANCE OF ELECTRIC PLANT 514 MAINTENANCE OF MISC STEAM PLANT		\$8,610,320 \$1.082.969	\$3,072,254 \$386.415	\$904,639 \$113.782	\$64,904 \$8,163	\$1,687,234 \$212.213	\$740,808 \$93.176	206,392 275,372	\$1,220,441 \$153 502	\$604,154		\$61,653 \$7,754
Sub-total		\$454,425,616	\$162,906,474	\$47,756,449	\$3,445,866	\$88,820,420	\$38,982,340	\$5,168,104	\$64,187,533	\$31,745,195		\$3,212,723
Hydraulic Production O&M 535 OPERATION SUPERVISION & ENGINEERING	62	\$6.242	\$2.375	\$658	351	\$1.179	\$515	\$67	5841	1148	\$108	\$37
536 WATER FOR POWER 537 HVDB ALLIT EVPENSES	2.2	8	20	S0	20	80	80	20	03	8	8	8
		7	7 S	88	28	38	20 XI	20 20	2 S	8 8	2 2	8 9 8
539 MISC. HYDRAULIC POWER EXPENSES 540 RENTS	34 04	\$32,162 \$1	\$12,239 \$0	\$3,392	\$263 \$1	56,076 S0	52, 652 80	\$343 \$0	\$4,335	\$2,116	\$558	\$189
	. 8	\$85,931	\$31,825	\$9,047	\$679	\$16,493	\$7,217	S944	511,839	55,815	31,518	\$552
		\$242,633 \$188,214	\$92,333 \$71,624	\$25,586 \$19,847	\$1,982 \$1,537	\$45,835 \$35,555	\$20,005 \$15,519	\$2,587	\$32,703 \$25,369	\$15,966 \$12.385	\$4,209 \$3.265	\$1,427 \$1.107
544 MAINTENANCE OF ELECTRIC PLANT 545 MAINTENANCE OF MISC HYDRAHLIC PLANT	~ ~	\$74,422	\$26,555 \$1 \$68	\$7,819	\$561	\$14,583 \$261	36,403	\$850	\$10,549 \$673	\$5,222	\$1,347 \$60	\$533 523
	-	\$633,998	\$238,519	\$66,811	\$5,106	\$120,581	\$52,689	\$6,848	\$86,259	\$42,224	\$11,085	\$3,876
Other Power Generation Operation Expense 345 OPERATION STIPEPAVISTON & ENGINEERDARD	Ū	000 C613	550 C33	£17 004	20013		020 013	117 10				1023
	ō -	\$18,512,079	\$6,605,308	\$1,944,963	\$139,542	\$3,627,532	056,014 \$1,592,729	\$11,416 \$211,537	\$17,900	\$8,739 \$1,298,923	\$335,060	\$132,553
548 GENERATION EXPENSE 549 MISC OTHER POWER GENERATION	51	\$227,067 \$99.365	5 86,409 5 37.813	\$10.478 \$10.478	\$1,855 \$812	\$42,894	518,722 58,193	\$2,421 \$1,059	\$30,605 \$13,393	\$14,942 \$6,539	\$3,939	\$1,335 \$584
550 RENTS 551 MAINTENANCE STIDEDVISION & ENGINEEDENIG	. 5. 7	0\$	20	80	8	80 80	80	20	05	20	8	8
	<u> </u>	\$229,542	\$87,351	38,210 \$24,206	9006 \$1,875	\$43,362 \$43,362	30,024 \$18,926	386U \$2,447	778,018 950,939	\$15,105	\$3,982	\$475 \$1,350
553 MAINTENANCE OF GENERATING & ELEC PLANT 554 MAINTENANCE OF MISC OTHER POWER GEN PLT		\$2,155,168 \$405,749	\$820,138 \$154,406	\$227,266 \$42,787	\$17,604 \$3,314	\$407,123 \$76.648	\$177,697 \$33.455	\$22,976 \$4.326	\$290,486 \$54,689	\$141,819 \$26.700	\$37,386	\$12,673 \$7,386
Sub-total		\$21,842,475	\$7,872,672	\$2,296,159	\$166,745	\$4,256,662	\$1,867,326	\$247,043	\$3,072,822	\$1,518,077	\$392,832	\$152,137
Other Power Supply Expense 555 PURCHASED POWER												
Demand Finerer	23	\$22,338,727 6465 704 205	\$8,500,884	\$2,355,657	\$182,470	\$4,219,906	51,841,866	\$238,155	\$3,010,939	\$1,469,982	\$387,512	\$131,357
555 PURCHASED POWER OPTIONS	-		170,601,000	C10	600°011616	001*06**06*	040'000'016	115,411,16	0071101776	\$10,890,214		244,111,16
		<u></u>										
556 SYSTEM CONTROL AND LOAD DISPATCH 557 OTHER EXPENSES	51	\$1,510,099 \$801,178	\$574,660 \$304,884	\$159,243 \$84.486	\$12,335 \$6.544	\$285,266 \$151.347	\$124,510 \$66.058	\$16,099 \$8,541	\$203,540 \$107,987	125,252		\$8,880 \$4,711
Sub-total		\$179,941,369	\$64,790,048	\$18,914,998	\$1,371,919	\$35,086,618	\$15,393,280	\$2,037,307	\$26,333,716	\$12,518,287	\$3,238,305	\$1,256,890
Transmission Expenses 560 OPERATION SUPERVISION AND ENG	51	\$814.001	\$309.764	\$85.838	\$6,640	5153 760	367 116	\$\$ 678	6109 716	553 565	101 113	54 787
561 LOAD DISPATCHING 562 STATION EXPENSES	<u> 3</u> 3	\$1,185,448 \$320,896	\$451,116 \$122,115	\$125,008 \$33,839	\$9,683 \$9,683	\$223,938 \$60,619	\$97,742 \$26,458	\$12,638 \$12,638	\$159,781 \$159,781	\$78,007 \$78,007	\$20,564 \$5,567	\$6,971 \$6,971
	5	\$310,792	\$118,270	\$32,774	\$2,539	\$58,710	\$25,625	\$3,313	\$41,890	\$20,451	\$5,391	\$1,828

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Kentucky UtHitles Electric Cost of Service Study (Expenses)

			(Expenses)	(S								
Acct. No. Account Description	Alfocator	Total	Residential	Gen'l Service	All Elec. Schools	Secondary PS	Primary PS	Sec. TOD TOD	Pri. TOD TOD	Retail Transmission	Fluc. Load	بر ال
565 TRANSMISSION OF ELECTINCITY BY OTHERS	202	\$4,699,657 \$4,699,657	\$1,788,429	\$495,587	\$38,388	\$887,791 5345,770	\$387,495	\$\$0,103 547 050		\$309,257 \$750,611	\$81,525 860 A20	\$27,635 \$72,100
	5	\$97,238 \$97,238	\$37,003	\$10,254	\$794	\$18,369	58,017	\$1,037	\$13,106	56(395	\$1,687	\$572
		8 8										
570 MAINT OF STATION EQUIPMENT 571 MAINT OF OVERHEAD LINES	5 5	\$1.036,205 \$2,882,225	\$394,322 \$1,089,204	\$109,270 \$301,826	\$8,464 \$23,380	\$195,745 \$540,690	\$85,437 \$235,995	\$11,047 \$30,514	S139,666 S385,787	S68,187 S188,346	\$17,975 \$49,651	\$6,093 \$16,831
572 UNDERGROUND LINES	ŭ	50 \$0	¢115 602	AEC (C3	50 505	\$CT 032	696 363	030 23	8C2 193	771 UCS	\$5 210	20 202
	51	\$1,049,893	\$399,531	\$110,713	\$8,576	\$198,330	386,565	\$11,193	\$141,510	S69,087	\$18,213	\$6,174
Sub-total		\$16.628,178	\$6,327,765	\$1,753,470	\$135,825	\$3,141,153	\$1,371,021	\$177,274	\$2,241,239	\$1,094,204	\$288,450	\$97,778
Distribution Expense - Operating	ä						007 010	104 Ju	111	1014	j.	010
580 OPERATION SUPERVISION AND ENGI 581 LOAD DISPATCHING	64 28	\$1,924,475 \$660.868	\$1,162,539 \$333.022	\$376,878	514,036 58.959	\$183,726 \$100.708	\$50,488 \$44.856	\$6,333 \$4,837	577,415 572.269	518 <i>1</i> 50	8 8	54,944
	58	\$1,096,591	\$552,590	\$151,451	\$14,866	S167,107	S74,431	\$8,026	16,0112	\$0	S 0	\$8,204
583 OVERHEAD LINE EXPENSES	93 i	\$2,835,179	\$1,744,301	\$404,075	S31,360	\$317,705	\$108,324	\$15,012	\$173,883	80	20	\$40,519 5703
	8 1	0\$ 05	500,4464 02	20'/40 20	202 20	758'/4 20	50 4 ,54	20/54 20/54	804°CC 20	SO	202	05
	26	\$6,008,989	\$3,858,065	\$1,697,636	\$12,264	5414,981	\$20,100	\$1,406	\$3,095	S1,400	245	8
386 METER EXPENSES - LUAD MANAGEMENT 587 CUSTOMER INSTALLATIONS EXPENSE	7	50 (465 580)	50 20	08 07	89	03 J	8 J	8 J	0, 0	89	9 J	08 08
	- 83	(400,009) \$3,892,874	\$2,320,763	3546,065	3-0 766'5 53	3350,954	5107,394	\$15,749	SI71,615	S47	5	\$346,289
	:	8	3	80	8	\$0	20	80	20	20	80	\$0
589 RENTS 500 MATNTENANCE SLIPERVISION AND EN	53 8	\$13,465 \$38,544	58,027 573 277	\$1,889 \$5 471	\$118 5431	\$1,214 54 411	5371	\$54 \$700	\$594 \$7 497	20 20	20	\$1,198 \$576
	38	B	50°	05	3	202	20010	\$0	05	\$0 \$	8) S	205
	82 1	\$685,204	\$335,207	\$91,872	\$9,018	\$101,369	\$45,151	\$4,869	\$72,743	\$0 80	20	\$4,977
593 MAINTENANCE OF OVERHEAD LINES 504 MAINTENANCE OF IMDERGROUMD I IN	88	\$18,303,308 \$614,677	\$11,260,831 \$344 685	\$2,608,623 \$86,477	\$502,457 \$6 833	\$2,051,035 \$77 \$89	\$33.671	\$96,914 \$3,657	\$1,122,548 \$54.035	20 20	8 8	\$261,581 \$7 834
	82	(\$280,262)	(\$219,287)	(\$42,975)	(\$2,400)	(\$18,287)	0-5	(5828)	0-5	2 .	9	(\$6,484)
	15	\$23,113	8	20	8	20	20	S0	20	<u>50</u>	20	823,113 20
597 MAIN LENANCE UF METERS 598 MISCELLANEOUS DISTRIBUTION EXPENSES	8 1	50 (1577.831)		(PU6 ES)	50 (5743)	1605 CSJ	0S (89L3)	(2113)	05 227	() S)	20 20 20	\$U (\$2.476)
	8	\$35,765,796	\$21,742,406	\$6,023,521	\$332,386	\$3,757,853	\$1,188,243	\$156,490	\$1,874,846	\$1,628	848	\$688,374
Customer Accounts Expense 901 SUPERVISION/CUSTOMER ACCTS	ŝ	\$2.015.177	\$1,408,476	\$293.414	59.934	\$278.213	\$14.379	\$3.704	\$3.839	\$2.020	2883	\$862
	9	\$3,772,608	\$2,636,804	\$549,299	\$18,597	\$520,842	\$26,918	\$6,934	\$7,187	\$3,782	S630	\$1,614
903 RECORDS AND COLLECTION	9	\$14,047,412	\$9,818,212	\$2,045,330	\$69,246	11,939,371	162,0012	\$25,821	\$26,760	\$14,084	\$2,347	\$6,009
905 MISC CUST ACCOUNTS	0 0	\$360,967	\$1,124,027 \$252,292	\$52,557	\$1.779 \$1.779	\$49.835	574,116	2663 2663	5688 \$688	\$362 \$362	095 807	\$154
		\$21,804,366	\$15,239,810	\$3,174,757	\$107,484	\$3,010,288	\$155,579	\$40,079	\$41,536	\$21,861	\$3,844	\$9,327
Customer Service & Information Expanse	œ	\$102 AFO	6134 510	100 80\$	0703	075 763	\$1 173	7 513	6367	\$103	(15)	682
)	\$7,989,989	\$5,584,474	\$1,163,358	\$39,387	\$1,103,090	\$57,010	\$14,686	\$15,221	58,011	\$1,335	\$3,418
908 CUSTOMER ASSISTANCE EXP-INCENTIVES	6	Q 4	0S	0\$	205	\$0 80	30	50	08	\$0	\$0 80	50
	o	1 ca'nor	Cor'nos	05	5 B	50%'11%	0100 20	6C1¢	03 03	20	\$0 \$0	20
	9	\$3,263,787	\$2,281,	\$475,214	\$16,089	\$450,595	\$23,288	\$5,999	\$6,217	\$3,272	\$545	\$1,396
911 DEMONSIKATION AND SELLING EXP 913 DEMONSTRATION AND SET FING EXP	æ	\$0 57 E33		50	8 j	0S	20 20	20	03 j	20	2	85
	999	\$61,726	\$43,142	58,987	toes	58,522	S440	5113	\$118	\$62	510 S10	\$26
915 MDSE-JOBBING-CONTRACT 916 MISC SALES EXPENSE		S 3										
Sub-total		\$11,602,136	\$8,109,126	\$1,689,283	\$57,193	\$1,601,779	\$82,784	\$21,326	\$22,102	\$11,632	\$1,939	\$4,863
General Expenses 920 ADMIN, & GEN. SALARIES-	68	\$16,108,237	\$7,886,446	\$2,103,744	\$121,945	\$2,568,202	\$913,374	\$121,929	\$1,460,051	\$619,299	\$161,447	\$151,800

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Kentucky Utilities Electric Cost of Service Study (Expenses)

Acc. Mo. Account Description Allocator Total Residential Service Schools PS 221 OFFICE SUPPLIES AND EXPENSES 66 \$5,126,852 \$2,5110,050 \$669,567 \$38,812 \$811,392 222 ADMINISTRATIVE EXPENSES 66 \$5,126,852 \$2,5110,050 \$669,567 \$38,812 \$811,332,883 223 OUTENCE SUPPLIES AND EXPENSES 66 \$7,140,177 \$3,435,765 \$3,43,506 \$3,932,511 \$3,133,883 \$3,932,511 \$3,133,883 \$3,932,511 \$3,13,383 \$3,932,511 \$3,13,383 \$3,932,511 \$3,13,383 \$3,932,511 \$3,13,383 \$3,932,511 \$3,13,383 \$3,532,526 <td< th=""><th>PS PS</th><th></th><th></th><th>Recall</th><th>5PIL</th><th>5</th></td<>	PS PS			Recall	5PIL	5
FFICE SUPPLIES AND EXPENSES 66 \$5,126,832 \$2,510,050 \$669,567 \$38,812 DMINISTRATIVE EXPENSES 06 \$5,126,832 \$2,510,050 \$669,567 \$38,812 UTSDE SERVICES 07 \$7,40,177 \$3,495,765 \$39,2511 \$54,450 UTSDE SERVICES 23 \$2,714,177 \$3,495,765 \$39,2511 \$54,659 UTSDE SERVICES 23 \$2,774,473 \$3,95,765 \$39,2511 \$54,659 UURLES AND DAMAGES - INSURANCE 23 \$2,774,473 \$31,206,083 \$31,023,184 \$34,324 WILLOXTE BEREATIS 23 \$53,096 \$71,33,288 \$34,324 \$251,760 BEGLI ATORY COMMISION PEES 66 \$33,056 \$17,01,003 \$739,132 \$14,187 UPLICARE LANGES 66 \$2,396,793 \$11,73,448 \$313,022 \$18,145 BENT AND LAAGES 59 \$1,701,003 \$779,132 \$14,187 BURIAL ENDERSES 59 \$1,701,003 \$779,132 \$14,187 BURIAGENERSES 59 \$1,701,003		90	91	Transmission	Load	Гł
DMINISTRATIVE EXPENSES TRANSFERRED 66 (\$1,896,500) (\$928,705) (\$247,736) (\$14,360) UTSIDE SERVICED 65 \$7,140,177 \$3,92,511 \$34,66) UTSIDE SERVICED 65 \$7,140,177 \$3,92,511 \$34,56) UTSIDE SERVICED 65 \$7,140,177 \$3,435,765 \$32,511 \$34,56,69 UTSIDE SERVICED 66 \$7,140,177 \$3,435,765 \$31,680 \$33,166 UTRIES AND DAMAGES - INSURAN 66 \$1,466,895 \$713,282 \$190,271 \$11,039 MEDOYEE BIREETIS 233,266,099 \$53,266,099 \$516,699 \$714,372 \$54,85 MEDIOYEE BIREETIS 233,766,099 \$516,691 \$71,31,328 \$251,760 \$54,85 GEOLATORY COMMISION PEES 25 \$53,076 \$51,791,323 \$14,187 UPLICATE CHAIGES 56 \$2,396,793 \$11,173,448 \$313,022 \$18,145 ENTS AND LEAGES 51,701,003 \$779,132 \$14,187 \$14,187 ENTS AND LEAGES 51,701,003 \$779,132 \$14,187 </td <td></td> <td></td> <td>\$464,696</td> <td>\$197,107</td> <td>\$51,384</td> <td>\$48,314</td>			\$464,696	\$197,107	\$51,384	\$48,314
UTSIDE SERVICES EMPLOYED 66 57,140,177 53,495,765 5932,511 554,054 5 ROPERTY INSUITANCE 23 52,774,462 51,205,083 5316,840 523,056 731,056 731,056 731,056 731,056 731,056 731,056 731,056 731,056 731,056 731,056 733,	_		(\$171,935)	(\$72,928)	(\$19,012)	(\$17,876
ROPERTY INSURANCE 23 \$2,774,423 \$1,206,083 \$316,840 \$23,056 UURLES AND DAMAGES - INSURAN 66 \$1,466 \$1,206,083 \$316,840 \$23,056 MULOYEE BENERTIS 66 \$1,466 \$1,4323 \$10,271 \$11,029 MULOYEE BENERTIS 66 \$1,466 \$13,282 \$190,271 \$11,029 MULOYEE BENERTIS 66 \$53,266,095 \$15,313,482 \$443,224 \$251,760 \$5485 MULUCATE CHARGES 23 \$66,999 \$53,676 \$14,4324 \$51,700 \$5485 UPLICATE CHARGES 66 \$53,076 \$1,566 \$402 \$52,3165 UPLICATE CHARGES 56 \$53,076 \$11,348 \$313,022 \$18,145 ENTS AND LEASES 56 \$53,076 \$11,348 \$313,022 \$18,145 ENTS AND LEASES 59 \$1,701,003 \$779,132 \$18,145 ENTS AND LEASES 59 \$1,701,003 \$779,132 \$18,145 ENTS AND LEASES 59 \$1,701,003 \$19,17			\$647,186	\$274,512	\$71,563	S67,287
UURIES AND DAMAGES - INSURAN 66 \$1,456,885 \$713,282 \$190,271 \$11,029 MPLOYIE BIMENTIS 65 \$33,266,885 \$773,282 \$190,271 \$11,029 MPLOYIE BIMENTIS 55,586 \$53,266,029 \$16,281,448 \$351,770 \$55,485 \$17,577 \$5,485 \$10,711 CATE CHARGES 66 \$33,076 \$1,500 \$1,73,448 \$313,022 \$18,145 \$10,711 CATE CHARGES 59 \$1,710,033 \$779,132 \$197,433 \$14,187 \$14,187 \$15,770 \$59 \$17,710 \$50 \$17,710 \$17,348 \$313,022 \$18,145 \$14,187 \$15,771 \$10,711 CATE CHARGES 50,710 \$1,73,448 \$313,022 \$18,145 \$14,187 \$15,771 \$10,711 CATE CHARGES \$17,710 \$17,348 \$313,022 \$18,145 \$14,187 \$15,771 \$1			\$310,729	\$136,708	336,037	\$74,221
MPLOYEE BENEFTIS 66 \$33,266,029 \$16,231,848 \$4,343,234 \$251,760 \$ EGULATORY COMMISSION FEES 23 \$669,999 \$718,912 \$5,485 \$			\$132,053	\$56,012	\$14,602	\$13,729
Edulatory Commission Fres 23 \$659,999 \$236,912 \$75,372 \$5,485 UPLICATE CHARGES 66 (\$3,076) (\$1,506) (\$402) (\$23) INCLICATE CHARGES 66 \$2,396,793 \$1,173,448 \$313,022 \$18,145 INTELLANEOUS GENERAL EXPENSES 66 \$2,396,793 \$11,173,448 \$313,022 \$18,145 INTELANEUS GENERAL EXPENSES 59 \$1,010,303 \$779,132 \$14,187 AND IEASES 59 \$1,010,303 \$779,132 \$14,187 ANDTENANCE OF GENERAL PLANT 50 \$8,336,244 \$317,703,099 \$9667,578 \$569,529 \$14,87 ANTENANCE OF GENERAL PLANT 50 \$8,336,244 \$317,703,099 \$9667,454 \$599,529 \$14,87	\$5,302,145 \$1,885,693	\$251,727	\$3,014,327	\$1,278,565	S333,313	\$313,397
UPLICATE CHARGES 66 (\$3,076) (\$1,506) (\$402) (\$23) 155 155 155 155 155 155 155 155 155 15			\$73,918	\$32,521	\$8,573	\$17,656
IISCELLANEOUS GENERAL EXPENSES 66 \$2,396,793 \$1,173,448 \$313,022 \$18,145 ENTS AND LEAREN 59 51,701,003 \$779,132 \$19,7433 \$14,187 ALMTENANCE OF GENERAL PLANT 59 \$8,336,244 \$3,720,342 \$667,578 \$69,529 \$ AMTENANCE OF GENERAL PLANT 59 \$8,336,244 \$37,703,099 \$9,861,454 \$593,617 \$\$	_		(\$279)	(\$118)	(163)	(\$23
59 \$1,701,003 \$759,132 \$197,433 \$14,187 \$0 \$0 \$59,539 \$14,187 \$77,036,656 \$37,103,099 \$9,861,454 \$593,617 \$			\$217,245	\$92,147	\$24,022	\$22,587
\$0 59 \$8,336,244 \$1,720,342 \$967,578 \$69,529 \$ \$77,056,656 \$37,103,099 \$9,861,454 \$593,617 \$			\$182,230	\$77,811	\$20,511	\$53,088
59 \$8,336,244 \$3,720,342 \$66,528 \$66,529 \$77,036,655 \$37,103,099 \$9,861,454 \$533,617 \$						
\$77,056,656 \$37,103,099 \$9,861,454 \$593,617 \$	S1,323,758 \$547,887	r \$72,059	\$893,067	\$381,333	\$100,519	\$260,173
	\$12,295,056 \$4,500,930	\$598,966	\$7,223,289	\$3,072,970	\$802,927	\$1,004.347
TOTAL O & M EXPENSES 58.215,941 \$152,00	\$152,090,411 \$63,594,192	\$8,453,436	\$104,083,342	\$50,026,079	\$12,939,943	\$6,430,415
TOTAL 08M EXPENSE Less PURCHASED POWER 5642,070,498 \$260,419,415 \$72,865,643 \$4,862,902 \$117,44	\$117,440,405 \$48,391,480	\$6,440,770	\$79,061,152	\$37,659,883	\$9,741,731	\$5,187,116

Pawer Production - Energy	* -	\$61.735,750	\$22,027,976	36,486,237	\$465,357	\$12,097,421	\$5,311,576	\$705,453	\$8,750,525	\$4,331,766	\$1,117,388	\$442,050	
Power Production - Demand	ĸ	\$13,439,781	\$6,579,672	\$ 1,441,151	\$148,702	\$2,103,643	S886,773	S95,998	\$1,382,055	\$615,099	\$186,688	20	
Transmission Energy	-	\$7,919,524	\$2,825,771	\$832,061	\$59,696	S1,551,869	5681,374	\$90,496	\$1,122,526	\$555,683	\$143,340	\$56,707	
Transmission Demand	32	\$1,724,068	\$844,047	5184,872	\$19,076	\$269,857	\$113,756	\$12,315	\$177,291	\$78,906	\$23,949	S 0	
Dist. Poles - Specific	28	\$0	\$0	50	50	30	\$0	\$0	50	S 0	05	S 0	
Dist Substation - General	28	\$3,416,046	\$1,721,402	\$471,793	\$46,308	\$520,563	\$231,863	S25,002	\$373,558	2 0	\$0	\$25,557	
Dist. Primary Lines	83	\$13,633,326	\$7,836,416	\$1,925,486	\$141,882	\$1,625,866	\$703,839	\$75,923	\$1,130,179	S 0	30	\$193,735	
Dist. Secondary Lines	84	\$3,279,881	\$2,378,808	\$478,293	\$45,393	S318,921	\$0	\$15,889	\$0	S 0	\$0	\$42,577	
Dist. Line Transformers - Demand	85	\$7,210,843	\$5,447,657	\$1,067,608	\$59,621	\$454,305	50	\$20,563	50	\$0	\$0	\$161,090	
Dist. Services - Customer	27	\$2,219,242	\$1,834,088	\$347,682	\$1,274	\$35,905	2 0	\$293	\$0	0 5	\$0	\$0	
Dist. Meters - Customer	26	\$1,758,407	\$1,128,983	\$496,778	\$3,589	S121,436	\$5,882	S411	2 906	\$410	\$12	\$ 0	
Dist Street & Customer Lighting	7	\$2,613,142	\$0	20	20	\$ 0	20	S 0	S 0	S 0	S 0	\$2,613,142	
TOTAL DEPRECIATION EXPENSES		\$118,950,010	\$52,624,819	\$13,731,961	\$930,898	\$19,099,786	\$7,935,064	\$1,042,343	\$12,937,041	\$5,581,864	\$1,471,377	\$3,634,858	
Other Expenses													
Regulatory Credits and Accretion Expense													
Production	51	(\$258,682)	(\$98,440)	(\$27,278)	(\$2,113)	(\$48,866)	(\$21,329)	(\$2,758)	(\$34,867)	(\$17,022)	(\$4,487)	(\$1,521)	
Transmission	52	(204)	(953)	(013)	(13)	(\$18)	(\$\$)	(13)	(EIS)	(20)	(2 5)	(21)	
Distribution	ន	(\$182)	(6013)	(\$26)	(22)	(\$10)	(\$\$)	(13)	(\$8)	(05)	(0\$)	(816)	
Property Texes & Other	ន	\$11,424,756	\$4,966,513	\$1,304,709	S94,942	\$1,874,743	\$784,510	\$102,811	\$1,279,548	\$562,950	\$148,395	\$305,634	
Other Taxes	ស្ត	\$6,127,668	\$3,533,220	\$928,181	S67,543	\$1,333,708	\$558,107	\$73,141	\$910,281	\$400,487	\$105,569	\$217,430	
Gain on Disposition of Allowances	+	(\$73,173)	(\$26,109)	(\$7,688)	(\$552)	(\$14,339)	(\$6,296)	(\$836)	(\$10,372)	(\$5,134)	(\$1,324)	(\$524)	
Interest	82	\$65,253,543	\$28,366,698	\$7,451,967	\$542,271	\$10,707,766	\$4,480,803	5587,217	\$7,308,256	\$3,215,339	\$847,571	\$1,745,654	
Other Frances					•			•					

Other Expenses Total Other Expenses TOTAL EXPENSES

Calculation of Taxable income and Allocation of Income Taxes:

Total Operating Revenue Operating Expenses Interest Expense

\$73,116,058 \$14,701,332 \$20,580,256 \$14,659,470 \$10,486,275 \$847,571 \$1,745,654 \$56,549,217 \$3,215,339 \$143,324,088 \$119,164,952 \$7,308,256 \$229,562,110 \$95,654,199 \$11,626,139 \$72,844,236 \$9,668,136 \$4,480,803 \$587,217 \$174,335,408 \$10,707,766 \$467,627,707 \$156,768,038 \$8,700,686 \$7,366,657 \$542,271 \$285,329,779 \$107,466,762 \$28,366,698 \$7,451,967 \$1,221,660,614 \$957,870,893 \$65,253,543 (\$805,708) \$8,348,326

\$16,850,879 \$13,351,502

\$44,518,937 \$18,329,160 \$1,370,787

\$791,758

\$53,931,231 \$41,849,308

\$198,536,178

\$4,156,613 \$1,095,722 \$2,266,657

\$9,452,827

\$759,573

\$702,089 \$13,852,977 \$5,795,784

\$36,741,738 \$9,649,856

\$0 \$84,473,836

\$1,023,124,436

\$413,696,477 \$114,918,729 \$7,908,829 \$165,043,173 \$77,325,039 \$10,255,353 \$128,473,209 \$59,764,556 \$15,507,041 \$12,231,930

Taxable Income

Schedule G	Page 9 of 17

Kentucky Utilities Electric Cost of Service Study (Expenses)

				(cateriates)	6								
					Gen'l	All Elec.	All Elec. Secondary Primary Sec. TOD Pri. TOD	Primary	Sec. TOD	Pri. TOD	Retail	Fluc.	St.
Acct. No.	Account Description	Allocator	Total	Total Residential	Service S	e Schools	PS	8	100	100	TOD Transmission	Load	L ta
Income Toward													
SAXE I SUCCUS													
State & Federal	State & Federal Income Taxes		\$72,669,576	\$72,669,576 \$16,740,280 \$15,317,971 \$289,805 \$16,295,127 \$6,708,365 \$501,745 \$6,167,874 \$4,887,008 (\$294,911) \$3,055,712	\$15,317,971	\$289,805	\$16,295,127	\$6,708,965	\$501,745	\$6,167,874	\$4,887,008	(\$294,911)	\$3,055,712

(\$294

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			Ĭ	Kentucky Utilities Kentucky Utilities Electric Cost of Service Study (Labor)	littes Vice Study						Sch Pag	Schedule Page 10 of	4- ⁷
Acct No.	Account Description	Allocator	Total	Residential	Gen'l Service	All Elec. Schools	Secondary PS	Primary	Sec. TOD Pri. TOD		Retail	Fluc.	St.
	Labor O & M Expenses							2	3		I Fansmission	Load	Ltg
Labor Expenses													
Steam Power Generation Operation Expenses 500 OPERATION SUPERVISION & I 501 FUEL 502 STEAM EXPENSES 503 ELECTRIC EXPENSES 506 MISC. STEAM POWER EXPENS 507 RENTS	Generation Operation Expenses OPERATION SUPERVISION & ENGINEERING TUEL STEAM EXPENSES ELECTRIC EXPENSES MISC. STEAM POWER EXPENSES RENTS	60 51 51 51	\$2,907,951 \$2,538,739 \$6,792,159 \$4,157,062 \$823,166 \$823,166	51,094,362 \$905,849 \$25,584,720 \$1,581,948 \$313,251 \$0	5306,449 \$266,731 \$716,245 \$438,369 \$86,804 \$04	\$23,428 \$19,137 \$55,481 \$33,481 \$33,956 \$33,724	\$552,964 \$497,478 \$1,283,075 \$785,291 \$155,501	\$241,615 \$218,426 \$560,025 \$342,757 \$671 \$671	\$31,397 \$29,010 \$72,412 \$44,319 \$8,776 \$8,776	\$395,538 \$359,845 \$915,485 \$560,312 \$110,951	\$193,606 \$178,134 \$446,953 \$273,552 \$54,168	\$50,833 \$45,950 \$117,824 \$12,113 \$14,280	\$17,760 \$18,178 \$39,940 \$24,445 \$4,840
Tota! Steam Powe	Total Steam Power Operation Expanses		5 17,219,077	\$6,480,130	\$1,814,598	\$138,726	\$3,274,310	su \$1,430,694	su 5185,913	\$2.342.132	\$0 \$1.146.412	5300 990	500 5105 163
Steam Power Generation Maintenauce Expenses 510 MAINTENANCE SUPERVISION & EI 511 MAINTENANCE OF STRUCTURES 512 MAINTENANCE OF BOILER FLANT 513 MAINTENANCE OF ELECTRLO PLAN 514 MAINTENANCE OF MISC STEAM PI	wer Generation Maintenauce Expenses 510 MAINTENANCE SUPERVISION & ENGINEERLING 511 MAINTENANCE OF STRUCTURES 512 MAINTENANCE OF BOILER PLANT 513 MAINTENANCE OF ELECTRIC PLANT 514 MAINTENANCE OF MISC STEAM PLANT	61 1 1 1 1	\$4,502,139 \$1,007,636 \$5,484,321 \$1,701,680 \$157,379	\$1,619,304 \$383,451 \$1,956,864 \$607,178 \$56,155	\$473,225 \$106,257 \$576,208 \$178,786 \$16,535	\$34,279 \$8,231 \$41,340 \$12,827 \$1,186	\$878,387 \$190,348 \$1,074,679 \$333,452 \$30,839	5385,404 5385,404 583,081 583,081 583,081 513,540 513,540	\$51,030 \$10,742 \$669 \$19,445 \$1,798	\$634,362 \$634,362 \$135,815 \$777,357 \$241,199 \$222,307	\$313,529 \$313,529 \$66,307 \$384,814 \$119,401 \$11,043	\$299,206 \$31,078 \$17,480 \$99,264 \$30,800 \$2,848	\$31,542 \$31,542 \$5,925 \$39,270 \$12,185 \$1,127
Total Steam Power	Total Steam Power Generation Maintenance Expense		\$12,853,155	\$4,622,951	\$1,351,011	\$97,863	\$2,507,706	\$1,100,290		\$1,811,039		\$231.469	\$90.048
Total Steam Power	Total Steam Power Generation Expense		\$30,072,232	\$11,103,082	\$3,165,609	\$236,589	\$5,782,015	\$2,530,984	\$331,598			\$532.468	116 2012
Hydraulic Power Generation Operation Expenses 353 OPERATION SUPERVISION & ENG 536 WATER FOR POWER 537 HYDRAULIC EXPENSES 538 HLECTRIC EXPENSES 539 MISC. HYDRAULIC POWER EXPEN 540 RENTS	ic Power Generation Operation Expenses 333 OPERATION SUPERVISION & ENGINEERING 336 WATER FOR POWER 337 HYDRAULLC EXPENSES 338 ELECTRC EXPENSES 338 ELECTRC EXPENSES 339 MISC. HYDRAULLC POWER EXPENSES 540 RENTS	22 22 22 22 22 22 22 22 22 22 22 22 22	\$6,180 \$0 \$0 \$0 \$3,139 \$3,139	\$2,352 \$0 \$0 \$1,195 \$1,195	\$652 \$0 \$333 \$0 \$333 \$0 \$333	50 52 52 50 50 50 50 50 50 50 50 50 50 50 50 50	05 50 50 50 50 50 50 50 50 50 50 50 50 5	\$510 \$0 \$0 \$259 \$259				\$107 \$107 \$50 \$54 \$54 \$54	962 950 958 958 958 958 958 958 958 958 959 959
Total Hydraulic Po	Total Hydraulic Power Operation Expenses		615,62	\$3,546	\$983	\$ 76	\$1,760	\$768	665	95013	06	3U C1£1	N
Hydraulic Power Generation Maintenance Expenses 541 MAINTENANCE SUPERVISION & EN 542 MAINTENANCE OF STRUCTURES 543 MAINTENANCE OF ELECTRIC PLAN 544 MAINTENANCE OF ELECTRIC PLAN 545 MAINTENANCE OF MISC HYDRAULI	Ic Fower Generation Maintenance Expenses 541 MAINTENANCE SUPERVISION & ENGINEERING 542 MAINTENANCE OF STRUCTURES 543 MAINT. OF RESERVES, DAMS, AND WATERWAYS 544 MAINTENANCE OF ELECTRIC PLANT 545 MAINTENANCE OF MISC HYDRAULIC PLANT	1 - 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	\$81,366 \$73,669 \$53,089 \$2,287	\$30,135 \$28,034 \$0 \$18,943 \$816	\$8,567 \$7,769 \$5,578 \$5,40	\$643 \$602 \$0 \$400 \$17	\$15,617 \$13,916 \$10,403 \$448	\$6,834 \$6,074 \$0,568 \$4,568 \$197	\$894 \$785 \$0 \$2607 \$26	\$11,210 \$9,930 \$0,525 \$7,525 \$324	\$5,507 \$5,507 \$4,848 \$0 \$3,725 \$160	\$1,438 \$1,278 \$0 \$961 \$41	\$523 \$433 \$380 \$380
Total Hydraulic Po	Total Hydraulic Power Generation Maint, Expense		\$ 210,411	\$77,928	\$22,153	\$1,662	\$40,384	\$17,672	\$2.312	\$28.988	\$14.240	817 53	61 3 C2
Total Hydraulic Po	Total Hydraulic Power Generation Expense		\$219,730	\$81,474	\$ 23,136	\$1,738	\$42,145	\$18,441	\$2,412	\$30,245	\$14,853	53.880	500°,10
Other Power Generation Operation Expense 546 OPERATION SUPERVISION & 547 FUEL 548 GEVERATION EXPENSE 549 MESC OTHER POWER GENER, 550 RENTS	Generation Operation Expense OPERATION SUPERVISION & ENGINEERING FUEL GENERATION EXPENSE MISC OTHER POWER GENERATION RENTS	51 51 51 51	\$125,103 \$0 \$164,974 \$26 \$26	\$47,607 \$0 \$62,780 \$10 \$10	\$13,192 \$0 \$17,397 \$3 \$0	\$1,022 \$0 \$1,348 \$1	\$23,633 \$20 \$31,164 \$5	\$10,315 \$0 \$13,602 \$2 \$0 \$0	\$1,334 \$0 \$1,759 \$0 \$0	\$16,862 \$0 \$22,236 \$4 \$0	\$8,232 \$0 \$10,856 \$2	\$2,170 \$0 \$2,862 \$0	\$736 \$0 \$0 \$0
Total Other Power (Total Office Power Generation Expenses		\$290,103	\$110,397	\$30,592	\$2,370	\$54,802	\$23.919	\$3,093	\$39,102	10 000	55 020	201 IS
Other Power Generation Maintenance Expense 551 MAINTENANCE SUPERVISION &	wer Generation Maintenauce Expeuse 551 MAINTENANCE SUPER VISION & ENGINEERING	51	\$69,040	\$26,273	\$7,280	\$564	\$13,042	\$5,692	\$736	\$9,306	\$4,543	\$1,198	\$406

		Ĩ	Kentucky Utilities Electric Cost of Service Study (Labor)	lities vice Study						Pa	Schedule Page 11 of	V-4 17
Acct. No. Account Description	Allocator	Total	Residential	Gen'l Service	All Elec. Schools	Secondary PS	Primary PS	Sec. TOD TOD	Pri. TOD TOD TI	Retail Transmission	Fluc. Load	St.
552 MAINTENANCE OF STRUCTURES 553 MAINTENANCE OF GENERATING & ELEC PLANT 554 MAINTENANCE OF MISC OTHER POWER GEN PLT	51 51	\$92,309 \$394,806 \$100,119	\$35,128 \$150,241 \$38,100	\$9,734 \$41,633 \$10,558	\$754 \$3,225 \$818	\$17,438 \$74,581 \$18,913	\$7,611 \$32,552 \$8,255	\$984 \$4,209 \$1,067	\$12,442 \$53,214 \$13,495	\$6,074 \$25,980 \$6.588	\$1,601 \$6,849 \$1,737	\$543 \$2,322 \$580
Total Other Power Generation Maintenance Expense		\$656,274	\$249,742	\$69,205	\$5,361	\$123,974	\$54,111		\$ 88,456	\$43,186	S11.384	\$3.859
Total Other Power Generation Expense		S946,377	\$360,139	\$99,797	\$7,730	\$178,776	\$78,030	64	\$127,558	\$62,276	\$16,417	\$5.565
Total Production Expense		\$31,238,339	\$11,544,694	\$3,288,542	\$246,057	\$6,002,936	\$2,627,455	\$344,099		\$2,118,633	\$552,765	\$202,183
Purchased Power 555 PURCHASED POWER 556 SYSTEM CONTROL AND LOAD DISPATCH 557 OTHER EXPENSES	51 51	\$0 \$1,364,100 \$0	\$519,101 \$0	\$143,847 \$0	\$11,142 \$0	\$257,686 \$0	\$112,472 \$0	\$14,543 \$0	\$183,861 \$0	\$89,764 \$0	\$23,663 \$0	\$8,021 \$0
Total Furchased Power Labor		\$1,364,100	\$519,101	\$143,847	\$11,142	\$257,686	\$112,472	\$14,543	\$183,861	\$89,764	\$23,663	\$8,021
Trausmission Labor Expenses 560 OFERATION SUPERVISION AND ENG 561 LOAD DISTATIONG	51 51	\$754,996 \$1,149,852	\$287,310 \$437,570	\$79,616 \$121,254	\$6,167 \$9.392	\$142,623 \$217.213	\$62,251 \$62,251	\$8,049 \$10.250	\$101,763	\$49,682	\$13,097	\$4,440
566 MISC TRANSMISSION EXPENSES 566 MISC TRANSMISSION EXPENSES	51	\$189,552 \$50,152	\$72,133 \$19,085	\$19,989 \$5,289	\$1, 548 \$410	\$35,807 \$9,474	\$15,629 \$4,135	\$2,021 \$535	\$25,549 \$6.760	\$12,473 \$12,473 \$3,300	\$3,288 \$3,288	50,701 \$1,115 \$295
	51 51	\$227,539 \$0	\$86,589 \$0	\$23,994 \$0	\$1,859 \$0	\$42,983	\$18,761	\$2,426	\$30,669	\$14,973	\$3,947	\$1,338
570 MAINT OF STATION EQUIPMENT 571 MAINT OF OVERHEAD LINES	51 51	\$493,314 \$113.056	\$187,728 \$43.023	\$52,021 \$11 922	54,030 54,030	061,692 091,190	340,675 540,675	\$0 \$5,259	\$06,492	\$0 \$32,462	\$0 \$8,558	\$0 \$2,901
572 UNDERGROUND LINES 573 MISC FLANT	51 51	\$35,126	513,367	\$3,704	\$0 \$287	\$6.635 \$6.635	908 CS	05 05	\$52,CIC \$0 \$0	\$7,440 \$0 \$11	51,961 02	\$665 \$0
Total Transmission Labor Expenses		\$3,013,587	SI,146,804	\$317,788	\$24,616	\$569,283	\$248,475	\$32,128	\$406.188	116,20	52 277	1076
Distribution Operation Labor Expense												
580 OPERATION SUPERVISION AND ENGI 581 LOAD DISPATCHING 589 STATIONI EVENANCIO	64 28	\$1,536,179 \$675,400	\$927,976 \$340,345	\$300,836 \$93,280	\$11,204 \$9,156	\$146,656 \$102,923	\$40,301 \$45.843	\$5,055 \$4,943	\$61,795 \$73,858	\$144 \$0	\$4 \$0	\$42,206
	28 55	\$579,618 \$1.682.083	\$292,079 \$1,034 876	\$80,051	\$7,857	\$88,327 5188,401	\$39,341	\$4,242	\$63,384	30	20	\$4,336
584 UNDERGROUND LINE EXPENSES 585 STREET LIGHTING EXPENSE	58	\$56,801	\$31,852	\$7,986	3631	\$7,170	\$3,107 \$3,107	\$337 \$337	\$103,163 \$4,993	80 80	\$0 \$0	\$24,039 \$724
	26	30,327,327	\$0 \$2,161,989	\$0 \$951.324	50 26.873	5037 548	20 S	\$0 5700	205	200	\$0	30
	ſ	\$0 8666	20	\$0	3 0	80	20	\$0 \$0	\$0,134	\$0 \$0	\$24 \$0	8 8
588 MISCELLANEOUS DISTRIBUTION EXP 589 RENTS	33	\$2,276,745 \$0	\$1,357,297	\$319,366	\$19,883	\$0 \$205,255	\$0 \$62,810	\$0 \$9,211	\$00,369	\$0 \$27	\$0 \$1	\$666 \$202,527
Total Distribution Operation Labor Expense		\$10,174,819	\$6,146,414	\$1,992,577	\$74,210	\$971,369	\$266.933	\$33.484	\$409.295	8056	670	6270 667
	65	\$31,589	\$19.169	\$4.487	1363	¢3 610	ELC 13	i i				20146136
591 MAINTENANCE OF STRUCTURES 502 MAINTENANCE OF STATION FORMATION	28	\$0	\$0	2 0	20	810're	5/2418 \$0	1/10	\$0,044	(20) 20	80) 8	\$473 \$0
	28	\$349,276 \$5 056 600	\$176,006	\$48,239 *770,477	\$4,735 555,935	\$53,225	\$23,707	\$2,556	\$38,195	2 0	2 2	\$2,613
594 MAINTENANCE OF UNDERGROUND LIN 595 MAINTENANCE OF LINE TRANSFORME	585	\$232,809	\$130,551	\$32,732	\$22,588 \$2,588	\$206,633 \$29,387	\$193,199 \$12,734	\$26,774 \$1,383	\$310,123 \$20,466	\$0 \$0	\$0 80	\$72,266 \$2,967
	5 IS	\$369	541,111 \$0	\$8,057 \$0	\$450 \$0	\$3,428 \$0	2 0 2 0	\$155 \$0	20 20	\$0 \$	\$0 80	\$1,216 \$360
	53	\$0 \$7,869	50 \$4,691	\$ 0 \$1,104	\$0 \$69	50 5709	\$0 \$217	\$ 32	\$0 \$347	8 8	3 03 03	20 20 20
										;	;	~~~~

		ä	Kentucky Lititites Electric Cost of Service Study (Labor)	lities vice Study						Pag	Page 12 of	
Acct. No. Account Description A	Allocator	Total	Residential	Gen'l Service	Ali Elec. Schools	Secondary PS	Primary PS	Sec. TOD TOD	Pri. TOD TOD T	Retall Transmission	Fluc. Load	rg La
Total Distribution Maintenance Labor Expense		\$5,732,929	\$3,482,52 4	\$815,296	\$64,127	\$657,002	\$231.130	531.072	5371 175	5	ç	
Total Distribution Operation and Maintenance Labor Expenses		\$15,907,748	\$9,628,938	\$2,807,873	\$138,337	\$1,628,370	\$498,063	\$64.555	S780.470	00	06	\$80,604
Transmission and Distribution Labor Expenses		\$18,921,335	\$10,775,743	\$3,125,661	\$162,953	\$2,197,653	\$746,539	\$96,683	\$1.186.658	\$199.263	275 YUL (53	001,0000
Production, Transmission and Distribution Labor Expenses		\$51,523,774	\$22,839,538	\$6,558,050	\$420,153	\$8,458,275	\$3,486,466	\$455.325	\$5.681 493	\$2 407 660	557 9CAS	100 0030
Customer Accounts Expense 901 SUPERVISION/CUSTOMER ACCTS	2						•				CC / 0701	100,0000
902 METER READING EXPENSION 903 DECORDING AND CONTINUED OF	e e	\$1,911,446 \$273,009	\$1,335,974 \$190,815	\$278,310 \$39.751	59,422 SI 346	\$263,892 \$37 601	\$13,639 \$1.040	\$503	\$3,641	\$1,916	\$319	\$818
904 UNCOLLECTIBLE ACCOUNTS	Ŷ	57,682,671 \$0	\$5,369,679 \$0	S1,118,611	\$37,872	\$1,060,662	\$54,818 \$54,818	\$14,122	\$520 \$14,635	\$274 \$7,703	546 51,284	\$117 \$3,286
905 MISC CUST ACCOUNTS	Q	\$292,629	\$204,528	\$42,607	\$0 \$1,443	540,400	\$0 \$2,088	\$0 \$538	\$0 \$557	\$ 0 \$ 293	\$0 \$49	50 8125
Tofal Customer Accounts Labor Expense		\$10,159,755	\$7,100,997	\$1,479,280	\$50,082	Si,402,645	\$72,492	\$18,675	\$19.354	\$10 IK	20 K D 2	545 V3
Customer Service Expense 907 SUPERVISION 908 CUSTOMER ASSISTANCE EXPENSES 908 CUSTOMER ASSISTANCE EXP-LOAD MGMT	ę	\$163,720 \$544,754 \$0	\$114,429 \$380,747	\$23,838 \$79,317	\$807 \$2,685	\$22,603 \$75,208	\$1,168 \$3,887	100'1S	\$312 \$1,038	\$164 \$546	\$27 \$91	\$70 \$233
909 TRYPORCHAND/NALIONAL AND INSTRUCTIONA 909 INSTELLANEOUS CUSTOMÆR SIRVICE 910 MISCELLANEOUS CUSTOMÆR SIRVICE 911 DEMONSTRATION AND SELLING EXP	Q	\$0 \$0 \$529,482 \$0	\$370,073	\$77,094	\$2,610	\$73,100	\$3,778	\$973	\$1,009	\$531	\$88	\$227
912 DEMONSTRATION AND SELLING EXP 913 WATER HEATER - HEAT PUMP PROGRAM 915 MDSE-JOBBING-CONTRACT 916 MISC SALES EXPENSE		8 8 8 8										
Total Customer Service Labor Expense		\$1,237,956	3865,249	\$180.249	26102	110 0113	660.03	120 00				
Sub-Total Labor Exp		\$ 62,921,485	\$30,805,785	\$8,217,578	\$476,338 \$10,031,831	116,011	162,756. \$3,567,791	3476.276 3	\$2,25 \$5_703_205 \$	51,241 \$2,419.087	\$207 \$207 0530	\$530 ****
Administrative and Gananol Demonstration												106'7600
920 ADMIN. & GEN. SAL ARIES- 921 OFFICE SUPPLIES AND EXPENSES	99	\$16,107,782	\$7,886,223	\$2,103,685	\$121,942	\$2,568,130	\$913,348	\$121,926	\$1,460.010	5619.282	2161 447	202 1213
922 ADMIN, EXPENSES TRANSFERRED - CREDIT	66 66	\$2,954 (\$1,438,980)	\$1,446 (\$704,511)	\$386 (\$187.932)	\$22 (\$10 804)	\$471	\$167		\$268	-		528
		05	\$0	20	50°	(77+*6778)	(555,185) 80	(\$10,892) \$0	(\$130,429) \$0	(\$55,323) (\$0	(\$14,422) \$0	(\$13,561) en
925 INJURIES AND DAMAGES - INSURAN	99	5244,673	\$119.790	50 S	\$0 \$0	\$0 \$0		50	20	20	20	20 5
242 UNITION COMPANY STATES	8	\$33,256,029 \$0	\$16,281,848	\$4,343,254	\$251,760	\$5,302,145	\$1,885,693	\$251,727 S	\$22,177 \$3,014,327 \$	\$9,407 \$1,278,565 \$:	\$2,452 \$333,313 \$	\$2,306 \$313,397
	66	\$0 \$221	\$108	\$ 29	3	\$35	\$13	3	043	g	រ	Ę
932 MAINTENANCE OF GENERAL PLANT 935 MAINTENANCE OF GENERAL PLANT	8	\$0 \$0								2	1	76
Total Administrative and German E		co+,ouv,+c	176'99/'10	\$465,260	\$ 33,433	\$636,529	\$263,451	\$34,649	\$429,431	\$183,364	\$48,334 \$	\$125,104
		\$52,181,162	\$25,373,831	\$6,756,636	\$398,117	\$8,316,897	\$2,994,952	\$399,286 \$r	\$4,7 95,804 \$2	\$2,035,417 \$5	\$531,151 \$	\$579,071
Concentration and Maintenance Expenses	s		\$26,179,615	\$14,974,214	\$874,454 \$	\$18,348,728	\$6,562,743	\$875,562 \$1(\$10,499,009 \$4	\$4,454,504 \$1,161,789		\$1,172,028
	4	\$115,102,647	\$56,179,615	\$14,974,214	\$874,454 \$18,348,728	18,348,728	\$6,562,743	\$875,562 \$10	\$10,499,009 \$4	\$4,454,504 \$1,161,789		\$1,172,028

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					Kentucky Utilities (Revenue)	tülities Jeb					-	r age 12 01 1	11
Acct. No.	Account Description	Allocator	Total	Residential	Gen'l Service	All Elec. Schools	Secondary PS	Primary PS	Sec. TOD	0	Retail	Fluc.	St.
REVENUE								2	2	001	Transmission	Load	Ltg
×	Sales Franchise Fees and HEA Dr Accrued Revenues Informpany Sales Off-System Sales Off-System Sales Brokerod Sales LATE PAVMENT - DIRECT POLE ATTACHMENT - DIRECT FOLLE ATTACHMENT - DIRECT POLE ATTACHMENT - DIRECT POLE ATTACHMENT - DIRECT POLE ATTACHUE 10 OFFSET-KY MATERIAL SALES - DIRECT POWER CHARGES MISO SCHEUDLE 10 OFFSET-KY MATERIAL SALES - DIRECT SERVICE ONOFF/RET CHK - DIRECT DIR SERVICE ONOFF/RET CHK - DIRECT DIR SULLES TAX COLL ÉCTTN FEES-KY	7 5 55 22 22 24 54 54 55 55 55 55 55 55 55 55 55 55 55	\$1,172,951,987 (\$10,546,741) \$334,807 \$37,366,206 \$3,310,009 \$256,817 \$4,395,413 \$4,393,423 \$439,828 \$1,200,742 \$1,064,694) \$44,605) \$44,606)\$44,606) \$44,606) \$44,606)\$44,606) \$44,606) \$44,606)\$44,606) \$44,606)\$44,606) \$44,606)\$44,606) \$44,606)\$44,606) \$44,606)\$44,606) \$44,606)\$44,606) \$44,606)\$44,606) \$44,606)\$44,606) \$44,606)\$44,606) \$44,606)\$44,606) \$44,606)\$44,606) \$44,606)\$44,606) \$44,606)\$44,606)\$44,606) \$44,606)\$44,606)\$44,606)\$44,606)\$44,606)\$44,606)\$44,606)\$44,6	447,746,696 (4,238,759) 150,708 13,332,662 1,419,370 91,635 3,563,214 270,597 516,511 2,693,821 (405,164) 19,100 1,331,113 6,817 1,429,385 6,817 1,429,385 8,467,627,707	151,765,496 (1,545,964) 51,083 3,925,863 411,288 26,982 760,451 62,645 136,245 136,478 (112,274) 5,038 47,864 5,038 47,864 5,311 84,496 84,496 84,496	8,355,396 (62,957) 2,812 2,81,662 30,115 1,936 1,936 9,966 9,967 (8,697) 368 57,823 56,823 57,823 57,823 57,823 57,823 57,823 57,823 57,823 57,823 57,823 57,823 57,823 57,935 57,935 57,935 57,823 57,935 57,935 57,935 57,935 57,935 57,823 57,935 57,825 57,925 57	221,580,886 (2,571,689) 7,571,689) 7,522,090 7,322,090 7,322 186,865 49,286 199,296 190,296 190,296 190,296 190,296 190,296 190,296 190,296 190,296 19	91,859,279 (700,129) 3,0919 3,214,887 3,214,887 3,214,887 3,214,886 3,214,886 8,83,44 583,664 (87,786) 3,100 1,399 0 1,399 (87,786) 3,100 1,399 (87,786) 3,100 1,399 (1,399 (1,399) 1,339 (1,399) 1,339 (1,399) 1,339 (1,399) 1,339 (1,399) 1,339 (1,399) 1,339 (1,399) 1,339 (1,399) 1,339 (1,399) 1,339 (1,399) 1,339 (1,399) 1,339 (1,399) 1,339 (1,396) 1,339 (1,399) 1,339 (1,339) 1,33	11.,193,618 (161,733) 3,768 426,983 43,918 2,935 0 2,335 0 2,335 10,973 75,497 75,497 11,351 11,351 (11,351) 406 2,921 11,351 31,70 33,734 511,626,133 511,626,133	136,797,218 (938,623) 46,045 5,296,347 5,7329 36,402 118,716 36,402 118,716 136,775 14,7755 14,7755 14,7755 14,7755 14,7755 14,7755 14,7755 14,75	69,612,366 (111,756) 23,431 2,621,847 2,621,847 2,0018 18,00 18,00 18,00 18,00 18,00 18,00 10,061 2,220 11,060 1,060 1,060 1,060 1,060	13,780,439 0 4,638 6,65310 70,027 4,648 0 16,036 122,798 (18,469) (18,469) (18,469) 233 109 (18,469) 333 210 43,993	20,260,593 (215,131) 6,820 6,820 6,820 26,7,556 26,7,556 26,756 1,927 6,286 6,286 6,286 1,110 1,110 1,110 1,110 1,110 1,110 6,25,906 6,260 3,015 1,110
												700,101,414	907,080,024

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Kentucky Utitites Electric Cost of Service Study (Allocator Amounts)

				Gen'	All Flan	Cocondant						
Alloc.	Description	Total	Residential	Service	Schools	ps PS	PS	TOD TOD	TOD TOD	Retail Transmission	Flue.	St.
	Energy (Loss Adjusted)	18.799.862 138	6 707 001 087	4 075 408 408	000 172 177							27
C1 (Energy	17,519,177,405	6.171.949.620	1 817 358 411		3,003,924,000 3 300 530 400	1,617,488,827	214,825,844	2,664,722,854	1,319,115,928	340,268,632	134,613,819
ю.	Customers (Monthly Bills)	6,116,225	5.019.241	850.552		004'000'E00'C	790'19/'000'1	ZL/'RCA'/AL	2,531,761,273	1,287,717,012	332,169,120	123,856,694
4 4		509,686	418,270	79.213	295	8 262	1210	100	797	999 00	12	36,913
סע		509,686	418,270	79,213	295	8,282	424	3	56	88	- •	3,076
	Verginau Average Customers (Lighting =9 Lights per Cust) Street Lighting	598,440	418,270	87,134	2,850	82,620	4,270	1.100	1.140	8 G		3,076
. 00		43,956,496	0	0	0	0	0	0	0	0	2 -	43 056 406
o		999,905	418,270	79,213	285	8,262	427	55	57	8	,	3,076
		506,202	418,270	79,213	295	8,262	427	55	57	30	-	342
1		506.952	410,270	512,81	262	8,262	0	0	0	0	0	342
		676,199	420.100	70,612	6067	707'8	427	<u>9</u> 9	25	30	•	342
		676,199	420,100	70 837	267	5770	416	69	64	32	*	167,385
		610,762	420,100	87.601	202	677'0	415	49	99	32	•••	167,385
		76,387,118	0			045470	101' 1	480	1,280	640	20	13,949
2		676,199	420,100	79,637	292	R 224	747	⊃ç	- 2	0 0	0	76,387,118
		527,412	420,100	78,637	292	8 224	455	R1 0	83	8		167,385
		526,800	420,100	79,637	292	8.224	20	ę 4	5 9	20	- (18,598
		527,379	420,100	79,637	292	8.224	415	ç q			50	18,698
	Total Transmission Pullingerit Peak Demands	4,233,651	1,962,568	537,890	52,796	593.493	264.347	28 505	475 803	010 100		18,038
		418,498,868	159,257,514	44,131,418	3,418,442	79.056.685	34,505,936	4 4R1 RAA	56 ANY 575	0/0°'177	6401/11	29,137
		3,372,521,883	1,450,723,591	382,661,629	27,986,159	560,449,403	235.492.033	30,820,687	384 177 602	110 867 320	40 1 0 0 4 1 0 4 1 1 4 1 1 1 1 1 1 1 1 1	2/90/9/2
		5,196,890,720	2,258,168,852	583,485,937	43,187,298	852,782,636	356,857,931	46.766.834	582.040 576	946 074 A7A	1721110101	120,500,500
	Powners and Evenes Adiate 6.55	198,536,178	53,931,231	41,849,308	791,758	44,518,937	18.329.160	1.370.787	16.850.870	13 361 602	700'1 /m'10	200,020,861
	Mater Cost - Michted	(33,085,532)	(20,563,558)	705,842	(323,355)	(5,071,242)	(3.629.267)	(708.185)	(1.802.258)	(383 305)	(001, CUO)	0,346,325
		100.0000%	64.2049%	28.2516%	0.2041%	6.9060%	0.3345%	0.0234%	0.0515%	0 022344	(900,458)	(puo,/44)
		100.0000%	82.6448%	15.6667%	0.0574%	1.6179%	0.0000%	0.0132%	0.00004			0.0000v
	Maximum class Demands (Primary) Sum of the truthidurof Curtomor Demands (Corrections)	3,894,628	1,962,567	537,890	62,796	593,493	264.347	28.505	425,893	e/ 0007-0	8 mmm	8,0000,0
0e		5,641,961	3,949,601	812,241	104,341	709,920	0	36.721	0	• c		101,82
		3.308,103 0.007 474	1,484,982	337,287	23,844	684,301	233,491	30,826	411,058	190.672	61.792	121.02
		101,100,0	2,080,350	447,135	57,095	560,717	249,182	21,426	341,198	144,228	39,823	. 0
		3.957.154	2.098.351	224,401	60,939 57 005	1,145,018	482,673	52,252	752,256	334,800	101,615	0
ä	Production Winter Demand Allocator	37,687,119	19.965.212	4 258 419	01,100 5A2 763	01/1000 E 2 40 4 E E	249,182	21,426	341,198	144,228	39,823	0
	Production Residual Summer Demand Allocator	3,358,153	1,484,981	337.287	23.844	584 202	233 404	204,055	3,249,600	1,373,593	379,266	0
		19,048,333	8,423,204	1,913,183	135,250	3.314.310	1326 474	30,020	800,014	2/5'081	61,792	0
	Production Residual Summer Demand Allocator	3,358,153	1,484,981	337,287	23,844	584.302	233.481	308,000	411.050	1/6/09/1	350,500	- «
2	Pietchiution OPM of inc. Terret.	19,048,333	6,423,204	1,913,183	135,250	3,314,310	1.324.424	174 855	7 331 630	2/0,051	360 E00	5
	Temperature Normalization Revenues & Services Flant)	945,383,672	627,921,666	137,056,662	8,906,167	87,385,837	26,258,991	4,043,344	40.559.248		nnninee V	14 261 758
	Customer Specific Assignment	2,300,076	2,362,665	264,295	12,855	241,693	83,420	11,850	0	0	0	B B
	Year-End Customers	0.77A A77	13 720 9641	0	0	0	0	0	0	0	0	0
	FAC Roll-In	(3.710.704)	(1 339 973)	1256 9851	(009,501)	(1,140,255)	(4,224,214)	(831,558)	3, 132, 208	3,532,765	0	927,987
	Interruptible Credit Allocator	1,601,542,287	801,355,186	174,213,519	19.167.275	212,50	(110,022) 406 375 340	(888) 40 602 060	(539,386)	(694,223)	(387,783)	(72,086)
	Uperauon and Maintenance Less Fuel Bana Data Dataona							002'020'01	101,040,400	09,460,279	20,640,032	¢
	VDT Revenue	908,837,718	364,691,143	121,479,709	6,648,873	186,103,686	72,898,865	1,110,048	8.187.097	107.887.035	32 985 640	8 845 737
48 F	Remove DSM Revenues	2 17 DAE 607	(13) 40 E07 744	194	0	(101)	(94)	0	0	0	0	16
	Remove ECR Revenues	92,931,133	34.826.991	11 082 703	040 050	1,023,748	218,508	67,582	2,710	2,978	0	0
8	Remove Changes in ECR Roll-In	87,584,103	33,637,125	11.667.441	640.200	16,081,743	7,274,998 6 BD2 063	923,853	11.026,723	5,672,457	1,592,265	1,592,953
	Gross Production Plant	2,373,889,077	903,370,839	260,330,643	19,380,739	448.440.460	185.731.152	741,001 25 308 187	310,068,100	4,884,714	1,308,727	1,382,335
22.2	Gross Distribution Plant	418,498,868	159,257,514	44,131,418	3,418,442	79,056,695	34,505,936	4,461,844	56.407.628	27.538.982	4 1, 180,047	13,859,042 2 AED 875
	Total Prod. Trans., Distrib Plant	1,224,8/0,612	730,214,721	171,816,198	10,696,851	110.426,631	33,791,061	4,955,377	53,987,787	14,703	442	108.957.831
	Dist. Overhead Lines Gross Plant	4,011,408,001	1,/82,843,U/4	466,278,259	33,506,032	637,922,686	264,028,150	34,725,207	430,371,526	183,765,551	48,440,223	125.377.849
	Gross Intangibie Plant	45.050.496	20 105 370	5 2/28 QER	5,326,549	53,861,859	18,398,782	2,549,762	29,633,780	0	0	6,882,097
	Gross Total Plant in Service	4.171,331,504	1,862,918,780	484,373,725	34.794.525	1,103,017 661,788,392	2/9/0/9/2 713 810 817	389,417 36 015 600	4,826,289	2,060,791	543,220	1,406,017
	Uist. Underground Lines Gross Plant Gross General Diant	125,419,548	70,330,623	17,633,724	1.394.270	15,831,591	6.860,209	745,114	11.025.4680	150,412,136	50,192,225	130,693,187
	Labor Accts 501-507	100.246,736	44,738,636	11,635,515	836,110	15,918,733	6,588,563	866,533	10.739.498	4.585.689	1.208.778	1,058,551 3 198 681
	Labor Accts 511-514	14,311,126 9 361 046	5,385,768	1,508,150	115,298	2,721,346	1,189,078	154,516	1,946,593	952,806	250.167	87.403
62 L	Labor Accts 538-540	3.139	0,000,047 1105	8//,/86	63,584	1,629,319	714,886	94,655	1,178,677	581,564	150,391	58,506
	Labor Accts 542-545	129,045	47,783	13.587	1.019	090 788	502 602	88 87	423	207	54	18
	Labor Acces 301-588	8,638,640	5,218,438	1,691,741	63,006	824.713	228.832	01 4/10	677,11	8,733 940	2,280	830
		19,288,204	11,704,844	2,740,038	215,664	2,209,196	777.323	104.494	1.248.099	10	57	237,340
									analacal.	2	2	266,045

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Kentucky Utilities Electric Cost of Service Study (Allocator Amounts)

592.957 6,187,116 8,480,548 8,480,548 5,781,110 5,781,110 5,781,110 5,781,110 5,781,110 5,781,110 1,172,0280,953 682,374 682,311 68,211 0 6,430,415 11,249,768 82,926 2,646,348 26,714 6,952,663 1,627,985 5,781,110 (20,788) 17,072 (3,717) 0 0 0 22,997 26,714 F St 12,839,943 33,187,518 185,635 7,806,893 70,027 0 1,471,377 1,161,789 13,780,439 630,638 9,741,731 ₽ 0 000 (52,547) 50,363 (2,185) 2,583,286 719,061 20,600,032 67,843 70,027 19,880,971 Fluc. Load 0 50.026,079 125,893,112 704,185 29,614,569 29,614,569 29,614,569 29,018 270,018 0 0 5,581,864 4,454,504 1,628 69,812,366 66,889,716 2,418,563 69,288,279 2,419,087 37,659,883 61,630.707 0 0 (203,710) 191,046 (12,664) 270,018 Transmission 257,354 Retail 5,703,205 79,061,152 40,559,248 362,621,930 12,937,041 10,489,008 1,874,846 136.787,218 40,559,248 104,083,342 257,864,715 1,442,369 60,659,018 547,329 40,558,248 118,740 152,046,238 5,499,251 157,545,488 (411,512) 391,316 (20,185) 00 527,134 547,329 Pri. TOD 100 476,276 8,440,770 3,294,875 29,104,299 737,968 1,042,343 876,562 156,480 11,193,618 4,043,344 350,000 8,453,436 20,396,187 114,086 4,787,914 4,787,918 4,797,918 2,724,676 570,199 737,956 10,322,615 373,351 10,895,966 (33,175) 30,852 (2,224) 41,694 43,918 Sec. TOD 100 3,567,791 48,391,480 25,258,991 222,269,321 2,759,000 63,594,192 157,742,203 882,333 37,106,616 332,871 25,268,991 7,935,064 6,562,743 1,188,243 91,859,279 25,258,991 100.732,884 3.643,335 104,376,219 (249,788) 239,378 (10,410) 00 332,871 322,461 Primary S 10,031,831 17,440,405 69,793,450 529,266,655 16,303,844 16,303,844 18,309,786 18,348,758 3,757,885 3,757,885 3,757,885 3,757,885 3,753,885 18,500,800 87,385,837 7,1386,902 7,1386,902 186,902,41 361,403,820 759,288 2,021,517 86,346,201 11,445,244 11,445,244 11,445,244 11,445,243 11,445,243 11,445,244 11,445,244 11,445,243 11,445,244 11,445,244 11,445,244 11,445,244 Secondary 235,772,815 8,<u>627,497</u> 244,300,313 (568,906) 548,440 (20,466) 738,792 759,258 S 0 205,000 6.215,941 15,827,241 87,411 87,411 3,76,087 30,115 5,091,771 1,629,047 2,139,634 476,338 4,862,902 6,720,818 26,720,818 22,133,634 990,898 874,454 332,386 8,355,396 8,355,396 8,355,396 18,498,226 669,049 19,167,275 (21.884) 23,715 1,830 31,948 30,115 All Elec. Schools 8,217,578 8,266,643 88,266,643 88,266,643 36,432,546 36,432,349 14,3731,961 14,374,214 6,023,521 14,374,214 6,023,521 14,374,214 14,574,4621 1,128,4611,128,461 1,128 168,132,458 6.081,062 174,213,519 (305,029) 308,153 1,124 412,412 411,288 Service Gen'l 30,805,785 366,785 366,588,374 366,588,374 1364,423,244 1185,502,532 56,179,616 56,179,616 55,179,616 55,179,616 55,179,616 21,742,405 21,742,405 21,742,405 21,742,405 21,742,405 21,742,405 21,742,405 21,742,405 21,742,405 32,632,534 4,077,239 1,419,377 1,419,377 1,419,377 1,419,377 1,550,503 1,419,377 1,550,503 1,419,377 1,550,503 1,550,500 1,550,500 1,550,500 1, (1,035,911) 1,104,817 68,906 773,383,254 27,971,942 801,355,196 1,488,276 1,419,370 Residential 62,921,485 604,2070,498 604,2070,498 604,2070,498 506,871,316 3,176,872,337 115,102,647 115,102,647 1,172,541,897 445,399,576 60,734 445,399,576 1,913,147,131 1,913,147,131 460,007 1,913,147,131 419,007 1,913,147,131 419,007 3,910,595 4,910,595 4 1,545,639,177 65,903,110 1,601,542,287 (2,903,251) 2,903,251 3,910,909 3,910,909 Total Off-System Sales Allocator Off-System Sales Coff-System Sales Costs allocated on Energy to be reallocated on RBPPT Costs allocated on Energy reallocated on RBPPT Net Adjustment. 66 Labor Accts 500-916 67 O&M less Purchased Power 68 Dist, Lines Gross Plant 69 Rate Base 70 Gross Transformer Plant 71 Deprection Expense 72 Total Labor 73 Distribution O&M 74 Seles Revenue 75 Distribution Polas, Lines, Transform & Services 76 O&M Expenses 77 OAM Expenses 78 OAM Expenses 79 OAM Expenses 70 OAM E Description Off System Sales Allocator Alloc.

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> Kentucky Utilities Electric Cost of Service Study (Allocator Percentages)

Term Term <th< th=""><th>Description</th><th>Tated</th><th></th><th>Gen'l</th><th>All Elec.</th><th>Secondary</th><th>Primary</th><th>Sec. TOD</th><th>Pri. TOD</th><th>Retail</th><th>Fitte</th><th>ð</th></th<>	Description	Tated		Gen'l	All Elec.	Secondary	Primary	Sec. TOD	Pri. TOD	Retail	Fitte	ð
1 10.0000 358/11 0.13895 0.13234 1.474% 7.7303 1.4304 1 10.00006 358/01 1.53735 0.13745 0.73035 0.13234 0.00035 0.00035 10.00006 353/05 0.03795 1.14274 4.14245 7.54035 0.00035 10.00006 25.0675 0.13735 0.00035 0.00035 0.00035 0.00035 10.00006 25.0675 0.13283 0.00035 0.00035 0.00035 0.00035 0.00035 10.00006 25.3675 0.132875 0.03635 0.00035 0.00035 0.00035 0.00035 10.00006 25.3675 0.03626 1.55750 0.03636 0.00035		IB101	Kesidential	Service	Schools	S	ß	100	TOD	Transmission	Load	, <u>-</u>
10.0000b 25.259*x 0.73785x	Energy (Loss Adjusted)	****	35.6811%	10.5065%	0 753907	10 50550						Lug
1 100.0000 2.044% 15.41% 0.077% 170000 0.017% 0.0009%<	Energy	*	35.2297%	10.3735%	0.7443%	19.3476%	0.0U3/%	1.1427%	14.1742%	7.0166%	1.8100%	0.7160%
1 10.0000% E.2.945% 0.017% 1.1203% 0.0002% 0.0007% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0	Customers (Monthly Bills)	÷- ·	82.0644%	15.5415%	0.0579%	1.6210%	0.0837%	%7071-1	14.4514%	7.3503%	1.8960%	0.7070%
1 110.0000% 55.845% 0.077% 1.5210% 0.000% 0.000% 0.000% 0.000% 0.000% 0.000% 0.0000% 0.000% 0.000% <td></td> <td>-</td> <td>82.0643%</td> <td>15.5415%</td> <td>0.0579%</td> <td>1.6210%</td> <td>0.0838%</td> <td>0.0108%</td> <td>0.0112%</td> <td>0.0060%</td> <td>0.0002%</td> <td>0.6035%</td>		-	82.0643%	15.5415%	0.0579%	1.6210%	0.0838%	0.0108%	0.0112%	0.0060%	0.0002%	0.6035%
1 1	Weighted Average Customers /Lighting =0.11		82.0643%	15.5415%	0.0579%	1.6210%	0.0838%	0.0108%	0.0112%	0.0035%	0.0002%	0.6035%
1 1 0.0000% <td>Creat Linking - Similar Customer</td> <td>= ;</td> <td>69.8934%</td> <td>14.5602%</td> <td>0.4929%</td> <td>13.8059%</td> <td>0.7135%</td> <td>0.1838%</td> <td>0.1905%</td> <td>0.0003%</td> <td>0.0002%</td> <td>0.6035%</td>	Creat Linking - Similar Customer	= ;	69.8934%	14.5602%	0.4929%	13.8059%	0.7135%	0.1838%	0.1905%	0.0003%	0.0002%	0.6035%
100.0000% E.2.5647% 0.0677% 1.5617% 0.0684% 0.5694% 0.5647% 0.0007% 0.0009% 0.0009% 0.0009% 0.0009% 0.0009% 0.0009% 0.0009% 0.0009% 0.0009% 0.0009% 0.0009% 0.0007% 0.00007% 0.0007% 0.0007%	Average Circlomere	= 7	0.0000%	0.0000%	%0000070	0.0000%	0.0000%	0.0000%	0.0000%	0,000,0	% /010/0	0.0428%
1 1 1 1 1 0	Average Customers (Lighting = 01 inter-	= ;	82.0643%	15.5415%	0.0579%	1.6210%	0.0838%	0.0108%	0.0112%	0.0050%	%0000.0	70000.001
1000000% 8.2.563% 15.42% 0.0533% 0.0003% <		=	82.5068%	15.6253%	0.0582%	1.6297%	0.0842%	0.0108%	0.0112%	% 60000	%2000.0	0.6035%
100.000% 82.568% 15.82% 0.0887% 0.0712% 0.0009% <t< td=""><td></td><td></td><td>82.5997%</td><td>15.6429%</td><td>0.0583%</td><td>1.6316%</td><td>0.000%</td><td></td><td></td><td>%ACOO'O</td><td>0.0002%</td><td>0.0675%</td></t<>			82.5997%	15.6429%	0.0583%	1.6316%	0.000%			%ACOO'O	0.0002%	0.0675%
100.0000% 62.1287% 117773 0.0422% 1.2163% 0.01614% 0.0072% 0.0003% 0.0007% 0.00007% 0.0007% 0.0007%	Average Primary Customers		82.5068%	15.6253%	0.0582%	1.6297%	0.084200	%000000	%000000	0.000%	0.0000%	0.0675%
100.0000% 63.2347% 11.77728 0.0477% 0.00057% 0.00007% 0.0007% 0.0007%	Year End Customers		62.1267%	11.772%	0.0432%	1 9169%		0.0010.0	%7110.0	0.0059%	0.0002%	0.0675%
100.0000% Ba:7323% 1.4.3423% 0.4776% 0.0007% 0.00007% 0.0007% 0.0007%	Year End Customers (Lighting = Lights)	100.000%	62.1267%	11.772%	%65700	1 212201	0.4100.0	0.0072%	0.0095%	0.0047%	0.0001%	24.7538%
100.0000% 0.2157% 0.1064% 0.3000% 0.1016% 0.0000% 0.1047% 0.0003% 100.0000% 78,5730% 1.1777% 0.0543% 1.1268% 0.0007% <td< td=""><td>veigmed Year End Customers (Lighting =9 Lights per Cust)</td><td>100,0000%</td><td>68.7829%</td><td>14 3479%</td><td>7002700</td><td>0/7017-1</td><td>0.0b14%</td><td>0.0072%</td><td>0.0095%</td><td>0.0047%</td><td>0.0001%</td><td>24.7538%</td></td<>	veigmed Year End Customers (Lighting =9 Lights per Cust)	100,0000%	68.7829%	14 3479%	7002700	0/7017-1	0.0b14%	0.0072%	0.0095%	0.0047%	0.0001%	24.7538%
0.0000% 62.1457% 0.1000% 0.0000% <	Street Lighting	100 0000%			0.01+0.0	%1005.61	0.6795%	0.0802%	0.2096%	0.1048%	0.0033%	2.2839%
0 0.0000% 7.8537% 0.00787% 0.0087% 0.0087% 0.0077% 0.0087% 0.0007% 0.0007% 0.0007% 0.0007% 0.0007% 0.0007% 0.0007% 0.0007% 0.0000% 0.0007% 0.0000% 0.0	Year End Customers	100 0000%	%.0000.0	0.000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0 0000%	100 0000%
NUMBOR Consols 0.0121% 0.0063% 0.0121% 0.0002% 0.0000% <th0.0000%< th=""> <th0.0000%< th=""> <th0.< td=""><td>Year End Customers (Lighting = 91 in the per $\mathcal{O}_{\text{tight}}$</td><td></td><td>07.120170</td><td>11.112%</td><td>0.0432%</td><td>1.2162%</td><td>0.0614%</td><td>0.0072%</td><td>0.0095%</td><td>0.0047%</td><td>0.0001%</td><td>0/ 0000000</td></th0.<></th0.0000%<></th0.0000%<>	Year End Customers (Lighting = 91 in the per $\mathcal{O}_{\text{tight}}$		07.120170	11.112%	0.0432%	1.2162%	0.0614%	0.0072%	0.0095%	0.0047%	0.0001%	0/ 0000000
District	Year Find Secondary Cuchanger	100,000%	79.6531%	15.0996%	0.0554%	1.5593%	0.0787%	0.003%	0.0121%	0 0061%	% • 0000 0	24.1330%
\$\$100.000% \$\$16.5105% 0.05544 1.5694% 0.0787% 0.0000%		100.0000%	79.7305%	15.1143%	0.0554%	1.5608%	%0000%	7660000	2000000	0.100000	%7000.0	3.5263%
100.000% 46.3554% 12.7751 1.4.715% 1.2.4775 1.4.715% 1.2.4775% 1.0.661% 5.2.4373% 0.0.0017% 5.2.509% 2.7788% 0.00000% 100.0000% 43.715% 11.4200% 0.5139% 16.6131% 6.8277% 1.0661% 5.2457% 1.3347% 5.2000% 2.7788% 100.0000% 43.715% 11.4200% 0.32388% 16.6131% 6.8277% 1.3661% 0.4975% 1.3364% 1.7347% 1.3347% 5.2000% 2.7347% 100.0000% 43.7758% 0.3388% 5.2.4258% 0.5304% 0.5204% 0.7347% 1.1384% 1.7347% 0.0010% 0.0000%	Maximum Class Also 2 and a vamary Customers	100.0000%	79.6581%	15.1005%	0.0554%	1.5594%	0.0787%	% CODD-D		%000000	0.0000%	3.5297%
# 10.0000% 38.0545% 10.5452% 0.3169% 1.7479% 5.7260% 5.7269% 5.7476% 1.5269% 0.7000% 7.1299% 6.7779% 5.7376% 0.3234% 0.3000% 7.1299% 0.10000% 0.2034% 0.10000% 0.0000% <th< td=""><td>maxinitum class Non-Colncident Peak Demands</td><td>100.0000%</td><td>46.3564%</td><td>12.7051%</td><td>1.2471%</td><td>14 0185%</td><td>0/ 10 10:0</td><td>0.020000</td><td>0.0121%</td><td>0.0000%</td><td>0.0000%</td><td>3.5265%</td></th<>	maxinitum class Non-Colncident Peak Demands	100.0000%	46.3564%	12.7051%	1.2471%	14 0185%	0/ 10 10:0	0.020000	0.0121%	0.0000%	0.0000%	3.5265%
# 100.0000 43.0160% 11.346% 0.2435% 10.4305% 6.866% 0.8399% 11.1394% 6.5664% 1.7347% 1.7347% 1.7347% 1.7347% 1.7394% 6.5664% 1.7347% 1.7394% 6.5664% 1.7394% 6.5664% 1.7394% 6.5664% 1.7394% 6.5664% 1.7394% 6.1575% 0.4053% 1.7394% 6.1525% 0.4053% 1.7394% 6.1526% 0.4053% 0.10500% 0.4053% 0.11394% 4.8775% 1.21994% 4.8775% 1.21994% 4.8775% 1.21994% 4.8775% 1.21994% 0.4053%	Total Transmission Plant	100.000%	38.0545%	10.5452%	0.8168%	18 00050/	%,604700	0.6733%	10.0597%	5.2290%	2.7788%	0.6882%
# 100.000% 43,4715% 11.3014% 5.0655% 1.3359% # 100.000% 23,477% 0.3310% 16.0157% 0.3310% 15.4073% 0.1339% 5.4073% 1.3365% 1.3359% 1 100.000% 27.5444% 11.4200% 0.3310% 15.4057% 1.3277% 0.3319% 1.4305% 5.4473% 1.1585% 2.1201% 5 100.0000% 82.5443% 15.6657% 1.5326% 1.5327% 0.0334% 0.0334% 0.0234% 0.0000% 0	Net Utility Plant	100.000%	43.0160%	11 3465%	200000	10.0303%	%7477.0	1.0661%	13.4786%	6.5804%	1.7347%	0.5880%
100.0000% 277544% 2.1334% 0.3389% 0.4303% 0.4359% 0.4359% 0.4275% 1.2389% 0.4359% 0.4359% 0.4359% 0.4359% 0.4359% 0.4359% 0.4359% 0.4359% 0.4359% 0.4359% 0.4359% 0.4359% 0.4359% 0.4359% 0.4359% 0.4050% 0.4359% 0.4050% 0.4059% 0.4050%	Total Utility Plant	100.000%	43 4715%	1000LV 11	9/0670'O	%1810.01	6.9827%	0.9139%	11.3914%	5.0665%	1.3355%	2.4997%
I 100.0000% 61.437% 5.473% 6.7250% 0.4058% 6.477% 5.7750% 0.4058% 5.477% 5.7250% 0.4058% 5.477% 5.7150% 0.4058% 5.477% 5.7150% 0.4058% 5.477% 5.7150% 0.4058% 5.477% 1.1585% 2.1501% 0.4058% 0.0000% 6.7100% 0.00000% 0.0000% 0.0000%<	Taxable Income	100.000%	27 1644%	01 07 00%	0.6310%	16.4095%	6.8668%	0.8999%	11.1998%	4.9275%	1.2989%	2.6752%
00.0000% 0.4.704% 0.5.347% 10.344% 0.4773% 15.3277% 10.344% 0.4713% 15.3277% 10.344% 0.4713% 15.3277% 0.0574% 0.0574% 0.0574% 0.0574% 0.0734% 0.0734% 0.0734% 0.0734% 0.0000%	Revenue and Expense Adjust before IT	100 000%	80 46070V	%£0/01/2	0.3988%	22.4236%	9.2322%	0.6904%	8.4876%	6.7250%	-0.4058%	700007
0.00000% BZ.6448% 15.6667% 0.00074% 1.6179% 0.0000% 0.0100% 0.00000% 0.0000% 0.0000%	Meter Cost - Wighted Cost of Maters		0/ 1701 mg	-2.1334%	0.9773%	15.3277%	10.9693%	2.1405%	5.4473%	1.1585%	2.1201%	1 ARGORY
0.0000% 53.3316% 15.8667% 0.0574% 1,6179% 0.0000% 0.0132% 0.0000%	Customer Services - Weighted cost of Services	10000000	%.6407°40	%9102.82	0.2041%	6.9060%	0.3345%	0.0234%	0.0515%	0.0233%	0 0007%	200000
0.00000% 53.319% 1.3556% 15.2389% 6.787% 0.7319% 1.0354% 0.0000% <	Maximum Class Demonds (Drimon)	20000001	07:0440%	15.6667%	0.0574%	1.6179%	0.0000%	0.0132%	0.0000%	0.000%		%,0000,0
0.00000% 55795% 0.0000% <t< td=""><td>Sum of the Individual Customer Demands (Secondary)</td><td>%0000000</td><td>20.3916%</td><td>13.8111%</td><td>1.3556%</td><td>15.2388%</td><td>6.7875%</td><td>0.7319%</td><td>10.9354%</td><td>0.000%</td><td>000000</td><td>%,0000,0</td></t<>	Sum of the Individual Customer Demands (Secondary)	%0000000	20.3916%	13.8111%	1.3556%	15.2388%	6.7875%	0.7319%	10.9354%	0.000%	000000	%,0000,0
100.0000% 44.2202% 10.0438% 0.7100% 17.395% 6.9530% 0.9179% 12.406% 1.8401% 1.90000% 100.0000% 52.9762% 10.0438% 0.7100% 14.1687% 6.2970% 0.5414% 8.5239% 3.6447% 1.0000% 100.0000% 52.9762% 10.7109% 11.2994% 1.4428% 14.1687% 6.5391% 0.7143% 10.2833% 4.5767% 1.3801% 100.0000% 52.9762% 10.7109% 17.3995% 6.5391% 0.7143% 10.0644% 1.0064% 100.0000% 52.9762% 10.0438% 1.4428% 14.1697% 6.5301% 0.3113% 1.22406% 5.6749% 1.8401% 100.0000% 52.9762% 10.0438% 1.4428% 1.41697% 6.5300% 0.3110% 12.2406% 5.6749% 1.8401% 1.0064% 100.0000% 44.2202% 10.0438% 0.7100% 17.3995% 6.9530% 0.3180% 12.2406% 5.6749% 1.8401% 1.8401% 100.0000% 44.2202% 10.0438%	Summer Peak Derind Domand Allocated	100.000%	70.0040%	14.3964%	1.8494%	12.5829%	0.0000%	0.6509%	0,000%	200000	*****	0.7481%
100.0000% 52.3762% 11.2994% 1.4428% 14.1697% 6.2970% 0.5414% 8.6223% 3.6447% 1.0044% 100.0000% 43.9567% 10.7230% 1.1644% 15.6524% 6.5931% 0.7143% 1.0283% 3.6447% 1.0064% 100.0000% 52.5762% 11.2994% 1.4428% 14.1697% 6.5391% 0.7143% 1.0283% 3.6447% 1.0064% 100.0000% 52.5762% 11.2994% 1.4428% 1.41697% 6.5391% 0.7143% 1.3084% 1.3084% 1.3084% 1.0064% 100.0000% 52.5762% 10.4428% 1.41697% 6.5300% 0.31109% 1.22406% 5.6749% 1.8401%	Winter Deak Derivel Domond Allocator	100.000%	44.2202%	10.0438%	0.7100%	17.3995%	6.9530%	0.9179%	12.240R%	6, 67,40%	0.000%	0.5164%
100.0000% 43.567% 10.7230% 1.1064% 15.6524% 6.5931% 0.7143% 10.2833% 4.5767% 1.3861% 100.0000% 52.9762% 11.2994% 1.4428% 14.1687% 6.2970% 0.5414% 8.5233% 3.6447% 1.3061% 100.0000% 52.9762% 10.12893% 0.7100% 17.3995% 6.5370% 0.5114% 8.6223% 3.6447% 1.0064% 100.0000% 52.9762% 10.0438% 0.7100% 17.3995% 6.9530% 0.3179% 12.2406% 5.6749% 1.8401% 100.0000% 44.2202% 10.0438% 0.7100% 17.3995% 6.9530% 0.3179% 12.2406% 5.6749% 1.8401% 1.8401% 100.0000% 44.2202% 10.0438% 0.7100% 17.3995% 6.9530% 0.3179% 12.2406% 5.6749% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401%		100.000%	52.9762%	11.2994%	1.4428%	14.1697%	6.2970%	0.5414%	8,6223%	264479/2	%10h011	0.0000%
100.0000% 52.3782% 11.2994% 1.4428% 14.1687% 6.2970% 0.5414% 8.8223% 3.6447% 1.3981% 100.0000% 52.3762% 11.2994% 1.4428% 14.1687% 6.2970% 0.5414% 8.8223% 3.6447% 1.0064% 100.0000% 52.3762% 11.2994% 1.4428% 1.41697% 6.2970% 0.5414% 8.8223% 3.6447% 1.0064% 100.0000% 52.3762% 10.0438% 0.7100% 17.3995% 6.9530% 0.3179% 12.2406% 5.6749% 1.8401% 100.0000% 44.2202% 10.0438% 0.7100% 17.3995% 6.9530% 0.3179% 12.2406% 5.6749% 1.8401% 1.8401% 100.0000% 64.419% 14.4573% 0.4237% 8.0926% 5.5749% 0.0000% 0.0000% 5.6749% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% 1.8401% <t< td=""><td>Production Boots of Manual 2010</td><td>100.0000%</td><td>48.9567%</td><td>10.7230%</td><td>1.1064%</td><td>15.6524%</td><td>6.5981%</td><td>705714307</td><td></td><td></td><td>1.0004%</td><td>0.0000%</td></t<>	Production Boots of Manual 2010	100.0000%	48.9567%	10.7230%	1.1064%	15.6524%	6.5981%	705714307			1.0004%	0.0000%
100.0000% 52.9752% 11.2994% 1.4428% 14.1697% 6.2970% 0.5447% 1.0064% 1.0064% 100.0000% 52.9762% 10.0438% 0.7100% 17.3995% 6.9530% 0.3417% 1.0064% 1.0064% 100.0000% 44.2202% 10.0438% 0.7100% 17.3995% 6.9530% 0.3179% 12.2406% 5.6749% 1.8401% 100.0000% 44.2202% 10.0438% 0.7100% 17.3995% 6.9530% 0.3179% 12.2406% 5.6749% 1.8401% 100.0000% 44.2202% 10.0438% 0.7100% 17.3995% 6.9530% 0.3179% 12.2406% 5.6749% 1.8401% 1.8401% 100.0000% 66.4191% 14.4437% 0.3421% 9.2433% 2.4718% 0.4277% 4.2202% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000%	Production restaural Winter Demand Allocator	100.0000%	52.9762%	11.2994%	1.4428%	14.1697%	6.2970%	0.541462	0/0007.01	4-010-4	1.3891%	0.0000%
100.000% 44.2202% 10.0438% 0.7100% 17.3995% 6.9530% 0.3173% 12.2406% 5.6749% 18401% 100.0000% 44.2202% 10.0438% 0.7100% 17.3995% 6.9530% 0.3173% 12.2406% 5.6749% 18401% 1 100.0000% 44.2202% 10.0438% 0.7100% 17.3995% 6.9530% 0.3173% 12.2406% 5.6749% 1.8401% 1 100.0000% 66.4191% 17.3995% 6.9530% 0.3180% 12.2406% 5.6749% 1.8401% 1 100.0000% 86.4191% 14.4573% 0.7100% 17.3995% 5.9530% 0.3180% 12.2406% 5.6749% 1.8401% 1 100.0000% 86.4191% 14.4573% 0.4237% 8.0926% 3.1280% 0.3180% 12.2406% 5.6749% 1.8401% 1 100.0000% 79.4457% 8.09266% 3.1280% 0.3180% 0.3000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.00000% 0.00000% 0.	Developments of the second of	100.0000%	52.9762%	11.2994%	1.4428%	14,1697%	6 2970%	0 544 40/	0/0770.0	0.044/%	1.UU64%	0.0000%
100.0000% 44.2202% 10.0438% 0.7100% 17.3955% 6.9530% 0.3180% 12.2405% 5.6749% 1.8401% 100.0000% 44.2202% 10.0438% 0.7100% 17.3955% 6.9530% 0.3180% 12.2405% 5.6749% 1.8401% 100.0000% 46.42202% 10.0438% 0.7100% 17.3955% 6.9530% 0.3180% 12.2405% 5.6749% 1.8401% 100.0000% 86.4191% 14.4573% 0.9421% 9.2433% 2.6178% 0.3180% 12.2405% 5.6749% 1.8401% 100.0000% 86.4191% 14.4573% 0.9421% 9.2433% 2.6718% 0.3160% 1.8401% 1.8401% 100.0000% 78.4394% 0.4237% 8.0926% 3.1280% 0.3160% 1.8401% 1.8401% 100.0000% 79.1094% 1.2664% -1.17251% -43.4372% 0.3571% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 10.4504% 1.26541% 6.5172% 0.3569%	Froduction Residual Summer Demand Allocator	100.0000%	44.2202%	10.0438%	0.7100%	17.3995%	6 9530%	0.01700	8.6223%	3.6447%	1.0064%	0.0000%
100.0000% 44.2202% 10.438% 0.7100% 17.2395% 6.9530% 0.9179% 12.2406% 5.6749% 1.8401% 100.0000% 66.4191% 14.4973% 0.7100% 17.3995% 6.9530% 0.9179% 12.2406% 5.6749% 1.8401% 100.0000% 66.4191% 14.4973% 0.9421% 9.24330% 2.6718% 0.31200% 5.6749% 1.8401% 100.0000% 66.4191% 14.4973% 0.9421% 9.24330% 2.6718% 0.3122406% 5.6749% 1.8401% 100.0000% 66.4191% 14.4973% 0.9421% 9.24330% 2.6718% 0.4237% 4.2802% 0.00000%	Production Summer Demand Allocator	100.0000%	44.2202%	10.0438%	0.7100%	17 1005%		0.6116.0	12.2406%	5.6749%	1.8401%	0.0000%
100.0000% 44.2202% 1.0.435% 0.1710% 17.2395% 0.9510% 1.56749% 5.6749% 1.8401% 100.0000% B6.4191% 14.4673% 0.9421% 9.24330% 0.95180% 0.3180% 12.2405% 5.6749% 1.8401% 100.0000% B6.4191% 14.4673% 0.9421% 9.24330% 0.3180% 0.31206% 5.6749% 1.8401% 100.0000% B6.4191% 14.4673% 0.9421% 9.24330% 0.31280% 0.31206% 0.00000% <td< td=""><td>Production Residual Summer Demand Allocator</td><td>100.000%</td><td>44.2202%</td><td>10.0438%</td><td>0.7100%</td><td>17 3005%</td><td>0.0000%</td><td>0.9180%</td><td>12.2406%</td><td>5.6749%</td><td>1.8401%</td><td>0.0000%</td></td<>	Production Residual Summer Demand Allocator	100.000%	44.2202%	10.0438%	0.7100%	17 3005%	0.0000%	0.9180%	12.2406%	5.6749%	1.8401%	0.0000%
100.0000% 66.4191% 1.4473% 0.1.7237% 0.5030% 0.5180% 0.5180% 0.5140% 5.6749% 1.8401% 100.0000% 72.1094% 8.4934% 0.4237% 8.0926% 3.1280% 0.0000% 5.6749% 1.8401% 0.00000% 0.0000% 0.0000%	Production Summer Demand Total	100.0000%	44.2202%	10.0438%	0 7100%	0/ 0000 Lt	0.00000	0.9179%	12.2406%	5.6749%	1.8401%	0.0000%
100.0000% 79.1094% 8.8494% 0.4237% 8.0426% 3.1260% 0.4237% 4.2302% 0.00000% 0.0000% 0.0000%	Distribution O&M- (Lines, Transformers & Services Plant)	100.000%	66.4191%	14 4973%	001010	STORES.	0.8530%	0.9180%	12.2406%	5.6749%	1.8401%	0.0000%
100.0000% 38.3537% 12.664% -1.0573% 7.9855% 0.0268% 14.5359% 10.0000% 36.3271% 0.0000% 36.3271% 0.0000% 36.3271% 0.0000% 36.3271% 0.0000% 36.3271% 0.0000% 36.3271% 0.0000% 32.3268% 10.4504% 10.4504% 50.0000% 36.3271% 0.0000% 36.3271% 0.0000% 36.3271% 0.0000% 36.3271% 0.0000% 36.3271% 0.0000% 36.3271% 10.4504% 10.4504% 10.4504% 10.4504% 11.8703% 11.8703% 11.2863% 0.00000% 10.0000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.000000% 0.000000% 0.0000	Temperature Normalization Revenues	100.000%	79 1094%	A BADAW	0/17407 0	9,00000	2.6/18%	0.4277%	4.2902%	0.0000%	%00000'0	1.5086%
100.0000% -38.3537% 126.0828% -1.0554% -1.7251% -43.4372% -9.5791% 32.2082% 36.3271% 0.0000% 100.0000% 36.1110% 10.4066% 0.9078% -1.0773% 7.9855% 0.0268% 14.5359% 18.7087% 10.4564% 100.0000% 36.1110% 10.4066% 0.9078% -1.0773% 7.9855% 0.0268% 14.5359% 1.3263% 1.4564% 100.0000% 50.0365% 1.1968% 15.2541% 6.5172% 0.6679% 9.8371% 4.3263% 1.2863% 100.0000% 40.1272% 13.3665% 0.7316% 15.2541% 6.5172% 0.6679% 9.8371% 4.3263% 1.2863% 100.0000% 40.1272% 13.3665% 0.7316% 20.4771% 8.0211% 0.1221% 0.30009% 0.00009% 0.00009% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.00000% 0.000000% 0.00000% 0.00000%	Customer Specific Assignment				0/ 1074-0	%07R0'0	3.1280%	0.3968%	0.0000%	0.0000%	0.0000%	0.0000%
100.0000% 36.1110% 10.4086% 0.0000% 36.3271% 0.0000% 100.0000% 50.0365% 10.4086% 1.0773% 7.9855% 0.02689% 14.5359% 18.7087% 10.4504% 100.0000% 50.0365% 10.8779% 1.19689% 15.2541% 6.5172% 0.6679% 3.63271% 0.14504% 100.0000% 50.0365% 10.8779% 1.19689% 15.2541% 6.5172% 0.6679% 3.6323% 1.2863% 100.0000% 40.1272% 13.3665% 0.7316% 20.4771% 8.0211% 0.1221% 0.3009% 11.8709% 3.6234% 80 100.0000% 40.1272% 13.3665% 0.7316% 20.4771% 8.0211% 0.1221% 0.3009% 1.18709% 3.6234% 80 100.0000% 81.6313% 8.2668% 0.73660% 50.0000% 50.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.00000% 0.0000% 0.0000% 0.0000% 0.0000% <t< td=""><td>Year-End Customers</td><td>100.0000%</td><td>-38.3537%</td><td>126.0828%</td><td>-1 065.4%</td><td>14 77E40/</td><td>100-Luf 67</td><td></td><td></td><td></td><td></td><td></td></t<>	Year-End Customers	100.0000%	-38.3537%	126.0828%	-1 065.4%	14 77E40/	100-Luf 67					
100.0000% 50.0365% 10.8779% 1.1968% 15.2541% 6.5172% 0.0679% 3.3371% 13.5559% 18.7087% 10.4504% 10.0000% 50.0365% 10.8779% 1.1968% 15.2541% 6.5172% 0.6679% 9.3371% 4.3263% 1.2863% 1.2863% 100.0000% 40.1272% 13.3665% 0.7316% 20.4771% 8.0211% 0.1221% 0.50009% 11.8709% 3.6294% 100.0000% 8700.0000% 50.0000% -5050.0000% -4700.0000% 0.00000% 0.00000% 0.00000% 80.100.0000% 81.6313% 8.2068% 0.00000% 7.9080% 1.6875% 0.5220% 0.0209% 0.0200% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.0000% 0.00000% 0.0000%	FAC RolHn	100.0000%	36.1110%	10.4086%	0.9078%	1027701-	7 001-00	%L6/6.6-	32.2082%	36.3271%	0.0000%	9.5424%
100.0000% 40.1272% 13.3655% 0.7316% 20.4771% 0.5112% 0.6579% 9.5371% 4.3263% 1.2863% 100.0000% 40.1272% 13.3655% 0.7316% 20.4771% 8.0211% 0.1221% 0.9008% 11.8709% 3.6294% 100.0000% 81.6313% 8.2068% 0.00000% -5056.0000% -4700.0000% 0.00000% 0.00000% 0.00000% 8(100.0000% 81.6313% 8.2068% 0.00000% 7.9080% 1.6879% 0.5220% 0.02209% 0.0230% 0.00000% 8(Interruptible Credit Allocator	100.000%	50.0365%	10.8779%	1 1968%	15 25440	%CCDA''	0.0268%	14.5359%	18.7087%	10.4504%	1.9427%
100.0000% 40.1272% 13.3855% 0.7316% 20.4771% 8.0211% 0.1221% 0.9008% 11.8709% 3.6294% 100.0000% -650.0000% 9700.0000% 0.0000% -5050.0000% -4700.0000% 0.0000% 0.00000% 0.00000% 0.00000% 8(100.0000% 81.6313% 8.2068% 0.0000% 7.9080% 1.6879% 0.5220% 0.0209% 0.0230% 0.0000%	Operation and Maintenance Less Fuel					0/1607.01	%77100	0.6679%	9.8371%	4.3263%	1.2863%	0.0000%
100.0000% -650.0000% 9700.0000% 0.0000% -5050.0000% -4700.0000% 0.0000% 0.0000% 0.1000% 0.1000% 0.0000% 8(100.0000% 81.6313% 8.2068% 0.0000% 7.9080% 1.6879% 0.5220% 0.0209% 0.0230% 0.0000% 8(Base Rate Revenue	100.000%	40.1272%	13.3665%	0.7316%	20.4771%	R 0211%	107CCF 1	200000			
100.0000% 81.6313% 8.2068% 0.0000% 7.9080% 1.6873% 0.5220% 0.0209% 0.0209% 0.0000%	VDT Revenue	100.000%		700.000%				0.00000	0.9008%	11.8709%		0.7532%
	Remove DSM Revenues	100.000%		8.2068%			4 607064	0.000%	0.0000%	0.0000%		%0000.00
					a' 0700'0	01 DODA" /	1.00/5%	0.5220%	0.0209%	0.0230%	0.0000%	0.0000%

Alloc

				Kentuc Electric Cost (Allocator	Kentucky Utilities Electric Cost of Service Study (Allocator Percentages)	Apn					1 age 1/ 01 1	2
				Gen'l	All Flee.	Secondary	Primary	Sec TOD	Pri TOD	Ratali	Flic	Ū,
Alloc.	Description	Total	Residential	Service		PS	PS	100	TOD	Transmission	Load	Ltg
64	Remove ECR Revenues	100.000%	37.2609%	12.8937%	0.6961%	18 9299%	7 8284%	0.8941%	11 8655%	6 1039%	1 7134%	1 7141%
50	Remove Changes in ECR Roli-in	100.000%	38.4055%	13.3214%	0.7310%	18.6593%	7.7675%	0.8468%	11.6189%	5,5772%	1.4943%	1.5783%
51	Gross Production Plant	100.000%	38.0545%	10.5452%	0.8168%	18.8905%	8.2452%	1.0661%	13.4786%	6.5804%	1.7347%	0.5880%
52	Gross Transmission Plant	100,000%	38.0545%	10.5452%	0.8168%	18.8905%	8.2452%	1.0661%	13.4786%	6.5804%	1.7347%	0.5880%
23	Gross Distribution Plant	100.000%	59.6157%	14.0273%	0.8733%	9.0153%	2.7587%	0.4046%	4.4084%	0.0012%	0,000%	8.8955%
24	Total Prod. Ttrans., Distrib Plant	100.000%	44.6285%	11.6069%	0.8341%	15.8796%	6.5723%	0.8644%	10.7131%	4.5744%	1.2058%	3.1210%
55	Dist. Overhead Lines Gross Plant	100.0000%	61.5235%	14.2522%	1.1061%	11.2058%	3.8207%	0.5295%	6.1330%	0.0000%	%000000	1.4291%
98	Gross Intangible Plant	100.000%	44.6285%	11.6069%	0.8341%	15.8796%	6.5723%	0.8644%	10.7131%	4.5744%	1.2058%	3.1210%
2	Gross Total Plant in Service	100.0000%	44.8601%	11.6120%	0.8341%	15.8651%	6.5643%	0.8634%	10.6998%	4.5648%	1.2033%	3,1331%
38	Dist. Underground Lines Gross Plant	100.0000%	56.0763%	14.0598%	1.1117%	12.6229%	5.4698%	0.5941%	8.7909%	0.0000%	0.0000%	1.2746%
en de	Gross General Flam	100.000%	%C829.44	11.6069%	0.8341%	15.8796%	6.5723%	0.8644%	10.7131%	4.5744%	1.2058%	3.1210%
3 13	Lauvi Avus uu 1-001 Anna Arris 511-514	100.000%	35 967.4%	10.535376	0.7600176	19.0100%	0.3000% 8 RANEW	1.0/9/%	13.6020%	0,02/0%	1./461%	0.0101% 0.7005%
62	Labor Accts 536-540	100.0000%	38.0545%	10.5452%	0.8168%	18.8905%	8.2452%	1.0661%	13.4786%	0.3040 %	% cono.1	0.5880%
6 3	Labor Accts 542-545	100.0000%	37.0360%	10.5286%	0.7898%	19.1930%	8.3990%	1.0990%	13.7771%	6.7676%	1.7670%	0.6430%
64	Labor Accts 581-588	100.000%	60.4081%	19.5834%	0.7294%	9.5468%	2.6235%	0.3291%	4.0226%	0.0094%	0.0003%	2.7475%
65	Labor Accts 591-598	100.000%	60.6840%	14.2058%	1.1181%	11.4536%	4.0300%	0.5418%	6.4708%	-0.0000%	-0.0000%	1.4960%
99	Labor Accts 500-916	100.000%	48.9591%	13.0601%	0.7570%	15.9434%	5.6702%	0.7569%	9.0640%	3.8446%	1.0023%	0.9424%
67	O&M less Purchased Power	100.0000%	40.5593%	11.3485%	0.7574%	18.2909%	7.5368%	1.0031%	12.3135%	5.8654%	1.5172%	0.8079%
8	Dist. Lines Gross Plant	100.0000%	60.3979%	14.2124%	1.1073%	11.4986%	4.1615%	0.5428%	6.6822%	0.0000%	0.000%	1.3972%
69 40	Rate Base	100.0000%	42.9494%	11.3457%	0.8278%	16.6603%	6.9966%	0.9161%	11.4146%	5.0878%	1.3404%	2.4610%
5 2	Gross Transformer Plant	100.0000%	75.5481%	14.8056%	0.8268%	6.3003%	0.0000%	0.2852%	0.0000%	0.0000%	0.0000%	2.2340%
62	Upreciauon Expense	100.000%	44.2411%	11.5443%	0.8330%	16.05/0%	6.6709%	0.8763%	10.8760%	4.6926%	1.2370%	2.9717%
1. 22	Distribution O&M	100.000%	40.000% RN 7011%	13.00347a 16 8.456%	%16010	10 5068%	3,7229%	0.4375%	3/12/1420 5 242002	3.01/6%	0.0004%	1.0182%
74	Sales Revenue	100.0000%	38.1726%	12.9388%	0.7123%	18.8909%	7.8315%	0.9543%	11.6626%	5.9348%	1.1749%	1.7273%
75	Distribution Poles, Lines, Transform & Services	100.0000%	66.4191%	14.4973%	0.9421%	9.2433%	2.6718%	0.4277%	4,2902%	0.0000%	0.0000%	1.5086%
76	Late Payment Revenue	100.0000%	74.2071%	17.2930%	0.0000%	4.2494%	0.0000%	0.0000%	2.6997%	0.0000%	0.0000%	1.5508%
11	Temperature Normalization Expenses	100.0000%	72.4505%	6.9568%	0.4039%	14.0634%	5.4358%	0.6896%	0.0000%	0.0000%	0.0000%	0.0000%
78	O&M Expenses	100.000%	39.5669%	11.1671%	0.7583%	18.5544%	7.7582%	1.0313%	12.6977%	6.1030%	1.5786%	0.7845%
6/	Steam Production Plant	100.0000%	38.0545%	10.5452%	0.8168%	18.8905%	8.2452%	1.0661%	13.4786%	6.5804%	1.7347%	0.5880%
80	Hydro Production Plant	100.0000%	38.0545%	10.5452%	0.8168%	18.8905%	8.2452%	1.0661%	13.4786%	6.5804%	1.7347%	0.5880%
5 6	Utitler Production Prlam Off-Sustem Salas	700.000%	38.0545% 36.0545%	10.5452%	0.8168%	18.8905%	8.2452%	1.0661%	13.4786%	6.5804%	1.7347%	0.5880%
8	Dist Primary Lines	100.000%	57,4799%	14.1234%	1.0407%	11.9257%	5.1626%	0.5569%	8.2898%	0.0000%	0.0000%	1.4210%
84	Dist Seconary Lines	100.000%	72.5273%	14.5826%	1.3840%	9.7235%	0.0000%	0.4844%	0.0000%	0.0000%	0.0000%	1.2981%
52 I	Dist Transformers	100.000%	75.5481%	14.8056%	0.8268%	6.3003%	0.0000%	0.2852%	0.0000%	0.0000%	%0000.0	2.2340%
86 87												
88												
83												
MEMO	Interruptible Credit Allocator											
92	Production Portion Intendible & General Plant Portion	100.0000%	50.0365% 50.0365%	10.8779%	1.1968%	15.2541%	6.5172% 6.5172%	0.6679%	9.8371%	4.3263%	1.2863%	0.0000%
83	Total Interruptible Credit Allocator	100.0000%	50.0365%	10.8779%	1,1968%	15.2541%	6.5172%	0.6679%	9.8371%	4.3263%	1.2863%	0.0000%
8 R												
MEMO	Off-System Sales Allocator											
	Off-System Sales	100.0000%	38.0545%	10.5452%	0.8168%	18.8905%	8.2452%	1.0661%	13.4786%	6.5804%	1.7347%	0.5880%
	Less. Aujusment to reallocate Experises											

+ Schedule G. Page 17 of 17

Schedule GAW-5

Comparison of Value Line Electric Rates of Return, 2000-2009

Company	Location	Own Gan?	Pct Elec Rev 1/	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 A	WATER
Allegheny Energy	East	NO	100%	13.4%	16.6%	-26.3%	-22.1%	5.0%	8,8%	15.3%	16.3%	13.9%	12.6%	5.3%
Cen, Vermont Pub, Serv.	East	YES	100%	6.9%	5.8%	9.3%	8.1%	5.0% 6.8%	0.5%	10.1%	8.2%	7.3%	7.5%	7.1%
CH Energy Group	East	YES	58%	10.6%	10.2%	5.3% 7.1%	9.1%	8.6%	8.8%	7.9%	8.1%	5.7%	8.1%	8.5%
Consol. Edison	East	NO	64%	10.7%	12.0%	11.3%	9.8%	7,8%	9.7%	9.2%	10.4%	9.5%	8.5%	9.9%
Constellation Energy	East	YES	18%	11.0%	9.2%	9.3%	11.1%	11.7%	12.3%	14.8%	14.7%	2.7%	3.0%	10.0%
Dominion Resources	East	YES	43%	8.0%	9.0%	13.3%	11.8%	12.3%	9.9%	13.1%	14.9%	17.5%	15,5%	12.5%
Duke Energy	East	YES	79%	0.075	5.070	10,070	11.070	11.070	0.010	4.1%	7.2%	6.1%	6.7%	6.0%
Exelon Corp.	East	YES	55%	7.8%	17.2%	20.1%	18.8%	19.5%	23.6%	23.7%	26.9%	24.6%	22.5%	20.5%
FirstEnergy Corp.	East	YES	100%	12.9%	8.9%	10.5%	5.4%	10.6%	10.2%	13.9%	14.6%	16.2%	11.9%	11.5%
FPL Group	East	YES	100%	12.6%	13.0%	10.9%	12.5%	11.8%	10.6%	12.9%	12.2%	14.0%	12.4%	12.3%
Northeast Utilities	East	NO	80%	-1.3%	8.5%	6.3%	6.9%	5.1%	5.1%	4.3%	8.4%	9.6%	9.0%	6.2%
NSTAR	East	NO	84%	13.0%	13.7%	13.8%	13.7%	13.1%	12.8%	13.1%	13,0%	13.3%	13,0%	13.3%
Pepco Holdings	East	YES	51%	9.8%	12.6%	9.2%	7.7%	7.7%	7.7%	7.0%	7.4%	9.5%	5.0%	8.4%
PPL Corp.	East	YES	100%	23.6%	28.2%	21.1%	19.6%	16.3%	16.7%	17.3%	18.2%	18.2%	8.1%	18.7%
Progress Energy	East	YES	100%	6.7%	11.5%	12.1%	10.9%	9.9%	9.0%	6.1%	8.2%	8.9%	9,0%	9.2%
Public Serv. Enterprise	East	NO	66%	19.1%	18.6%	12.1%	15.4%	12.6%	14.2%	13.8%	18.1%	19.0%	18.0%	16.9%
SCANA Corp.	East	YES	51%	10.9%	10.2%	11.6%	12.1%	12.0%	14.2%	10.5%	10.1%	11.4%	10.0%	11.2%
Southern Co.		YES							14.9%					
TECO Energy	East East	YES	100% 66%	12.3% 16.7%	14.0% 15.4%	15.1% 9.9%	14.8% - 0.9%	14.9% 10.7%	14.9%	13.8% 14.1%	14.0% 13.2%	13.1% 8.1%	12.5% 10.3%	13.9% 11.1%
UIL Holdings	East	NO	100%	12.5%		9.9% 9.1%	-0.9%	10.7% 6.7%	13.3% 5.8%	14.1% 9.9%	13.2%	8.1% 10.1%		11.1% 9.2%
Allete	east Centraí	YES	100%	12.3%	11.9%	3.1%	0.0%	6.1% 6.1%	5.8% 11.3%	9.9% 11.6%	10.1% 11.8%	10.1%	9.5% 6.6%	9.2% 9.6%
Allant Energy	Central	YES	72%	9.6%	9.8%	5.8%	6.7%	8.2%	13.1%	9.1%	11.8%	9.3%	6.8%	9.0%
Amer, Electric Power	Central	NO	100%	3.7%	9.8% 12.8%	13.7%	12.4%	8.2% 12.2%	11.3%	9.1% 12.0%		5.5% 11.3%		
		YES	83%						9.7%		11.4%	8.7%	10.4%	11.1%
Ameren Corp.	Central	NO		14.3%	14.0%	9.9%	11.6%	9.1%		8.1%	9.2%		7.8%	10.2%
CenterPoint Energy Cleco Corp.	Central	YES	21% 100%	14.9%	6,6%	27.2% 13.1%	23.8% 12.5%	18.6% 11.9%	17.4% 10.7%	27.8% 8.3%	22.0% 7.8%	21.9% 9.6%	14.1%	19.9%
CMS Energy Corp.	Central Central	YES	55%	14.9%	14.6% 8,8%	-38.0%	-2.9%	6,2%	9.9%	6.4%	7.8%	9.8% 11.7%	9.5% 8.5%	11.3%
DPL Inc.		NO	100%	22.9%	8,8% 27.8%	-38.0%	-2.9% 14.6%	20.7%	9.9% 11.9%	0.4% 17.5%	24.2%	25.0%	20.7%	3.0%
DFL IIIC. DTE Energy	Central	YES							11.9%			25.0% 7.4%		19.6%
Empire Dist, Elec.	Central Central	YES	59% 87%	11.7% 9.8%	7.2%	13.8% 7.8%	9.1% 7.8%	8.0% 5.8%	6.0%	7.5% 8.5%	7.7%		8.4%	9.1% 7.0%
Entergy Corp.	Central	YES	87% 73%	9.7%	3.9% 9.3%	10.9%	7.8% 9.8%	5.8% 11.0%	11,9%	8.3% 13.8%	6.2%	7.5% 15.3%	6.9%	
· · ·											14.4%		14.3%	12.0%
Great Plains Energy	Central	YES YES	100%	13,8%	12.6%	13.6%	16.4%	15.5%	13.3% 11.8%	9.4%	10.1%	4.6%	4.8%	11.4%
Integrys Energy ITC Holdings	Central Central	NO	17% 100%	11.9%	10.8%	11.7%	9.1%	14.0% 1.3%	13.2%	9.7% 6.2%	5.5% 13.0%	3.9%	6.1%	9.5%
-				1 3 70/	17.59/	13.89/	11 60/					11.8%	12.9%	9.7%
MGE Energy NiSource Inc.	Central	YES YES	62%	13.7% 5.5%	12.6%	12.8% 9.7%	11.6%	10.0%	9.3% 6.0%	11.3%	11.4%	11.0%	10.2%	11.4%
OGE Energy	Central	YES	18%	5.5% 13.8%	6.8%		9.4%	9.0% 12.3%	12.1%	6.3%	6.1%	7.8%	5.0%	7.2%
Otter Trail Corp	Central Central	NO	100% 100%	15.8%	9.7%	11.4% 14.5%	11.8% 11.7%	9.1%	11.2%	14.1% 10.2%	14.5%	12.2% 5.1%	12.7%	12.5%
Vectren Corp.	Central	NO	25%	14.8% 9.7%	14.9% 8.5%	14.5%	10.4%	9.1%	12.0%	9,3%	10.2% 11.6%	5.1% 9.5%	3.8% 10.5%	10.6%
Westar Energy	Central	YES	100%	9.7% 3.2%	-2.2%	7.3%		9.9% 7.1%	9.5%	9.3%		9.3% 6.2%		10.5%
Wisconsin Energy		YES		5.2% 6.5%	-2.2% 10.6%		10.3%	7.1% 8.8%	9.5% 11.3%	10.7%	9.2%		6.2%	6.7%
Avista	Central West	YES	66% 56%	0.5% 11.1%		12. 6 % 4.5%	11.4% 6.6%	4.7%	5.9%	10.8%	10.9% 4.2%	10.7% 7.4%	10.6%	10.4%
Black Hills	West	YES	56% 41%	19.0%	7.9% 17.2%	4.5%	8.1%	4.7% 7.8%	5.5% 9.5%	8.0% 9.4%	4.2%	0.7%	8.0% 6.5%	6.8% 10.0%
Edison International	West	YES		15,0%					9.5% 16.7%					
El Paso Electric	West	YES	100% 100%	14.6%	13. 6 % 14. 6 %	11.9% 6.3%	13.6% 6.3%	3.5% 6.3%	6.6%	14.0% 10.6%	13.0% 11.2%	12.8% 11.2%	10.5% 9.0%	12.2%
Hawlian Electric	West	YES	100%	9.8%	14.6%	11.3%	10.8%	8.9%	9.7%	9.9%		6.5%		9.7%
DACORP		YES									7.2%		6.0%	9.2%
MDU Resources	West West	NO	100%	16.0% 12.4%	14.4%	7.0%	4.2%	7.2%	6.2%	8.9%	6.8%	7.6%	8.0%	8.6%
	West	YES	5% 94%	12.4% -3.6%	13.3%	10.1% -23.1%	12.6% -9.4%	12.6%	14.5% 4.0%	14.7%	12.8%	13,7%	10.1%	12.7%
NV Energy Inc.				-3.0%	1.8%			4.8%		9.0%	6.6%	6.7%	6.0%	0.3%
G&E Corp	West	YES	77%	44 554	22.9%	-24.9%	18.5%	10.3%	12.3%	12.7%	11.8%	12.6%	11.5%	9.7%
Pinnacle West Capital	West	YES	100%	11.9%	12.5%	8.0%	8.1%	8.0%	6.5%	9.2%	8.5%	6.2%	7.5%	8.6%
NM Resources	West	YES	100%	10.0%	15.4%	6.5%	6.3%	8.0%	8.2%	7.2%	3.5%	0.5%	4.5%	7.0%
Portland General	West	YES	100%	10 001	-		-	7.2%	5.3%	5.8%	11.0%	6.4%	6.5%	7.0%
uget Energy Inc.	West	YES	100%	13.0%	7.7%	7.2%	7.0%	8.1%	7.2%	7.9%	7.3%			8.2%
Sempra Energy	West	NO	60%	17.2%	19.4%	20.4%	16.6%	18.9%	14.4%	14.8%	13.5%	14.0%	13.5%	16.3%
JniSource Energy	West	YES	84%	7.1%	14.3%	7.6%	8.4%	7.9%	7.5%	10.6%	8.5%	2.1%	12.5%	8.7%
Kcel Energy Inc.	West	YES	80%	9.7%	12.6%	3.7%	9.8%	10.0%	9.2%	9.7%	9.1%	9.2%	9.5%	9.3%
Average			76%	11.3%	12.2%	8.4%	9.5%	9.9%	10.4%	11.0%	11.2%	10.3%	9.6%	10.3%

Source: Value Line Investment Analyzer, April 12, 2010 except where otherwise noted. 1/ Source: February 2010 AUS Monthly Utility Reports

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Competitive Fixed Period Electric Residential Rates in Texas 1/

	Customer		Average Cents/kWh	i
Company	Charge		Charge	• • • •
1 Amigo Energy	\$6.95	2a/	10.5	8
2 Texas Power	\$10.00	2b/	10.2	8
3 Champion Energy Services	\$4.95		10.0	7
4 Gexa Energy	\$4.79		10.4	3
5 Cirro Energy	\$9.89		10.43	3
6 Kinetic Energy	\$7.54		10.32	2
7 Simple Power	\$0.00		10.30	D
8 Ambit Energy	\$9.99	2b/	10.7	5
9 StarTex Power	\$4.99	2a/	10.4	7
10 YEP	\$7.95	2b/	10.2	5
11 Brilliant Energy	\$2.15		10.70	C
12 Southwest Power & Light	\$7.95	2b/	10.28	3
13 Dynowatt	\$6.95	2b/	10.18	3
14 APNA Energy	\$6.95		10.9	5
15 Gateway Power Services	\$11.69		11.47	7
16 MX Energy	\$9.90		11.77	7
17 Mega Energy	\$ 0. 00		9.85	5
18 Stream Energy	\$0.00		11.27	7
19 Texpo Energy	\$7.95	2b/	12.97	7
20 Spark Energy	\$0.00		10.22	2
21 TXU Energy	\$5.95		12.02	2
22 Reliant Energy	\$5.00		10.70)
23 CPL Retail Energy	\$4.95		12.90)
24 WTU Energy	\$4.95		10.40)
25 Direct Energy	\$5.00		11.33	3
26 Potentia	\$4.88		10.05	5
27 Tara	\$6.95	2a/	10.98	3
28 Abacus Resources	\$5.95	2a/	10.30)
29 Bounce	\$4.95	2a/	10.40)
30 Frontier	\$4.95		11.75	;
Customer Charges:		_		
No Customer Charge	4			
Waivable Customer Charge	11			
Traditional Customer Charge	15	_		
Total	30	-		
Avg. Non-Waivable Customer Cha	rge:		\$6.24	

Avg. Non-Waivable Customer Charge:

\$6.24

1/ "Fixed Period" means customer enters a contract to not switch

provider for at least a predetermined time period, in this case 12 months.

2a/ Customer charge is waived with a minimum usage of 500kWh.

2b/ Customer charge is waived with a minimum usage of 1000 kWh.

Weighted Cost 2.13% 5.39% 7.51%

Cost

0.0461 10.00%

Kentucky Utilities Residential Customer Charge

	Residential Customer Charge			
		Residential Amount		
Rate Base:				
Gross Plant		05 000 750		
Services		65,820,759 40,516,336		
Meters		40,010,000		
	Kentucky Utilities Residential Customer Charge			
		Residential Amount		
Rate Base:	· · · · · · · · · · · · · · · · · · ·			
Gross Plant				
Services		65,820,759		
Meters		<u>40.516,336</u>		
	otal	106,337,096		
Depreciation F	Reserve			
Operation & Maintenance Expenses Meter Maintenance Expenses Meter Operations Meter Maint. Meter Reading Records & Collections Misc. Customer Accts. Total		(46,561,906)		
Meters Total Net Rate Base Operation & Maintenance Expenses Meter Operations Meter Maint. Meter Reading Records & Collections Misc. Customer Accts. Total		(18,190,035)		
Meters Total Net Rate Base Operation & Maintenance Expenses Meter Operations Meter Maint. Meter Reading Records & Collections Misc. Customer Accts.		(64,751,941)		
Meters Total Net Rate Base Operation & Maintenance Expenses Meter Operations Meter Maint. Meter Reading Records & Collections Misc. Customer Accts.		41,585,155		
Meters Total Net Rate Base Operation & Maintenance Expenses Meter Operations Meter Maint. Meter Reading Records & Collections Misc. Customer Accts.				
Meters Total Net Rate Base Operation & Maintenance Expenses Meter Operations Meter Maint. Meter Reading Records & Collections Misc. Customer Accts. Total		3,858,065		
Services Meters Total Net Rate Base Operation & Maintenance Expenses Meter Operations Meter Maint. Meter Reading Records & Collections Misc. Customer Accts.		0		
Meters Total Net Rate Base Operation & Maintenance Expenses Meter Operations Meter Maint. Meter Reading Records & Collections Misc. Customer Accts.		2,636,804		
Meters Total Net Rate Base Operation & Maintenance Expenses Meter Operations Meter Maint. Meter Reading Records & Collections Misc. Customer Accts.		9,818,212		
Meters Total Net Rate Base Operation & Maintenance Expenses Meter Operations Meter Reading Records & Collections Misc. Customer Accts.		252,292		
Total Net Rate Base Operation & Maintenance Expenses Meter Operations Meter Maint. Meter Reading Records & Collections Misc. Customer Accts.		16,565,373		
Depreciation Expense				
Services		1,309,833		
Meters		713,088		
Тс	otal	2,022,921		
Revenue Requirement				Pct
Interest		884,539	LT- Debt	46.14%
Equity Return		2,239,776	Equirty	53.86%
Income Tax @		1.326.260	Total	100.00%
R	evenue for Return	4,450,575		
Total Customer Revenue Re	equirement	23,038,869		
Number of Bills		5,019,241		
Monthly Cost		\$4.59		

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR AN ADJUTMENT OF BASE RATES

CASE NO. 2009-00549

AFFIDAVIT OF GLENN A. WATKINS

)

Commonwealth of Virginia

Glenn A. Watkins, being first duly sworn, states the following: The prepared Pre-Filed Direct Testimony, and the Schedules and Appendix attached thereto constitute the direct testimony of Affiant in the above-styled case. Affiant states that he would give the answers set forth in the Pre-Filed Direct Testimony if asked the questions propounded therein. Affiant further states that, to the best of his knowledge, his statements made are true and correct. Further affiant saith not.

Glenn A. Watkins

HIMINIMANNIN MINIM

SUBSCRIBED AND SWORN to before me this 19th day of an 2010. ARY PUBLIC

My Commission Expires: 10-13-14 Registration No: 7315144 0.31-1