### **COMMONWEALTH OF KENTUCKY**

### **BEFORE THE PUBLIC SERVICE COMMISSION**

In Re the Matter of:

APPLICATION OF LOUISVILLE GAS	)	
AND ELECTRIC COMPANY FOR AN	)	
ADJUSTMENT OF ITS ELECTRIC AND	)	CASE NO. 2016-00371
GAS RATES AND FOR CERTIFICATES	)	
OF PUBLIC CONVENIENCE AND	)	
NECESSITY	)	

DIRECT TESTIMONY OF WILLIAM STEVEN SEELYE MANAGING PARTNER THE PRIME GROUP, LLC

Filed: November 23, 2016

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### Exhibits

Exhibit WSS-1 – Qualifications Exhibit WSS-2 - Cost Components for Residential Service Rate RS Exhibit WSS-3 - Cost Support for CSR Credits Exhibit WSS-4 – Cost Support for Lighting Rates LS and RLS Exhibit WSS-5 – Cost Support for LED Lighting Rates Exhibit WSS-6 – Cost Support for Redundant Capacity Charge Exhibit WSS-7 – Cost Components for Residential Gas Service Rate RGS Exhibit WSS-8 – Cost Components for As Available Gas Service Rate AAGS Exhibit WSS-9 - Cost Support for Utilization Charge for Daily Imbalances Exhibit WSS-10 – Cost Support for Substitute Gas Sales Service Rate SGSS Exhibit WSS-11 - Cost Support for Local Gas Delivery Service Rate LGDS Exhibit WSS-12 – Cost Support for Pole Attachment Charge Exhibit WSS-13 – Cost Support for Duct Attachment Charge Exhibit WSS-14 – Change in Miscellaneous Revenues for Attachment Charges Exhibit WSS-15 – Cost Support for Unauthorized Reconnection Charge Exhibit WSS-16 – BIP Analysis for Electric COS Exhibit WSS-17 – LOLP Analysis for Electric COS Exhibit WSS-18 – Zero Intercept Overhead Conductor Exhibit WSS-19 – Zero Intercept Underground Conductor Exhibit WSS-20 – Zero Intercept Line Transformers Exhibit WSS-21 – Electric COS Functional Assignment BIP Methodology Exhibit WSS-22 – Electric COS Functional Assignment LOLP Methodology Exhibit WSS-23 – Electric COS Class Allocation BIP Methodology Exhibit WSS-24 – Electric COS Class Allocation LOLP Methodology Exhibit WSS-25 – Gas Transmission Plant Functional Assignment for COS Exhibit WSS-26 – Zero Intercept Distribution Mains Exhibit WSS-27 – Low-, Medium-, and High-Pressure Distribution Mains Exhibit WSS-28 – Gas COS Functional Assignment and Classification Exhibit WSS-29 – Gas COS Class Allocation

Exhibit WSS-30 – Gas COS Storage Allocation

### 1 I. INTRODUCTION

### 2 Q. Please state your name and business address.

A. My name is William Steven Seelye. My business address is 6001 Claymont Village
Drive, Suite 8, Crestwood, Kentucky 40014.

5

### Q. By whom and in what capacity are you employed?

A. I am the managing partner for The Prime Group, LLC, a firm located in Crestwood,
 Kentucky, providing consulting and educational services in the areas of utility
 regulatory analysis, revenue requirement support, cost of service, rate design and
 economic analysis.

### 10 Q. On whose behalf are you testifying in this proceeding?

A. I am testifying on behalf of Louisville Gas and Electric Company ("LG&E" or "the
Company"), which provides both electric and natural gas sales and delivery services
in Kentucky.

14 **Q.** What is the purpose of your testimony?

A. The purpose of my testimony is (i) to describe the proposed allocation of the revenue
increases for LG&E's electric and natural gas operations; (ii) to support LG&E's
proposed rates, and (iii) to sponsor the fully allocated cost of service studies based on
LG&E's embedded cost of providing electric and natural gas service for the fully
forecasted test year, which is the 12 months ending June 30, 2018.

20

### Q. Please summarize your testimony.

A. In developing its proposed rates in this proceeding, LG&E relied heavily on the
 results of the electric and gas cost of service studies. For the most part, the

1 Company's class cost of service studies were prepared using methodologies that have 2 been accepted by the Kentucky Public Service Commission ("Commission") in 3 previous rate cases. In this proceeding, however, LG&E is presenting two versions of 4 the electric cost of service study. In one version, the Base-Intermediate-Peak ("BIP") 5 methodology used in prior cost of service studies for time-differentiating and allocating fixed production costs will be utilized. In the other version, a methodology 6 7 is used to allocate fixed production costs that is more reflective of the way generation 8 resources are planned by the Company. This alternative version allocates costs by 9 weighting hourly class loads by the hourly Loss of Load Probability ("LOLP"), which 10 is a key measure that has been used by LG&E and Kentucky Utilities Company 11 ("KU" or Kentucky Utilities") (collectively, the "Companies") for planning their 12 generation resources for many years. I will present information comparing the results 13 of the LOLP version of the cost of service study to the BIP version that has been used 14 in prior rate cases. The methodology used for the gas cost of service study has also 15 been modified to reflect a refinement in the way that transmission costs are allocated 16 in the study.

The purpose of a class cost of service study is to determine the contribution that each customer class is making towards LG&E's overall rate of return. Rates of return are calculated for each rate class. A class cost of service study is also used as a tool for developing unit charges for electric and gas service. Cost of service is a standard measure of reasonableness for utility rate design.

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In this filing, LG&E is proposing rate design changes to begin to address

- 2 -

1 fundamental changes that are taking place within the electric and gas utility 2 industries. Across the United States, electric utilities are beginning to see competitive 3 pressures from various forms of distributed generation (e.g., solar generation, natural 4 gas generation, and wind generation). As a result of customers installing behind-the-5 meter electric generation, and also customers finding ways to conserve energy or use energy more efficiently, many utilities are experiencing steep declines in their sales 6 7 per customer. Regardless of the environmental benefits that may result from these 8 initiatives, it is important that the utility ensure that the rate design is structured in a 9 way that recovers the actual cost of serving customers who install distributed 10 generation and pursue behind-the-meter energy efficiency measures. With 11 improperly designed rates, it is possible for the utility's other customers (for example, 12 customers who cannot or do not install distributed generation) to be unduly penalized 13 by having costs improperly shifted onto them from customers who install distributed 14 generation or reduce their energy consumption. Therefore, it is important for the 15 utility to design its rates so that the actual cost of providing service is recovered 16 through rates even when customers reduce their energy consumption but still require 17 the same utility infrastructure to serve them. For example, if a customer reduces its 18 energy consumption through the installation of solar generation, but falls back on the 19 utility to deliver power to the customer when the solar generation is not operating, the 20 utility still needs the same distribution infrastructure to serve the customer even 21 though the customer might be using less energy.

22

LG&E is therefore taking some initial steps toward implementing rate changes

- 3 -

1 that will provide appropriate and equitable cost recovery in a changing utility 2 industry. We are proposing to separate out the infrastructure and variable cost 3 components of the energy charge for Residential Service (RS), General Service (GS) 4 and other two-part rates that include only a customer charge and an energy charge. 5 The purpose of this change in the presentation of these rate schedules is to provide more information to customers, stakeholders and employees about which costs are 6 7 avoidable through the installation of distributed generation (i.e., the variable cost 8 component) and which costs are less likely to be avoided (i.e., the fixed cost 9 component). We are also proposing changes to the large customer rates, specifically 10 Time-of-Day Secondary Service (TODS), Time-of-Day Primary Service (TODP), 11 Retail Transmission Service (RTS), and Fluctuating Load Service (FLS), to provide 12 better assurance that the actual costs of transmission and distribution service are 13 recovered from customers that install distributed generation. For the natural gas side 14 of the business, LG&E is proposing a cost-based Substitute Gas Sales Service (SGSS) 15 for customers who are supplied natural gas, methane, native gas, or other gaseous 16 fuels from sources other than LG&E. LG&E is also proposing a Local Gas Delivery 17 Service (LGDS) to allow local gas producers to transport natural gas through LG&E's 18 gas delivery system. I will discuss these changes in greater detail later in my 19 testimony.

## Q. Are you supporting certain information required by Commission Regulations 807 KAR 5:001, Section 16(7) and 16(8)?

22 A. Yes. I am sponsoring the following schedules for the corresponding Filing

- 4 -

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5

2		• Cost of Service Studies Section 16(7)(v) Tab 52
3		• Revenue Summary Section 16(8)(m) Tab 66
4	Q.	How is your testimony organized?
5	A.	My testimony is divided into the following sections: (I) Introduction, (II)
6		Qualifications, (III) Electric Rate Design and the Allocation of the Increase, (IV) Gas
7		Rate Design and the Allocation of the Increase, (V) Increase in Miscellaneous Service
8		Charges, (VI) Electric Cost of Service Study, and (VII) Gas Cost of Service Study.
9		
10	II.	QUALIFICATIONS
11	Q.	Please describe your educational and professional background.
12	A.	I received a Bachelor of Science degree in Mathematics from the University of
13		Louisville in 1979. I have also completed 54 hours of graduate level course work in
14		Industrial Engineering and Physics. From 2014 through 2015 I completed an
15		additional 12 hours of Electrical Engineering coursework at the University of
16		Louisville's Speed School of Engineering (courses in computer design,
17		microcontroller programming, digital signal processing, and computer
18		communications). In addition, from 2012 through 2015, I was an instructor at
19		Louisville's Walden School and a private tutor and instructor in advanced placement
20		calculus, linear algebra, pre-calculus, college algebra and differential equations.
21		Concerning my professional background, from May 1979 until July 1996, I
22		was employed by LG&E. From May 1979 until December, 1990, I held various

1 positions within the Rate Department of LG&E. In December 1990, I became 2 Manager of Rates and Regulatory Analysis. In May 1994, I was given additional 3 responsibilities in the marketing area and was promoted to Manager of Market 4 Management and Rates. I left LG&E in July 1996 to form The Prime Group, LLC, 5 with two other former employees of LG&E. Since leaving LG&E, I have performed or supervised the preparation of cost of service and rate studies for over 150 investor-6 7 owned utilities, rural electric distribution cooperatives, generation and transmission 8 cooperatives, and municipal utilities. Therefore, including my time at LG&E, I have 9 more than 35 years of experience in the utility industry. A more detailed description 10 of my qualifications is included in Exhibit WSS-1.

### 11 Q. Have you ever testified before any state or federal regulatory commissions?

A. Yes. I have testified in over 50 regulatory and court proceedings in 13 different
jurisdictions including the Kentucky Public Service Commission. I have testified on
behalf of both LG&E and KU on numerous occasions. A listing of my testimony in
other proceedings is included in Exhibit WSS-1.

### 16 Q. Please describe your work and testimony experience as they relate to topics

17

### addressed in your testimony?

A. I have performed or supervised the development of cost of service and rate studies for
 over 150 utilities throughout North America. I have also testified on numerous
 occasions regarding the rates proposed by electric, gas and water utilities, including
 LG&E.

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### III. ELECTRIC RATE DESIGN AND THE ALLOCATION OF THE INCREASE

A. ALLOCATION OF THE ELECTRIC REVENUE INCREASE

## 3 Q. Please summarize how LG&E proposes to allocate the electric revenue increase 4 to the classes of service.

5 A. LG&E relied on the results of the electric cost of service studies to determine the 6 revenue increases allocated to the classes of service. Specifically, larger relative 7 portions of the overall revenue increase are allocated to the rate classes with low rates 8 of return on rate base, and smaller relative portions of the overall increase are 9 allocated to the rate classes with high rates of return. In other words, LG&E is 10 proposing higher percentage increases for rate classes that have low rates of return 11 and lower percentage increases for rate classes that have higher rates of return. 12 LG&E is proposing rate increases for all electric rate classes except for Lighting 13 Energy Service. A comparison of the rate of return at current rates and the percentage 14 revenue increase proposed for each rate class is shown below in Table 1:

15

16

	Rate of Retur	n on Rate Base	Revenue
Rate Class	BIP Version	LOLP Version	Increase
Residential Service	2.65%	2.04%	9.54%
General Service	7.34%	8.65%	7.15%
Primary Service-Secondary	8.84%	9.70%	7.05%
Primary Service-Primary	6.49%	7.03%	8.25%
Time-of-Day Secondary Service	11.9 <b>2</b> %	11.90%	6.75%
Time-of-Day Primary Service	4.57%	5.39%	8.22%
Retail Transmission Service	3.48%	4.83%	8.45%
Lighting Energy Service	8.01%	17.55%	0.00%
Traffic Energy Service	7.62%	10.39%	6.76%
Lighting Service & Restricted Lighting Service	5.39%	6.01%	8.21%
Special Contracts	1.94%	2.47%	8.69%
Total All Classes	4.92%	4.92%	8.52%

### Table 1

4 Table 2 shows the same results as Table 1 except that the data is sorted from the 5 highest to the lowest percentage increase:

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	Rate of Retur	n on Rate Base	Revenue	
Rate Class	<b>BIP Version</b>	LOLP Version	Increase	
Residential Service	2.65%	2.04%	9.54%	
Special Contracts	1.94%	2.47%	8.69%	
Retail Transmission Service	3.48%	4.83%	8.45%	
Primary Service-Primary	6.49%	7.03%	8.25%	
Time-of-Day Primary Service	4.57%	5.39%	8.22%	
Lighting Service & Restricted Lighting Service	5.39%	6.01%	8.21%	
General Service	7.34%	8.65%	7.15%	
Primary Service-Secondary	8.84%	9.70%	7.05%	
Traffic Energy Service	7.62%	10.39%	6.76%	
Time-of-Day Secondary Service	11.92%	11.90%	6.75%	
Lighting Energy Service	8.01%	17.55%	0.00%	
Total All Classes	4.92%	4.92%	8.52%	

7 8

### Table 2

9 As illustrated in Table 2, the percentage increases allocated to the rate classes are 10 essentially inversely proportional to the class rate of return. In allocating the revenue

increase to the classes, one of the Company's objectives was to limit the maximum 1 2 increase to any class to approximately one percentage point above the overall 3 increase. This results in the class with the lowest rate of return, particularly in 4 relation to the LOLP version of the cost of service study, receiving a 9.54 percent 5 increase and the class with the highest rate of return receiving a zero percent increase. The decision was made not to assign an increase for any rate class with a rate of 6 7 return exceeding 15 percent. All other rate classes with a rate of return under 15 8 percent were allocated a rate increase within a bandwidth of approximately 1 to 1.75 9 percentage points of the average increase.

10 **Q.** Are there any rate classes that are not shown on the above table?

- A. Yes. Residential Time of Day Service (RTOD) is a small rate class currently serving
  only 50 customers. This rate class was included with Rate RS in the cost of service
  study. LG&E is proposing an increase of 9.53 percent for this rate class. Rate FLS is
  also not included in the above table because no customers are currently served under
  the rate schedule.
- Q. Are classes with the higher rates of return subsidizing classes with low rates of
   return?
- A. Yes, from a cost of service perspective, they are. Of course, cost of service is just one
  factor that must be considered. Economic factors such as job creation and retention
  are also important considerations.
- 21 Q. Is LG&E proposing to eliminate all subsidies in this proceeding?
- 22 A. No. LG&E's objective is to eliminate subsidies gradually over time. While LG&E

- 9 -

1		does want to address the issue of subsidies, the Company proposes to do so in a
2		manner that doesn't create unduly large increases for any one major rate class.
3	Q.	Have you prepared schedules showing the proposed revenue increase for each
4		standard rate schedule?
5	A.	Yes. The revenue increase for each rate class is shown on Schedule M-2.1-E of
6		Section 16(8)(m) of the Filing Requirements. The detailed billing calculations for
7		each rate schedule are shown on Schedule M-2.3-E. The proposed unit charges for
8		each rate schedule are shown on Schedule M-2.3-E.
9		
10		B. RESIDENTIAL SERVICE (RS)
11	Q.	Please provide a brief description of Rate RS.
12	A.	Rate RS is the standard electric rate schedule available to single-family residential
13		service. Approximately 364,000 residential customers are served under this rate
14		schedule. Rate RS has a two-part rate structure that includes a Basic Service Charge
15		and an Energy Charge.
16	Q.	What are the charges that LG&E is proposing for Rate RS?
17	A.	LG&E is proposing to <i>increase</i> the Basic Service Charge from \$10.75 per month to
18		\$22.00 per month. The Company is proposing to <i>decrease</i> the energy charge from
19		\$0.08639 per kWh to \$0.08471 per kWh.
20	Q.	Is the Company proposing any changes in the presentation of the charges for
21		Rate RS?
22	A.	Yes, LG&E is proposing that the energy charge be broken down into a variable cost

component (Variable Energy Charge) and a fixed cost component (Infrastructure
 Energy Charge). The Variable Energy Charge is \$0.03681 per kWh and the
 Infrastructure Energy Charge is \$0.04790 per kWh. These charges would also apply
 to Volunteer Fire Department Service (Rate VFD).

5

Q.

### Why is the Company proposing this change?

6 The purpose of showing the energy charge as consisting of both a variable cost A. 7 component and a fixed cost component is solely educational and informational at this 8 point in time. The Company wants customers, stakeholders and employees to be 9 aware that two types of costs are included in the energy charge for Rate RS and other 10 rates that have a two-part rate structure consisting of a Basic Service Charge and an 11 Energy Charge. The energy cost component consists of costs, such as fuel expenses and variable operation and maintenance expenses, that vary directly with the kWh 12 13 usage of customers. The fixed cost component consists of demand-related costs that 14 do not vary directly with energy usage, such as depreciation expenses, return, taxes, 15 and fixed operation and maintenance expenses related to utility infrastructure. It is 16 important for customers, stakeholders and employees to understand that not all costs 17 are automatically reduced when customers use less energy. For example, the fixed 18 costs associated with poles, transformers, conductors, power plants, office buildings, 19 etc., are not automatically reduced when consumers reduce their energy usage. As 20 greater emphasis is placed on distributed generation and energy conservation in our 21 society, it is important for customers, stakeholders and utility employees to 22 understand the distinction between fixed and variable costs.

Q. What is the breakdown of total costs among these three cost components for
 2 Rate RS?

A. The following table shows how the cost of providing service to customers under Rate
RS is broken down between customer-related fixed costs, demand-related fixed costs,
and energy-related variable costs:

6

Cost Component	Percentage of Cost
Customer-Related Fixed Costs	22.9%
Demand-Related Fixed Costs (Infrastructure Demand Costs)	40.6%
Energy-Related Variable Costs	36.5%

### Table 3

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### 10 Q. How are these costs currently recovered from Rate RS customers?

A. Rate RS, as well as a number of other LG&E rate schedules that serve smaller
commercial and industrial customers (for example Rate GS), are currently structured
as a *two-part rate* consisting of a customer charge (Basic Service Charge) and an
energy charge. The Basic Service Charge is billed as a flat monthly charge per
customer, and the energy charge is a variable charge billed on a cents-per-kWh basis.
Under a two-part rate design, all *three cost components* (customer costs, demand

1 costs and energy costs) are recovered through two rate components (customer charge 2 and energy charge). Unlike the three- and multi-part rates that are used for LG&E's 3 larger customers, the two-part rate for Rate RS does not utilize a demand charge. 4 Therefore, demand costs (costs associated with transformers, overhead and 5 underground conductor, transmission lines, and generation capacity) must be 6 recovered through either the customer charge or the energy charge. For Rate RS, all 7 demand costs and a portion of the customer costs are currently being recovered 8 through the energy charge. The following table compares the percentage of costs 9 broken down by component (customer cost, demand cost, and energy cost) to the 10 percentage of recovery through the rate components (customer charge and energy 11 charge):

12

Component	Percentage of Cost	Rate Design
Customer	22.9%	11.5%
Demand	40.6%	0.0%
Energy	36.5%	88.5%

13

- 14
- 15

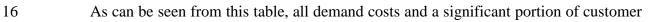


Table 4

1

costs are currently recovered through a variable energy charge.

2 **O**.

### What are three- and multi-part rate designs?

3 A. A *three-part rate* is a rate structure that includes a customer charge, energy charge 4 and demand charge. LG&E's rate for medium commercial and industrial customers 5 (Rate PS) is a three-part rate consisting of a customer charge, energy charge and demand charge. The rates for large commercial and industrial customers (Rate 6 7 TODS, TODP, RTS, and FLS) are structured as a multi-part rate consisting of a 8 customer charge, energy charge and multi-part demand charge that is unbundled 9 between production fixed cost components and transmission/distribution fixed cost 10 components. The reason that a two-part rate structure traditionally has been used in 11 the industry for residential and small commercial and industrial accounts is that the 12 cost of the metering technology necessary to bill a three- or multi-part rate for small 13 customers has been prohibitive. This is changing in the industry. As utilities install 14 advanced metering technology for all types of customers, it becomes more feasible to 15 use three- or multi-part rates for residential and general service (small commercial 16 and small industrial) customers.

#### 17 Does recovering fixed customer and demand costs through a variable energy **O**. 18 charge create problems?

19 A. Yes, it certainly does. The Company must install generation, transmission and 20 distribution infrastructure to serve customers. The costs associated with this 21 infrastructure are fixed. As explained earlier, some of these fixed costs are demand-22 related and are thus related to utility infrastructure that is sized to meet maximum

1 loads that customers place on the system, while other fixed costs are customer-related 2 and are thus related to the number of customers that the utility serves. These fixed 3 costs typically will not change if a customer uses more energy or if a customer uses 4 less energy. For example, once the Company installs a distribution line, transformer, 5 service line, and meter to serve a customer, the operation and maintenance expenses, 6 depreciation expenses, property taxes, interest expenses, and other such costs are not 7 decreased if a customer uses less energy. Once the facilities are installed they are 8 invariant to customer usage and are therefore fixed. If the costs are improperly 9 recovered through a volumetric charge rather than a fixed charge, then when a 10 customer uses less energy these fixed costs will not be recovered from the customer, 11 and those costs must be recovered from other customers. This is particularly 12 problematic if a customer reduces energy consumption by installing distributed 13 generation technology such as solar panels or a wind turbine but falls back on the 14 utility when sunlight is unavailable or when the wind isn't blowing. In those 15 instances, the customer will have reduced its energy usage with distributed generation 16 but will still require the same generation, transmission and distribution capacity to 17 meet its demand requirements. The customer will have reduced the billing of fixed 18 costs collected through the energy charge but will not have caused the utility to 19 reduce its fixed costs. In those instances, the fixed costs are thus shifted to customers 20 who have not installed distributed generation technology.

21

### Q. At this point, has distributed generation created problems for LG&E?

22 A. Nothing significant. However, the installation of customer-owned distributed

- 15 -

1 generation is already creating problems with the erosion of fixed cost recovery for 2 utilities in western states, such as New Mexico, Arizona, Nevada, and Colorado. At 3 this point, it is important for LG&E to be aware of what is going on in other 4 jurisdictions and to begin educating its customers, stakeholders and employees about 5 the kinds of costs that are fixed and those that are variable and thus avoidable. In the short term, only variable costs are avoidable as a result of self-generation and 6 7 conservation efforts by consumers. But even if distributed generation never becomes 8 a major factor on LG&E's system, the changes that LG&E is proposing are still 9 beneficial because the Company is moving toward a more cost-based rate structure. 10 Thus, LG&E's rates provide for a more fair and equitable recovery of costs from 11 customers.

# Q. With the emergence of customer-owned distributed generation, what ratemaking frameworks are other utilities and commissions exploring to ensure that costs are fairly and equitably recovered from customers?

15 A. They are looking into a number of options. In a recent rate case in New Mexico for 16 which I was a witness, the commission staff proposed a rate design that would insure 17 that all production, transmission and distribution fixed costs would be recovered fully 18 from customers with distributed generation. Other utilities are considering the 19 implementation of three- and multi-part rates for residential and small commercial 20 and industrial customers. Under some of the approaches being adopted by utilities, 21 residential customers would be billed under a rate that includes one or more types of 22 demand charges; for example, the residential rate could include a demand charge that is billed on the basis of the customer's maximum monthly demand (that recovers
transmission and distribution fixed costs) and a demand charge billed on the basis of
the customer's demand determined at the time of the utility's system peak (coincident
peak demand) (that recovers generation fixed costs.) Ultimately, rates that make use
of multi-part rate structures allow utilities to price electric service in a more costbased manner, thus greatly reducing, if not eliminating, intra-class subsidies.

7 Some utilities are also considering the use of straight-fixed variable ("SFV") 8 rate designs that would collect all transmission and distribution costs through a 9 monthly customer charge. An SFV rate is a rate design in which all the utility's fixed 10 costs, or fixed transmission and distribution costs, would be recovered through a flat 11 monthly charge, such as a customer charge. SFV rate designs have been used 12 extensively in the natural gas industry to deal with declining usage, downward 13 spiraling margins, and the equitable recovery of fixed costs. An SFV rate design 14 would not only help protect the utility against lost revenue due to energy conservation 15 and the installation of distributed generation but it would also ensure that fixed costs 16 are fairly and reasonably distributed. Only the utility's avoidable costs would be 17 recovered through an energy charge, specifically, the utility's variable energy costs. 18 All fixed costs would be recovered through the customer charge or other fixed charge, 19 thus fully ensuring the fixed costs are inappropriately shifted onto customers that do 20 not implement distributed generation.

21 Other utilities are proposing revenue decoupling mechanisms to allow the 22 utility to encourage the introduction of behind-the-meter distributed generation

- 17 -

1 technologies without resulting in an erosion of fixed cost recovery. Revenue 2 decoupling is designed to decouple the link between energy usage and the amount of 3 net revenues collected by the utility. It is generally implemented as a rate adjustment 4 mechanism that operates with annual surcharges or surcredits. With decoupling, the 5 annual amount of net revenues, or fixed cost revenues, (total revenues less variable energy expenses) for a rate class would be compared to the fixed-cost revenue 6 7 requirement determined from the utility's rate case for that rate class, as adjusted to 8 reflect increases or decreases in the number of customers served. If the net revenues 9 collected from the customer class for a 12-month period are less than the fixed-cost 10 revenue requirement for the customer class determined from the rate case (as adjusted 11 for changes in the number of customers served) then a surcharge is calculated based 12 on the deficiency and then applied to kWh sales in a subsequent 12-month period. 13 Likewise, if the net revenues collected from the customer class for a 12-month period 14 are greater than the fixed cost revenue requirement for the customer class determined 15 from the rate case (again, as adjusted for changes in the number of customers served) 16 then a surcredit is calculated based on the excess revenues and applied sales in a 17 subsequent 12-month period. Since decoupling allows the utility to collect net 18 revenues equivalent to the fixed-cost revenue requirement from its last case, the 19 utility would be protected against the loss of revenues due to the adoption of 20 distributed generation technologies by customers. Decoupling and other lost revenue 21 mechanisms have been implemented by several utilities (including LG&E in the past) 22 in conjunction with energy conservation and demand-side management programs.

1		Decoupling is often identified as a way to align the interests of the utility and
2		customers in the adoption of energy saving technologies.
3	Q.	Are these options that LG&E and KU should be evaluating?
4	А.	Yes. It is important for the Companies to continue to monitor developments in the
5		industry. But at this point, breaking out the energy charge in the Company's two-part
6		rates into fixed and variable cost components is a good first step toward educating
7		customers, stakeholders and employees about what makes up the cost of providing
8		service to customers.
9	Q.	What is the basis for the proposed increase in the Basic Service Charge for Rate
10		RS?
11	А.	The Company is proposing a cost-based Basic Service Charge that reflects the
12		customer-related costs from the Company's cost of service study. As will be
13		explained in greater detail in the portion of my testimony dealing with the electric
14		cost of service study, the methodology that is used to classify costs as customer
15		related corresponds to the methodology that has been accepted by the Commission in
16		the past. The methodology for classifying costs as customer-related also corresponds
17		to one of the standard methodologies set forth in the Electric Utility Cost Allocation
18		Manual published by the National Association of Utility Regulatory Commissioners
19		("NARUC").
20	Q.	Have you prepared an exhibit showing the calculation of the cost components for
21		Rate RS?
22	٨	West Frankiki (WCC 2 shares the selected strength and the senit sectors of the senit sectors of the sector sector sectors of the sector sector sector sectors of the sector sectors of the sector sector sector sectors of the sector sector sector sectors of the sector secto

22 A. Yes. Exhibit WSS-2 shows the calculation of the unit customer cost, demand related

1 cost, and energy costs from the BIP version of the cost of service study. From this 2 calculation, the customer cost is \$22.04 per customer per month; the demand-related 3 cost is \$0.04094/kWh; and the energy cost is \$0.03681/kWh. In the proposed rate, 4 LG&E is proposing a Basic Service Charge of \$22.00 which is slightly below the unit 5 cost from the cost of service study. The small difference is recovered through the Infrastructure Energy Charge which LG&E is proposing to be \$0.04790/kWh. The 6 7 Company is proposing a Variable Energy Charge of \$0.03681/kWh, which is the 8 same as calculated from the cost of service study.

9

Q.

### Why is the Basic Service Charge rounded?

10 A. The Basic Service Charge is rounded to keep the charge as simple and easy to use as
possible. The Companies are also proposing that the charge be the same for both
LG&E and KU.

### 13 Q. Please explain the costs that are recovered through the Basic Service Charge.

14 A. The Basic Service Charge recovers the minimum system that each customer must 15 have in place to access the electric grid. The customer charge also recovers the cost 16 of operating and maintaining this minimum system as well as other costs not related 17 to customer usage, such as meter reading, billing and customer service costs. The 18 minimum system comprises the meter, service drop from the transformer, the 19 transformer, the minimum size of wire, and poles extending to the distribution 20 substation that is necessary to provide a customer with access to the electric grid. 21 Once the cost of this minimum system is determined using the zero-intercept 22 methodology (discussed later in my testimony), it can be allocated to each customer.

1

Q.

### What other costs need to be recovered from customers?

2 A. Customers often need more equipment than the minimum system in order to receive 3 adequate service. The cost of this equipment above the minimum is related to the 4 customer's usage level and is a demand-related fixed cost that is recovered through 5 either a demand or energy charge. A cost of service study is performed for the purpose of allocating costs as accurately as possible based on cost causation. In a 6 7 cost of service study, it is important to distinguish the distribution system costs 8 related to demand from the distribution system costs that are related to the minimum 9 system which are not related to demand, as discussed in the NARUC Electric Utility 10 Cost Allocation Manual. As discussed earlier, the Company must install the 11 minimum amount of equipment to provide customers with access to the electric grid. 12 This minimum amount of equipment is not related to the volume of electricity used 13 by the customer, and each customer must have that minimum amount of equipment in 14 place to obtain electric service. These non-volumetric fixed distribution costs are 15 associated with serving the customer and therefore should be borne by the customer 16 through a fixed customer charge regardless of usage. The remainder of the 17 distribution costs, which are related to installed capacity, are classified as demand-18 related and are collected through a kWh energy charge for Rate RS or through a kW 19 charge for customer classes billed under a three- or multi-part rate that has a demand 20 charge. This split of distribution system costs between volumetric and fixed assures 21 that customers only have to pay for what they are actually using, namely the basic 22 minimum system that all customers require plus as much additional equipment as

1 required to meet their needs.

## Q. Does the current Basic Service Charge of \$10.75 recover all LG&E's customer related costs for Rate RS?

4 A. No. The current Basic Charge of \$10.75 per customer per month does not recover all of 5 the customer-related fixed costs of \$22.04. Based on Exhibit WSS-2, there are \$11.29 in customer-related fixed costs per customer per month (calculated as 22.04 - 10.75 =6 7 \$11.29) that are not being collected through the Basic Service Charge. When this under-8 recovery of \$11.29 per customer per month is multiplied by the billing units of 9 4,368,714 customer months for Rate RS during the test year, the result is \$49,322,781 in 10 fixed customer-related costs that are not being recovered through the Basic Service 11 Charge under the current rate design. When these customer charge fixed costs are 12 recovered through the Energy Charge instead, the result is about 1.2 cents per kWh of non-volumetric fixed cost collected through the Energy Charge (calculated as 13 14 49,322,781/4,179,523,067 kWh = 0.012/kWh). Thus, the current Basic Service 15 Charge is \$11.29 per customer per month too low and the Energy Charge is 1.2 cents per 16 kWh too high based on data from the cost of service study. This recovery of non-17 volumetric fixed costs through the energy charge assessed on a kWh basis results in 18 intra-class subsidies and in unrecovered fixed costs if kWh usage declines due to energy 19 efficiency, conservation or mild weather.

20

### 0 Q. Will LG&E's proposed residential rate help to eliminate subsidies?

A. Yes. There are two types of subsidies that need to be considered – inter-class subsidies
and intra-class subsidies. The term *"inter-class subsidies"* refers to subsidies that are

provided from or to one class of customers to or from another class of customers, and the "*intra-class subsidies*" refers to subsidies that are provided from or to customers within the same rate class. LG&E's proposed rates are designed to make progress towards reducing both *inter-* and *intra-class* rate subsidies. As will be discussed, the apportionment of the total revenue increase to the customers was developed in such a manner as to provide a reduction in *inter-class subsidies*.

7 The rate making principle to follow to avoid *intra-class subsidies* is that fixed 8 costs should be recovered through fixed charges (such as the customer charge and 9 demand charge), and variable costs should be recovered through variable charges (such 10 as the energy charge and the fuel adjustment charge). If fixed costs are recovered 11 through variable charges, such as the energy charge assessed on a kWh basis, each kWh 12 contains a component of fixed costs and customers using more energy than the average 13 customer in the class are paying more than their fair share of the utility's fixed costs, 14 while customers using less energy than the average customer in the class are paying less 15 than their fair share of the utility's fixed costs. These fixed costs should be collected 16 through the billing units associated with the appropriate cost driver, and energy usage 17 clearly is not the correct cost driver for collecting fixed costs.

18 The collection of fixed costs through the energy charge typically results in 19 customers with above-average usage subsidizing customers with below-average usage. 20 In order to eliminate this source of intra-class subsidies, LG&E proposes a rate design 21 that more closely follows the ratemaking principle of recovering fixed costs through

1	fixed	charges	and	variable	costs	through	variable	charges	than	does	its	current	rate
2	desig	1.											

Increasing the Basic Service Charge will eliminate subsidies by bringing the charges toward the actual cost of providing service. Increasing the Basic Service Charge from \$10.75 to \$22.00 will eliminate subsidies that high usage customers are currently providing low usage customers.

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### C. RESIDENTIAL TIME-OF-DAY ENERGY AND DEMAND SERVICES

9 Q. Please provide a brief description of LG&E's residential time-of-day rates.

A. LG&E offers two time-of-day rates, RTOD-Energy and RTOD-Demand. Rate
RTOD-Energy is a time-of-day rate that includes a time differentiated energy charge.
Under the rate, customers are charged a significantly lower energy charge for offpeak usage. There are approximately 50 customers currently taking service under
RTOD-Energy. The Company is not proposing any structural changes to Rate
RTOD-Energy.

16Rate RTOD-Demand is a time-of-day rate that includes a flat energy charge17but a time differentiated demand charge. There are currently no customers taking18service under RTOD-Demand. LG&E is proposing structural changes to Rate19RTOD-Demand to more accurately reflect costs and thus encourage customers to sign20up for the rate.

### 21 Q. What are the charges that LG&E is proposing for Rate RTOD-Energy?

A. LG&E is proposing to *increase* the Basic Service Charge from \$10.75 per month to

- 24 -

\$22.00 per month and to *decrease* the off-peak energy charge from \$0.06128 per
kWh to \$0.05850 per kWh. The Company is proposing to increase the Basic Service
Charge to the same level as being proposed for Rate RS. The off-peak energy charge
is being reduced to a level that yields a revenue increase for Rate RTOD-Energy that
is approximately equal to the percentage increase for Rate RS.

### 6 (

### Q. What structural changes is LG&E proposing for Rate RTOD-Demand?

7 A. LG&E is proposing to eliminate the off-peak demand charge and replace it with a 8 base demand charge that is applied to the customer's maximum usage whenever it 9 occurs. This is the same structure that has been used for decades for LG&E's large 10 customer rates and seems to operate effectively. Using a base demand charge rather 11 than an off-peak demand charge prevents customers from being penalized for 12 improvements in load factor. LG&E is proposing to increase the Basic Service 13 Charge from \$10.75 per month to \$22.00 per month and to *decrease* the off-peak 14 energy charge from \$0.04565 per kWh to \$0.03681 per kWh. The Company is proposing to replace the demand charge for off peak hours of \$3.25 per kW with a 15 demand charge for all hours of \$3.51 per kW, and to decrease the demand charge for 16 17 on peak hours from \$12.38 per kW to \$7.68 per kW.

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### **D. GENERAL SERVICE (GS)**

### 20 Q. Please provide a brief description of Rate GS.

A. Rate GS is the standard electric rate schedule available to small commercial and
 industrial customers served at secondary voltages (available voltages *less than*

2,400/4,160Y volts). The rate schedule is limited to customers whose 12-month
 average monthly demands do not exceed 50 kW. Approximately 45,000 small
 commercial and industrial customers are served under this rate schedule. Rate GS has
 a two-part rate structure that includes a Basic Service Charge and an Energy Charge.

### 5 Q. What are the charges that LG&E is proposing for Rate GS?

A. LG&E is proposing to increase the Basic Service Charge for Rate GS from \$25.00
per month to \$31.50 per month for single-phase service and from \$40.00 to \$50.40
per month for three-phase service. The Company is proposing to increase the energy
charge from \$0.09650 per kWh to \$0.10230 per kWh. As with Rate RS, the energy
charge for Rate GS will be broken down into Variable Energy Charge and
Infrastructure Energy Charge. The Variable Energy Charge is \$0.03721 per kWh and
the Infrastructure Energy Charge is \$0.06509 per kWh.

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### **E. POWER SERVICE (PS)**

### 15 Q. What are the charges that LG&E is proposing for PS?

A. PS is a rate available for large commercial and industrial customers served at
secondary voltages (available voltages *less than* 2,400/4,160Y volts) whose 12-month
average loads exceed 50 kW but do not exceed 250 kW and for large commercial and
industrial customers served at primary voltages (2,400/4,160Y volts, 7,200/12,470Y
volts, or 34,500 volts) whose 12-month average do not exceed 250 kW. LG&E is not
proposing an increase to Basic Service Charge for customers served at secondary
voltages. Therefore, the Basic Service will remain at \$90 per customer per month for

secondary voltage customers. The Company is proposing to increase the Basic 1 2 Service Charge from \$200.00 to \$240.00 per customer per month for customers 3 served at primary voltages. The Company is not proposing to change the Energy 4 Charge for either secondary or primary voltage customers. Thus the energy charge 5 will remain at \$0.04071 per kWh for secondary voltage service and at \$0.03925 per kWh for primary voltage service. For secondary voltage service, the Company is 6 7 proposing to increase the Summer Demand Charge from \$18.40 to \$20.93/kW/Mo 8 and to increase the Winter Demand Charge from \$15.99 to \$18.19/kW/Mo. For 9 primary voltage service, the Company is proposing to increase the Summer Demand 10 Charge from \$15.92 to \$18.64/kW/Mo and to increase the Winter Demand Charge 11 from \$13.63 to \$15.96/kW/Mo.

Q. In its Order in Case No. 2015-00417 dated June 29, 2016, the Commission
ordered KU to include in its next application for a general adjustment in rates
testimony in support of the monthly billing demand provisions of Rate PS. Will
you be the witness addressing this issue?

A. Yes. The Commission's Order in Case No. 2015-00417 related to a complaint filed
concerning the determination of billing demand in Rate PS for Kentucky Utilities.
However, because Rate PS for LG&E has the same rate structure and provisions for
the determination of the billing demand as Rate PS for KU, it is appropriate to
address the issue in the LG&E proceeding as well.

21 Q. How is the billing demand determined under Rate PS?

22 A. For Rate PS, the monthly billing demand is determined as the greater of the

- 27 -

1 following:

2		a) the maximum measured load in the current billing period but not less than
3		50 kW for secondary service or 25 kW for primary service, or
4		b) a minimum of 50% of the highest measured demand in the preceding
5		eleven (11) monthly billing periods, or
6		c) a minimum of 60% of the contract capacity based on the maximum load
7		expected on the system or on facilities specified by Customer.
8	Q.	Is this a standard provision in the electric utility industry?
9	A.	Yes. It is common for utilities to determine billing demands on the basis of a
10		minimum demand (as in provisions (a) and (c) as shown above) or based on a
11		percentage of the highest demands during a previous 11-month period (as in provision
12		(b) as shown above) or both. Determining billing demands on the basis of a
13		percentage of the highest demand during a previous 11-month or other period is
14		referred to as a "demand ratchet" in the electric utility industry, and is a standard
15		practice in the industry. In a standard treatise on electric utility ratemaking,
16		Lawrence J. Vogt, Electricity Pricing: Engineering Principles and Methodologies
17		(CRC Press: 2009), the author states:
18 19 20 21 22 23 24		A <i>demand ratchet</i> processes a customer's metered maximum demand for the prior eleven months by applying a specified percentage to those demands in all or a portion of those months and then selects the highest resulting calculated demand as the current month's billing demand – if it exceeds the current month's maximum demand. ( <i>Id.</i> , at pp. 312.)
25		Not only are demand ratchets standard provisions in the industry, but the use of a

1 demand ratchet percentage of 50% or greater is also common.

### 2 **O**. Do other utilities in Kentucky, Indiana, and Ohio have demand ratchets? 3 A. Yes. The medium and large power tariffs of the major utilities in the region use some 4 form of a demand ratchet. Below is a summary of the ratchets used by investor-5 owned utilities in Kentucky, Indiana, and Ohio: For Kentucky Power Company's Medium General Service 6 i) 7 Tariff M.G.S., the monthly billing demand is the maximum of (a) the 8 minimum billing demand of 6 kW or (b) 60% of the greater of (1) the 9 customer's contract capacity in excess of 100 kW or (2) the customer's highest previously established monthly billing demand during the past 11 10 11 months in excess of 100 kW. 12 For Duke Energy Kentucky's and Duke Energy Ohio's Rate ii) 13 DS Service at Secondary Voltage, the billing demand is the higher of (a) 85% 14 of the highest monthly kW demand established in the summer period and effective for the next succeeding 11 months or (b) 1 kW for single phase 15 16 secondary voltage service and 5 kW for three-phase secondary voltage 17 service. 18 iii) For Indianapolis Power & Light Company's Rate PL Primary 19 Service, the billing demand cannot be less than 60% of the highest billing 20 demand that has been established in any of the immediately preceding 11 21 months and in no case less than 500 kW.

iv) For Indiana Michigan Power Company, the monthly billing

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1 demand in Indiana cannot be less than 60% of the customer's highest 2 previously established monthly billing demand during the past 11 months, or 3 100 kVA. 4 v) For Ohio Edison, the monthly billing demand is the maximum 5 of 1) the measured demand during the month; 2) 5 kW; or 3) the contract demand (where the contract demand is 60% of the customer's expected, 6 7 typical monthly peak load.) 8 Q. Is the ratchet provision in LG&E's Rate PS in line with these other utilities? 9 A. All of these utilities except Duke Energy Kentucky and Duke Energy Ohio Yes. 10 have a 60% ratchet provision. Duke Energy Kentucky and Duke Energy Ohio have 11 an even higher ratchet percentage of 85%, but the ratchet is only applied to demands 12 metered during the summer months. The ratchet percentage used in LG&E's Rate PS 13 is lower than these other utilities. 14 What is the justification for including a demand ratchet in a large power tariff **Q**. such as Rate PS? 15 16 A. A utility must install distribution, transmission, and generation facilities to serve a 17 customer's demand. Just because a customer's demand is not always at the maximum 18 level does not mean that the fixed costs of the facilities installed to meet the 19 customer's maximum demand will disappear. The fixed costs of the facilities installed to meet a customer's maximum demand will be incurred even when the 20 21 customer has a lower demand. In the case of localized facilities, such as primary and 22 secondary distribution lines, transformers, substations, and transmission facilities, the

1 utility must install sufficient capacity to meet the customer's maximum demand, 2 whenever the demand occurs. Therefore, a utility's transmission and distribution 3 fixed costs are correlated to the customers' maximum demands, not their average 4 monthly demands. Generation fixed costs are correlated to customer demands at the 5 time of the system peak. For most but not all customers, the customer's maximum demands occur near the system peak. For system peak demands, which drive the cost 6 7 of generation fixed assets, customer load diversity has an effect on the generation 8 requirements that individual customer demands place on the system. Therefore, 9 while a 100% ratchet percentage is justified for the recovery of transmission and 10 distribution fixed costs, a lower ratchet could possibly be justified for the recovery of 11 generation fixed costs. For this reason, in an unbundled rate environment in which 12 generation fixed costs are billed separately from transmission and distribution fixed 13 costs, a 100% ratchet percentage would be justified for the transmission and 14 distribution component, while a lower percentage, such as 50%, would typically be 15 used for the generation fixed cost component of the rate. With a bundled rate, such as 16 LG&E's Rate PS, in which generation, transmission and distribution fixed costs are 17 recovered through a single demand charge, it is not uncommon to see demand 18 ratchets for a bundled demand charge in the 50 to 90% range.

### 19 Q. Do demand ratchets more accurately reflect the actual cost of providing service?

A. Yes, in general they do. Because demand-related fixed costs do not disappear when customers have lower demands during the year, demand ratchets ensure that customers with month-to-month fluctuations in their demand pay an appropriate share of fixed costs. Without demand ratchets, customers with demands that fluctuate from
 month to month end up being subsidized by customers with steady demands.

Q. Can you provide an example that shows how, without a demand ratchet,
customers with steady demands end up subsidizing customers with fluctuating
demands?

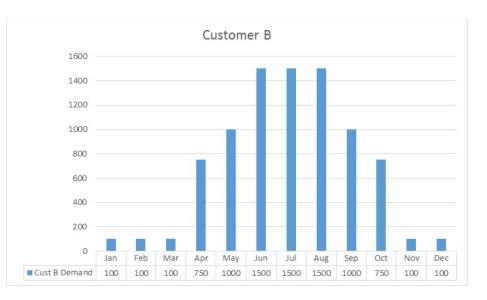
6 Yes. Consider two customers – Customer A and Customer B – both with a maximum A. 7 demand of 1,500 kW during the year. In this example, Customer A has a steady 8 demand of 1,500 kW every month. Customer B has a demand of 1,500 kW that only 9 occurs during the summer peak months, but during the non-summer months Customer 10 B's demands are significantly lower. For purposes of this example, we will assume 11 that both customers' summer demands are coincident with the summer system peak. 12 This is a simplifying but not unrealistic assumption. The following two graphs show 13 the monthly demands for Customer A and Customer B.

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Graph 1



### Graph 2

5 In this example, if there are no significant topographical differences between serving 6 the two customers, the fixed generation, transmission and distribution costs would be 7 essentially the same for both customers. Both customers have a 1,500 kW demand 8 coincident with the summer system peak; therefore, the generation fixed costs 9 necessary to serve both customers would be the same. Both customers have a 10 maximum non-coincident demand of 1,500 kW; therefore, the transmission and 11 distribution delivery costs would be the same for both customers. Therefore, in this 12 example, the fixed generation, transmission and distribution costs are the same to 13 serve both customers. Yet, even though it costs the same to serve both customers, 14 without a demand ratchet, the demand charge revenues collected from the two 15 customers are starkly different. The following table shows the demand charge

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revenue that would be collected from the two customers under the current Rate PS
 Secondary demand charges without a ratchet:

		Customer	Α		Customer	В
			Demand			Demand
	kW	Demand	Charge	kW	Demand	Charge
Month	Demand	Charge	Revenue	Demand	Charge	Revenue
Jan	1,500	15.99	\$ 23,985	100	15.99	\$ 1,599
Feb	1,500	15.99	23,985	100	15.99	1,599
Mar	1,500	15.99	23,985	100	15.99	1,599
Apr	1,500	15.99	23,985	750	15.99	11,993
May	1,500	18.40	27,600	1000	18.40	18,400
Jun	1,500	18.40	27,600	1500	18.40	27,600
Jul	1,500	18.40	27,600	1500	18.40	27,600
Aug	1,500	18.40	27,600	1500	18.40	27,600
Sep	1,500	18.40	27,600	1000	18.40	18,400
Oct	1,500	15.99	23,985	750	15.99	11,993
Nov	1,500	15.99	23,985	100	15.99	1,599
Dec	1,500	15.99	23,985	100	15.99	1,599
Total			\$ 305,895			\$ 151,580

## 3 4

#### Table 5

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As can be seen from the table, LG&E would collect less than half the revenue in
demand charges from Customer B than from Customer A, even though the fixed costs
associated with serving the two customers are the same. Without a ratchet Customer
A would be overpaying and Customer B would be underpaying for service. In other
words, Customer A would be subsidizing Customer B.

# 11 Q. What happens in the example if the Company's current demand ratchet for Rate 12 PS is used?

A. Under the demand ratchet for Rate PS, the billing demand cannot fall below 50% of
the customer's monthly demands during the preceding 11 months. If the same load

1pattern used in the example reoccurs year after year, then Customer B's billing2demand could not fall below 750 kW (1,500 x 50% = 750 kW). Of course, Customer3A's billing demand could not fall below 750 kW either, but in this example Customer4A's demand is a constant 1,500 kW and thus Customer A is unaffected by the demand5ratchet. The table below shows the demand charge revenue that would be collected6from the two customers under the current Rate PS demand charges with the current7ratchet:

		Customer	Α		Customer	В
			Demand			Demand
	kW	Demand	Charge	kW	Demand	Charge
Month	Demand	Charge	Revenue	Demand	Charge	Revenue
Jan	1,500	15.99	\$ 23,985	750	15.99	\$ 11,993
Feb	1,500	15.99	23,985	750	15.99	11,993
Mar	1,500	15.99	23,985	750	15.99	11,993
Apr	1,500	15.99	23,985	750	15.99	11,993
May	1,500	18.40	27,600	1000	18.40	18,400
Jun	1,500	18.40	27,600	1500	18.40	27,600
Jul	1,500	18.40	27,600	1500	18.40	27,600
Aug	1,500	18.40	27,600	1500	18.40	27,600
Sep	1,500	18.40	27,600	1000	18.40	18,400
Oct	1,500	15.99	23,985	750	15.99	11,993
Nov	1,500	15.99	23,985	750	15.99	11,993
Dec	1,500	15.99	23,985	750	15.99	11,993
Total			\$ 305,895			\$ 203,548

### Table 6

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11 As can be seen, the demand ratchet in Rate PS significantly reduces the subsidies 12 received by Customer B. In this example, the subsidies still exist but they are 13 reduced.

14 Q. Would it be possible to eliminate all fixed-cost subsidies?

A. In this idealized example it would be possible to eliminate all subsidies. This can be
done by increasing the ratchet percentage to 100%. If a 100% demand ratchet is
applied, Customer B's billing demand would be 1,500 kW each month (100% x 1,500
kW = 1,500 kW). Again, Customer A's billing demands would be unchanged. With
a 100% ratchet, the demand billings would be the same for both customers, as
illustrated in the following table:

		Customer	Α		Customer	В
			Demand			Demand
	kW	Demand	Charge	kW	Demand	Charge
Month	Demand	Charge	Revenue	Demand	Charge	Revenue
Jan	1,500	15.99	\$ 23,985	1500	15.99	\$ 23,985
Feb	1,500	15.99	23,985	1500	15.99	23,985
Mar	1,500	15.99	23,985	1500	15.99	23,985
Apr	1,500	15.99	23,985	1500	15.99	23,985
May	1,500	18.40	27,600	1500	18.40	27,600
Jun	1,500	18.40	27,600	1500	18.40	27,600
Jul	1,500	18.40	27,600	1500	18.40	27,600
Aug	1,500	18.40	27,600	1500	18.40	27,600
Sep	1,500	18.40	27,600	1500	18.40	27,600
Oct	1,500	15.99	23,985	1500	15.99	23,985
Nov	1,500	15.99	23,985	1500	15.99	23,985
Dec	1,500	15.99	23,985	1500	15.99	23,985
Total			\$ 305,895			\$ 305,895

Table 7

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Q. If a 100% percent demand ratchet would eliminate all of the subsidies in the example, then why isn't LG&E proposing to use a 100% demand ratchet percentage?

A. As mentioned earlier, the example is somewhat idealized. Specifically, it was
assumed that both customers' maximum demands occur at the time of the system

1 peak. This means that the cost of the generation capacity installed to serve both 2 customers would be the same. Not all customers with a load pattern that fluctuates 3 like Customer B will have a maximum demand that occurs at the time of the 4 Companies' system peak. Some low-load factor customers will have a maximum 5 demand that coincides with the system peak and others may not. The relationship between a customer's demand at the time of the system peak and the customer's 6 7 maximum demand is referred to as the coincidence factor. Coincidence factors for 8 commercial and industrial customers during a month will typically range from 50% to 9 100%. Because coincidence factors are on average less than 100% it is reasonable to 10 use a demand ratchet for generation fixed costs that is less than 100%. This is the 11 reason that demand ratchets for generation fixed costs are typically between 50% to 12 90% for rates that are not billed based on a coincident peak demand.

#### 13 Q. Do demand ratchets encourage customers to use power more efficiently?

14 Yes. Demand ratchets encourage customers to manage their peak demands and A. 15 purchase energy at a more constant rate. If a customer avoids monthly spikes in its 16 demands, then the customer can avoid the application of the ratchet. Therefore, a 17 ratchet provides an incentive for customers to maintain more steady demands, without 18 month-to-month load fluctuations, which will result in a lower average cost of 19 providing service. Because a utility must install capacity to meet spikes in a 20 customer's demands, if a customer avoids demand spikes the utility can then install 21 less distribution, transmission and generation capacity to serve the customer's load. 22 Demand ratchets induce customers to use power more efficiently and allow demand

rates to send a better price signal.

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#### F. LARGE CUSTOMER RATES (TODS, TODP, RTS, FLS)

#### 4 Q. What are the standard large customer rates offered by LG&E?

5 A. LG&E offers four standard rates for large commercial and industrial customers: Time-of-Day Secondary Service (TODS), Time-of-Day Primary Service (TODP), 6 7 Retail Transmission Service (RTS), and Fluctuating Load Service (FLS). TODS is 8 available to customers served at secondary voltages (available voltages less than 9 2,400/4,160Y volts) with average demands between 250 kW to 5,000 kW. TODP is 10 available to customers served at primary voltages (2,400/4,160Y volts, 11 7,200/12,470Y volts, or 34,500 volts) with average demands greater than 250 kVA. 12 RTS is available to customers served at transmission voltages (69,000 volts or higher) 13 with average demands greater than 250 kVA. FLS is available to customers served at 14 primary or transmission voltage whose demands are 20,000 kW or greater. 15 Customers with demands of 20,000 kW or greater whose loads either increase or 16 decrease 20 MVA or more per minute or whose load either increase or decrease 70 17 MVA or more in ten minutes, when any such increases or decreases occur more than 18 once during any hour of the month, are required to take service under FLS. The 19 proposed charges for TODS, TODP, RTS, and FLS are shown on pages 8, 9, 10, and 20 11, respectively, of Schedule M-2.3-E of the Filing Requirements.

### 21 Q. Do all of these rate schedules have the same basic rate structure?

22 A. Yes. All four of these rates have a rate structure consisting of a Basic Service

1		Charge, an Energy Charge, and a Maximum Load C	harge comprising a Peak Demand
2		Charge, an Intermediate Demand Charge, and a Base	e Demand Charge. For example,
3		the unit charges for TODS are <i>currently</i> as follows:	
4			
5		Basic Service Charge	\$200.00 per customer
6		Energy Charge	\$0.04049 per kWh
7		Maximum Load Charge:	
8		Peak Demand Charge	\$6.74/kW/Mo.
9		Intermediate Demand Charge	\$5.10/kW/Mo.
10		Base Demand Charge	\$4.60/kW/Mo.
11		The Peak Demand Charge applies to billing demand	s (maximum demands) that occur
12		during the weekday hours ("Peak Demand Period")	from 1:00 PM to 7:00 PM during
13		the summer months of May through September (su	mmer peak months") and during
14		the weekday hours from 6:00 AM to 12:00 Noon of	during winter months of October
15		through April (winter peak months). The Interme	diate Demand Charge applies to
16		billing demands that occur during the weekday	v hours ("Intermediate Demand
17		Period") from 10:00 AM to 10:00 PM during the sur	mmer peak months and from 6:00
18		AM to 10:00 PM during the winter peak months. T	The Base Demand Charge applies
19		to the billing demands that occur at any time during	the month.
20	Q.	Is there a cost basis for this rate structure?	
21	A.	Yes. LG&E and KU must install sufficient gener	ration resources to meet its peak
22		demands. Peak demand conditions occur during the	he summer peak months and the

1 winter peak months. Furthermore, peak conditions occur during hours between 6:00 2 AM in the morning and 10:00 PM at night, but varying by season. LG&E and KU 3 must also install sufficient transmission and distribution facilities to deliver the power 4 to the individual customers, no matter when they need power, whether it is during the 5 peak or intermediate period or otherwise. Over the years, the Companies have structured the Peak Demand Charge and the Intermediate Demand Charge so that 6 7 these charges would essentially provide recovery of generation fixed costs. The Base 8 Demand Charge was structured so that the charge would basically provide recovery 9 of transmission and distribution demand-related costs. (The structure was initially 10 developed by LG&E and included only a peak and base charge, but was eventually 11 adopted by KU and modified to include an intermediate charge to give customers 12 greater opportunities to control their demands and reduce their demand costs.) 13 Therefore, the Maximum Load Charge was, and is, essentially unbundled between 14 generation fixed costs, which are recovered through the Peak and Intermediate 15 Demand Charges, and transmission and distribution demand-related fixed costs, 16 which are recovered through the Base Demand Charge.

17

#### Q. How are the billing demands determined?

A. The billing demands for the Peak and Intermediate Demand Charges are determined
as the greater of (a) the maximum measured load during the Peak or Intermediate
Demand Periods, or (b) 50% of the highest measured demand for the Peak or
Intermediate Demand Periods during the preceding 11 monthly billing periods. This
means that a 50% demand ratchet applies to the Peak and Intermediate Demand

1 Charges. The billing demands for the Base Demand Charge is determined as the 2 greater of (a) the maximum measured load during the month (i.e., all hours of the 3 months), (b) 75% of the highest measured demand determined the same way in the 4 preceding 11 monthly billing periods, or (c) 75% of the contract capacity based on the 5 customer's maximum load. This means that a 75% demand ratchet applies to the Base Demand Charge. A higher ratchet was implemented for the Base Demand 6 7 Charge because the charge was designed to recover transmission and distribution 8 demand-related costs which must be adequately sized to meet the customer's 9 maximum demand whenever the demand occurs.

10

#### Q. What changes is LG&E proposing to the rate structure?

A. LG&E proposes to keep the same basic rate structure but to increase the demand
 ratchet for the Base Demand Charge to 100%. The Company is not proposing to
 change the demand ratchets for the Peak and Intermediate Charges at this time.

14 Q. Why is LG&E proposing this change?

15 A. The modification to the demand ratchets for the large customer rates is being 16 proposed in conjunction with the elimination of the Company's standard rider for 17 Supplemental or Standby Service (Rider SS). The Company has concluded that Rider 18 SS is not adequate in light of fundamental changes that are taking place in the electric 19 utility industry. Rider SS is available to customers who are regularly supplied with 20 electric energy from generating facilities (distributed generation) owned by the 21 customer and who desire to contract with LG&E for reserve, breakdown, 22 supplemental or standby service. Fundamental changes are taking place in the

1 electric utility industry whereby more customers are installing distributed generation 2 to meet their power needs and falling back on the utility to supply power when their 3 facilities are not operating. In some jurisdictions, there has been a surge in the 4 installation of customer-owned renewable distributed generation such as solar 5 generation or wind generation. In general, utilities are supportive of these initiatives as long as the utility's other customers are not subsidizing customers that install 6 7 distributed generation facilities. Therefore, it is important for utilities to have a rate 8 structure that prevents the subsidization of distributed generation by customers who 9 have chosen not to install distributed generation.

10 It is also important for a utility to implement rates that allow the utility to 11 recover the appropriate amount of fixed costs associated with serving customers who 12 have installed distributed generation facilities but who want to rely on the utility to 13 provide generation, transmission and distribution service when the distributed 14 generation facilities are not operating. But LG&E also wants to offer a rate design 15 that provides reasonable cost recovery while not discriminating against customers 16 who install distributed generation and that isn't excessively harsh or onerous to 17 customers who install distributed generation but want backup service.

18

#### Q. Why is the current standby rate inadequate?

A. In addition to the administrative problems with the rider that are addressed in the
Direct Testimony of Robert M. Conroy, there has generally been an unwillingness on
the part of customers with distributed generation to sign up under the rider because it
is viewed as "too harsh" or "too onerous". Rider SS, which is a rider that would

1		generally be applicable to customers served under Rates PS, TODS, TODP, RTS, or
2		FLS, requires a standby customer to establish a contract demand for its entire load.
3		The customer would then be billed a minimum demand charge that is the greater of
4		(1) the customer's total demand charge billed under the customer's primary rate
5		schedule (PS, TODS, TODP, RTS, or FLS), or (2) the demand charge calculated by
6		applying the demand charges set forth in Rider SS to the customer's contact demand.
7		Currently, the demand charges set forth in Rider SS are as follows:
8		
9		Secondary Voltage: \$13.57 per kW (or kVA) per month
10		Primary Voltage: \$12.30 per kW (or kVA) per month
11		Transmission Voltage: \$10.83 per kW (or kVA) per month
12		
13		These charges were designed to provide full recovery of all production, transmission,
14		and distribution fixed costs. Therefore, for a customer who has installed its own
15		distributed generation facilities, the customer will have paid for its own generation
16		facilities plus the full fixed costs per kW (or kVA) of LG&E's generation facilities on
17		a monthly basis. From the customer's perspective, under this arrangement the
18		customer will view this as paying for the cost of generation assets twice.
19	Q.	But if the utility is standing ready to provide generation backup service to
20		customers who have installed their own generation, then shouldn't the customer
21		pay a portion of the fixed costs?
22	A.	Yes, they should. The challenge, though, is determining the appropriate level of fixed

costs that the customer should pay. The amount that a distributed generator should 1 2 pay largely depends on the operating characteristics of the distributed generation 3 facilities that are installed. In all cases, a standby customer should pay for all of the 4 transmission and distribution plant installed to serve the customer's maximum 5 demand. As discussed earlier in the portion of my testimony addressing the demand ratchet for Rate PS, sufficient transmission and distribution capacity needs to be 6 7 installed to deliver power to the customer whenever the customer needs it. For a 8 customer who has installed distributed generation facilities, the utility must have 9 transmission and distribution capacity to deliver sufficient power to meet the 10 customer's load requirements whenever the customer's distributed generation 11 facilities aren't operating. But for generation capacity, the cost of backing up the 12 customer depends on the operating characteristics of the customer's generating 13 facilities. For example, if the customer has installed solar generation, then the utility 14 would be called upon to provide backup power whenever there isn't sufficient 15 sunlight to energize the solar panels, which is likely to occur during periods when the 16 utility is experiencing peak load conditions, such as during a winter system peak 17 which typically occurs during nighttime hours. Likewise, if the customer has installed wind generation, then the utility would be called upon to provide backup 18 19 power whenever the wind isn't blowing, which is also likely to occur during summer 20 and winter system peak load conditions. Therefore, for these types of distributed 21 generation facilities, it is highly likely that the utility would be called upon to provide 22 backup power during time periods when the utility is experiencing peak load

1 conditions. On the other hand, if the customer has installed a coal- or gas-fired 2 generating facility that operates basically continuously at a low forced outage rate, 3 then it is less likely that the utility would be called upon to provide generation backup 4 power during peak load conditions. Therefore, it would, in general, be less costly to 5 provide generation backup service to a customer who has a generating facility that is operated 24 hours per day, seven days per week, but with a random forced outage rate 6 7 than to provide generation backup service to a customer whose generating facility is 8 subject to wind conditions and available sunlight.

## 10 **el**i

Q.

9

# How will the costs of providing backup service be addressed if Rider SS is eliminated?

11 A. Under LG&E's proposal, a customer with distributed generation facilities who relies 12 on LG&E to provide backup service to its generating facilities would be served on the 13 same rate as any other customer. Therefore, the Company will not discriminate 14 between a customer who has distributed generation facilities and any other customer with similar fluctuating load requirements. If a customer with distributed generation 15 16 meets the load requirements for one of the Company's standard rate schedules, then 17 the customer will be served under that rate schedule. However, this policy 18 necessitates a change in the demand ratchet for Rates TODS, TODP, RTS, and FLS.

# 19 20 21

# Q. Please explain how serving standby customers under TODS, TODP, RTS, and FLS and changing the ratchet will help provide proper recovery of fixed generation, transmission, and distribution demand-related costs.

A. As explained earlier, generation fixed costs are essentially recovered through the Peak

1 and Intermediate Demand Charges. A 50% demand ratchet is applied in determining 2 the billing demand for these rate components. Importantly, the billing demands are 3 based on measured demands during the Peak and Intermediate Billing Periods. 4 Therefore, if a standby or other customer has a demand that occurs during the peak 5 and intermediate hours (and most customers do), then the Peak and Intermediate Demand Charges will apply to those demands. But if the customer's demand occurs 6 7 outside of the Peak and Intermediate Billing Periods, then there will be no measured 8 demands during those periods and the Peak and Intermediate Demand Charges will 9 not apply.

10 Furthermore, the 50% ratchet will be applied based on the maximum demands 11 that have occurred during the preceding 11 months. LG&E is not proposing to 12 change the ratchet percentages applicable to the Peak and Intermediate Demand 13 *Charges at this time.* The structure for determining the billing demand allows the 14 Company to recover at least 50% of a maximum demand that occurred during the 15 peak and intermediate periods for the current and preceding 11 months. This demand 16 ratchet therefore provides recovery of at least 50% of the annual fixed generation 17 costs that the Company has incurred to supply generation capacity to the customer. 18 At this point, the Company believes that the 50% demand ratchet, along with the 19 change to the proposed ratchet for the Base Demand Charge, strikes a reasonable 20 balance *between* (i) providing a pricing structure for recovering a reasonable portion 21 of the annual fixed generation costs incurred to provide service to standby customers 22 and to customers with intermittent loads that fluctuate from month to month and (ii)

1 offering a pricing structure that isn't unduly harsh or onerous to standby or customers 2 with intermittent loads. It should be kept in mind that the two components that 3 provide recovery of generation fixed costs - the Peak and Intermediate Demand 4 Charges - represent most of the total demand charges billed under Rates TODS, 5 TODP, RTS, and FLS. Under LG&E's current rates, the peak and intermediate demand charges represent from approximately 71% to 78% of the total demand 6 (For example, by calculating a simple percentage of the peak and 7 charges. 8 intermediate demand charges to the total of the peak, intermediate and base demand 9 charges for Rate TODP, the percentage to the total is 71% [(\$5.26 + \$3.91) ÷ (\$5.2610 + \$3.91 + \$3.75) = 71%]. For Rate FLS, the percentage is 78% [(\$3.42 + \$2.37)  $\div$ 11 (\$3.42 + \$2.37 + \$1.62) = 78%].) Therefore, peak and intermediate demand charges, 12 which represent most of the demand charges for these rate schedules, will be 13 unaffected by the proposed change in the ratchet.

14 For transmission and distribution costs, it is important to increase the ratchet 15 percentage to provide assurance that the fixed costs of the transmission and 16 distribution facilities installed to deliver power to customers any time they need the 17 power are appropriately recovered from standby customers and from customers with 18 large month-to-month fluctuations in their loads. As explained in the portion of my 19 testimony dealing with the demand ratchets for Rate PS, transmission and distribution 20 facilities must be sized to deliver the maximum load that the customer creates on the 21 system. Unlike generation facilities, transmission and distribution facilities are 22 designed to meet localized demands placed on the system by customers. The

1 Company is therefore proposing to implement a 100% ratchet for the component of 2 the demand charge that provides for recovery of transmission and distribution fixed 3 costs. The 100% ratchet will only apply to the Base Demand Charge which currently 4 represents between 22% and 29% of the total demand charges (based on the above 5 calculations).

# 6

# 6 Q. What is the effective *overall* demand ratchet if you consider all three rate 7 components?

8 A. As I explained, for TODS, TODP, RTS, and FLS, the 100% ratchet would only apply 9 to the Base Demand Charge and the current 50% ratchet would continue to apply to 10 the Peak and Intermediate Demand Charges. Based on a simple analysis, since the 11 50% ratchet would apply to the demand charge components (Peak and Intermediate 12 Demand Charge) that represent between 71% to 78% of the demand charges, whereas 13 the 100% ratchet would apply to the demand charge component (Base Demand 14 Charge) that represents between 22% and 29% of the cost, the simple weighted effect 15 of both ratchets works out to be equivalent to a demand ratchet of 61% to 65%. [78% 16 x 50% + 22% x 100% = 61% and 71% x 50% + 29% x 100% = 65%.] These 17 effective ratchet percentages are not out of line with demand ratchet percentages 18 typically included in rates applicable to large commercial and industrial customers.

# Q. Will changing the demand ratchet for the Base Demand Charge have a large impact on customer's bills?

A. Because the impact will be factored into the determination of the revenue requirement
for the rate classes, the change will not result in any more or any less revenue

1 calculated for the class. Specifically, the revenues calculated at the proposed rates are 2 determined by applying the proposed Base Demand Charges for TODS, TODP, RTS 3 and FLS to billing demands for the test year that are reflective of the revised ratchet. 4 In other words, in determining the proposed revenue for the Base Demand Charges 5 the charges are multiplied by billing demands that are higher than what would otherwise be billed during the forecasted test year. Therefore, from the Company's 6 7 perspective, the change is revenue neutral. The Company is not expected to collect 8 any more revenue from customers as a result of making this change. While the 9 proposed demand ratchet may protect against revenue erosion if customers install 10 distributed generation, it is not anticipated that the Company will collect additional 11 revenues coming out of the rate case as a result of this change. However, on an 12 individual customer basis, the change will affect some customers more than others. 13 Specifically, the change will result in larger increases to customers with large 14 fluctuations in their monthly demands and in smaller increases to customers with steady demands that don't fluctuate from month to month. 15 A number of 16 manufacturing customers on LG&E and KU's system will benefit from the change, 17 particularly high-load-factor manufacturing or commercial customers with relatively 18 constant demands from month to month. Of course, customers with intermittent loads 19 will see a larger increase.

# 20 Q. Do you have any other comments about the proposed change in the demand 21 ratchet?

22 A. Yes. It is important to note that this proposal will create a level playing field for

customers who install distributed generation and rely on LG&E for backup service and customers with large fluctuations in their monthly demands. From the utility's perspective there is not much difference between serving either type of customer. Therefore, the proposed rate structure represents a non-discriminatory approach to serving both types of customers while helping to ensure that the utility's other customers are not subsidizing standby customers or customers with large swings in their monthly demands.

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#### G. CURTAILABLE SERVICE RIDER (CSR)

#### 10 Q. Please describe the proposed changes to CSR.

11 The Curtailable Service Rider is a rider that provides a credit to industrial or A. 12 commercial customers that will interrupt a portion of their load when called upon by 13 LG&E. Curtailable customers receive a discount in the form of a credit to their 14 demand charges in exchange for their willingness to receive curtailable service on a 15 designated portion of their load. A customer taking service under CSR is subject to a 16 maximum of 375 hours of curtailment (or interruption) during a 12-month period. 17 LG&E is proposing to lower the CSR credit from \$6.40 to \$3.56 per kVA of 18 curtailable billing demand for transmission voltage service and from \$6.50 to \$3.67 19 per kVA for primary voltage service. As also discussed in Mr. Conroy's testimony, 20 the Company is proposing to restrict the rider so that it will only be available to 21 customers served under the schedule as of the date new rates go into effect as a result 22 of this proceeding.

Q.

#### What is the basis for the proposed credit?

2 A. As also discussed in the Direct Testimony of David S. Sinclair, LG&E is proposing to 3 determine the credit based on the fixed carrying costs of the large-frame combustion 4 turbines jointly owned by LG&E. Specifically, the credit is based on LG&E's 5 portion of the fixed costs of the jointly-owned Brown Units 5, 6, and 7, Trimble County Units 5, 6, 7, 8, 9, and 10, and Paddy's Run Unit 13. These units were 6 7 installed during the late 1990s and early 2000s and are jointly owned by LG&E and 8 KU. It is appropriate to use the fixed carrying costs of these combustion turbine units 9 because these units would be dispatchable for a similar number of hours as the hours 10 of curtailment set forth in the CSR tariff. These units are typically dispatched after 11 LG&E and KU's base load coal-fired steam units, gas-fired combined cycle facility, 12 solar generation facility, and hydro-electric units. Traditionally, load designated to be 13 served under CSR has been used to avoid or defer the installation of peaking units 14 such as combustion turbines which have been dispatched fewer hours of the year than 15 coal-fired steam generating units or gas-fired combined cycle generating units. In the 16 past, the CSR credit has been based on the avoidance or deferral of a hypothetical 17 combustion turbine unit. The Companies currently expect they will have no need to 18 install peaking or other generation capacity through the end of the forecasted test 19 year. Therefore, instead of using the cost of a hypothetical future combustion turbine 20 unit that may or may not be installed during the next decade or more to establish the 21 credit, the Company is proposing to use the fixed carrying costs of the most-recently 22 installed conventional combustion turbines as the basis for the CSR credits.

Q.

#### What do you mean by a "conventional combustion turbine"?

2 A. A conventional combustion turbine, as opposed to a combined-cycle combustion 3 turbine, is a single cycle turbine for which there is no heat-recovery system that 4 allows heat from the combustion gas to be reused to operate at higher efficiencies. 5 Combined-cycle units have higher fixed costs but operate at greater capability and higher efficiencies, which allows the units to be operated for more hours during the 6 7 year. LG&E's combined cycle unit will typically operate for more than 8,000 hours 8 during the year. The operational hours of a combined cycle generating unit or of a 9 coal-fired steam generating unit are in no way comparable to the hours of curtailment 10 set forth in the CSR tariff.

11 **Q.** What is a "large-frame combustion turbine"?

A. Beginning in the 1980s, utilities began installing larger combustion turbines that
achieved higher efficiencies than their earlier, and typically smaller, counterparts.
Large-frame combustion turbines operate at higher capabilities and higher pressures
allowing the units to achieve higher efficiencies. All the combustion turbines that
LG&E installed since 1999 have been large-frame units.

# 17 Q. How many hours are these combustion turbines dispatched during a 12-month 18 period?

A. It varies from year to year, but the Companies' large-frame combustion turbines will
typically be dispatched from 200 to 1,500 hours during a 12-month period. The
following table shows the number of hours that the large-frame Brown, Trimble and
Paddy's Run combustion turbines jointly-owned by LG&E were dispatched during

$\mathbf{a}$
1
_

Large-Sc	LG&E's cale Conventional ion Turbine Units
Generating Unit	Hours of Operations
Brown Unit 5	644
Brown Unit 6	270
Brown Unit 7	257
Trimble 5	1614
Trimble 6	982
Trimble 7	1632
Trimble 8	371
Trimble 9	1081
Trimble 10	382
Paddy's Run 13	973

### 3

#### 4

### Table 8

5 These units will typically operate for more hours than the maximum number of hours 6 of annual curtailment under the CSR tariff, and they typically have start-up times that 7 are shorter than the 30-minute period that CSR customers can respond to a 8 curtailment. Because Trimble 8 and 10 are quick-start units that can be brought on 9 line and fully loaded in 10 minutes or less, they are often held in reserve for 10 emergencies. While the combustion turbine units listed in Table 8 have operating 11 characteristics that offer greater flexibility than curtailable load, these are still the 12 generating units in the Companies' fleet that are the most comparable in terms of the 13 hours' use of the units and the startup times to the terms and conditions of the CSR 14 rate schedule. The Companies' combined-cycle and coal-fired base load units will

typically operate over 8,000 hours per year and have longer startup times, and the
Company's older combustion turbines will typically operate less than 100 hours
during a 12-month period. Furthermore, the large-frame units listed in the above
table are the most recent combustion turbines installed by the Companies.

# 5 Q. How are the fixed carrying costs for the large-frame combustion turbine units 6 calculated?

A. The carrying costs are calculated based on the total fixed cost of the units for the fully-forecasted test-year. The fixed carrying charges for the units include the following standard cost-of-service components: (1) return on net investment (rate base), (2) income taxes, (3) depreciation expenses, (4) operation and maintenance expenses, and (5) property taxes. These are the standard items included in a utility's revenue requirements.

#### 13 Q. Have you prepared an exhibit showing the derivation of the CSR credits?

- A. Yes. Exhibit WSS-3 shows the calculation of the CSR credit based on the fixed
  carrying costs of the Brown, Trimble County, and Paddy's Run 13 combustion
  turbines. This analysis shows that the credit should be \$3.56/kVA/Month for
  transmission voltage service and \$3.67/kVA/Month for primary voltage service.
- 18 Q. Why is LG&E proposing to restrict the CSR schedule so that it will only be
  19 available to existing customers after the new rates go into effect?
- A. As mentioned earlier, LG&E has no need for additional generation capacity during
  the next decade or so. The Companies have not issued any curtailments under Rider
  CSR since January 2015. Because the current generation mix was planned to take

into account CSR capacity and its use in avoiding combustion turbine capacity, the
 Companies believe that it is appropriate to provide *current* CSR customers a credit
 based on the actual fixed cost of the most recent combustion turbines that were
 installed by the Companies.

5

## 6

### H. LIGHTING RATES

#### 7 Q. Explain how the rate increases were determined for the lighting rates?

A. LG&E offers two rates that include the lighting fixture along with the delivered
energy to operate the lights. Those two rates are Lighting Service (LS) and Restricted
Lighting Service (RLS). The Company also offers two types of delivered energy
service to customers who own their own lighting fixtures or traffic lights. Those two
rates are Lighting Energy Service (LE) and Traffic Lighting Service (TE).

13 The proposed rates for each type of light under Rate LS and Rate RLS were 14 determined by allocating the revenue requirement for the lighting class to each light 15 type based on the cost of each type of lighting fixture. Those costs include the 16 carrying charges, distribution energy costs, and operation and maintenance expenses. 17 The maximum increase for any type of fixture was capped at 30%. LG&E is not 18 proposing increases for incandescent lights, and the Company is proposing 19 comparatively smaller increases for mercury vapor lights because incandescent and 20 mercury vapor lights are no longer being replaced and, in some cases, they are 21 approaching their depreciable lives. The current unit revenue requirement of fixtures 22 under Rate LS and Rate RLS is shown in Exhibit WSS-4. The proposed charge for 1 each fixture type is shown on pages 17 through 23 of Schedule M-2.3-E of the Filing 2 Requirements.

3 LG&E is not proposing an increase to Rate LE. Therefore, the Energy Charge 4 for Rate LE remains at \$0.06934/kWh. For Rate TE, the Company is not proposing 5 to increase the Basic Service Charge from its current level of \$4.00 per delivery point per month; however, LG&E is proposing to increase the Energy Charge from 6 7 \$0.07871/kWh to \$0.08533/kWh.

8 **Q**.

### Is LG&E proposing to offer any new types of lights?

9 A. Yes. LG&E wants to be proactive in encouraging energy efficiency by offering light 10 emitting diode ("LED") lights. The lights being offered correspond to the size and 11 style of the most popular conventional lights offered by the Company. The new 12 lights to be offered are: (1) 50 Watt Open Bottom Overhead Yard Light; (2) 80 Watt 13 Overhead Cobra Head Light; (3) 134 Watt Overhead Cobra Head Light; (4) 228 Watt 14 Overhead Cobra Head Light; (5) 80 Watt Underground Cobra Head Light; (6) 134 15 Watt Underground Cobra Head Light; (7) 228 Watt Underground Cobra Head Light; 16 and (8) 68 Watt Underground Colonial Light. While LED lights are more energy 17 efficient than traditional lighting fixtures, the cost of an LED fixture tends to be 18 higher than the cost of a conventional fixture, and the average service life ("ASL") 19 for an LED fixture is expected to be lower. This could ultimately result in higher 20 depreciation expenses for all lights.

#### 21 О. How did LG&E develop the proposed charges for these new lights?

22 A. The rates for these lights were determined using a standard revenue requirement

- 56 -

approach, with carrying charges, distribution energy costs, and operation and
 maintenance expenses included as revenue requirements for the monthly rates. The
 carrying charges include depreciation expenses, return on investment, income taxes
 and property taxes. The support for the proposed rates for LED lights is included in
 Exhibit WSS-5.

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### I. REDUNDANT CAPACITY (RC)

#### 8 Q. Please describe LG&E's Redundant Capacity rider.

9 A. The Redundant Capacity rider allows customers that have one or more redundant 10 distribution feeds to reserve back-up capacity on the distribution system. This rider 11 would typically be used by customers who want greater assurance that their service will 12 not be interrupted because of an outage on a distribution line. These customers would 13 want a redundant feed along with automatic relay equipment capable of switching from 14 a principal circuit to a backup circuit if electric service from the primary feed is lost. 15 With the greater use of technology, some customers are finding it increasingly difficult 16 to tolerate electrical outages for even short periods of time.

#### 17 Q. How is a customer charged for redundant capacity?

A. A customer who wants a second feed must pay the cost of the customer-specific
facilities required to provide the feed, including the second distribution line, automatic
relay equipment, or other customer-specific facilities that may be required. Customers
can pay for the customer-specific facilities by either making a contribution-in-aid-ofconstruction or by taking service under the Company's Excess Facilities rider. If the

1 customer wants to have full backup capacity on the second feed, there are additional 2 costs incurred by LG&E of ensuring that there is sufficient network distribution capacity 3 to provide full backup if a relay occurs on the automatic switchgear. To ensure that 4 there is sufficient capacity on the redundant feed to serve the load if the primary feed 5 goes down, the utility must plan the distribution facility as if there were two customers placing demands on the system. For this reason, LG&E assesses a demand charge to 6 7 cover the distribution demand-related cost of providing backup service for new 8 customers with redundant feeds. The demand charge is applied to the customer's 9 monthly billing demand determined under the standard rate schedule under which the 10 customer receives electric service. Rider RC includes a charge for customers taking 11 service at primary voltages and a charge for customers taking service at secondary 12 voltages.

13

#### Q. What changes is LG&E proposing to the Redundant Capacity charges?

A. LG&E is proposing to increase the demand charge for primary voltage customers from
\$1.26 to \$1.50 per kW per month and from \$1.43 to \$1.66 per kW per month for
secondary voltage customers. The cost support for the proposed redundant capacity
charges is included in Exhibit WSS-6.

18

#### 19 IV. GAS RATE DESIGN AND THE ALLOCATION OF THE INCREASE

20 A. ALLOCATION OF THE GAS REVENUE INCREASE

Q. Please summarize how LG&E proposes to allocate the gas revenue increase to
 the classes of service?

1 A. LG&E relied on the results of the gas cost of service study to determine how the 2 revenue increase is allocated to the classes of service. Specifically, larger relative 3 portions of the overall revenue increase are allocated to the rate classes with low rates 4 of return on rate base, and smaller relative portions of the overall increase are 5 allocated to the rate classes with high rates of return. Because of the high rates for return for Industrial Gas Service (IGS), LG&E is not proposing to increases revenues 6 7 for this rate schedule; however, LG&E is proposing to restructure the rate 8 components while producing the current revenues plus revenues that will be 9 transferred from the Gas Line Tracker (GLT) to base rates, as discussed in Mr. 10 Garrett's testimony. LG&E is proposing a decrease to As-Available Gas Service 11 (AAGS), after taking into consideration the revenues that will be transferred from the 12 GLT to base rates. A comparison of the rate of return at current rates and the 13 percentage revenue increase (decrease) proposed for each rate class is shown below in 14 Table 9:

15

	Rate of Return	Revenue
Rate Class	on Rate Base	Increase
Residential Gas Service (RGS)	5.08%	4.96%
Commercial Gas Service (CGS)	7.32%	3.48%
Industrial Gas Service (IGS)	21.31%	0.00%
As-Available Gas Service (AAGS)	30.69%	-6.65%
Firm Transportation (FT)	11.00%	2.01%
Total All Classes	6.00%	4.22%

16

- 17

In developing the proposed percentage increases, the Company was once again guided by the results of the cost of service studies. In general, the classes with the lower class rates of return were allocated a larger percentage increase, and the classes with the higher rates of return were allocated a smaller percentage increase.

#### 6

1

#### Q. Is LG&E proposing to eliminate all subsidies?

A. No. As with the allocation of the revenue increase for electric service, LG&E is not
proposing to eliminate all rate subsidies in this filing but intends to continue to
eliminate subsidies gradually over time.

#### 10 Q. Are there any rate classes that are not shown on the above table?

11 Yes. Distributed Generation Gas Service (Rate DGGS) is a rate class that serves a A. 12 small number of customers. It is a demand/commodity rate that is derived from unit 13 costs from the cost of service study for Rate IGS. Rate DGGS is not broken out in 14 the cost of service study but is included in Rate IGS in the study. Local Gas Delivery 15 Service (LGDS) is a new rate being proposed by LG&E for the transportation of 16 natural gas produced locally through LG&E's delivery system. There are currently 17 no customers served under the rate schedule. I will discuss the development of Rate 18 LGDS shortly. Substitute Gas Sales Service (Rate SGSS) is a new rate being 19 proposed by LG&E to serve customers that desire substitute sales and delivery 20 service from the Company. LG&E is proposing to move one commercial customer 21 from Rate CGS to Rate SGSS. I will also discuss the development of SGSS and the 22 impact of moving the customer from Rate CGS to Rate SGSS in the section of my 1 testimony dealing with Rate SGSS.

## 2 Q. Have you prepared an exhibit showing the proposed gas revenue increase for 3 each rate schedule?

- A. Yes. The revenue increase for each rate class is shown on Schedule M-2.1-G of
  Section 16(8)(m) of the Filing Requirements. The detailed billing calculations for
  each rate schedule are shown on Schedule M-2.3-G. The proposed unit charges for
  each rate schedule are shown on Schedule M-2.3-G.
- 8

9

**B. RESIDENTIAL GAS SERVICE (RGS)** 

#### 10 Q. Please provide a brief description of Rate RGS.

A. Rate RGS is the standard gas rate schedule available to single-family residential
 service. Approximately 296,000 residential customers are served under this rate
 schedule. Rate RGS consists of a Basic Service Charge, Distribution Delivery
 Charge (or "Distribution Cost Component") and Gas Supply Cost Component.

### 15 Q. What are the charges that LG&E is proposing for Rate RGS?

A. LG&E is proposing to *increase* the Basic Service Charge from \$13.50 per month to \$24.00 per month, which corresponds to an increase of \$10.50 per month. It should be noted, however, that LG&E is proposing to reset the Gas Line Tracker ("GLT") by removing from the GLT rate base all Gas Line Program projects performed prior to July 1, 2017, the beginning of the forecasted test year, and to place the cost of those projects into base rates. The specifics involved in resetting the GLT is described in greater detail in Mr. Garrett's testimony, but in short, the rate effect of the reset is that

1		the currently filed GLT rate for RGS of $6.33$ per customer per month <sup>1</sup> will be
2		included in the proposed \$10.50 increase in the Basic Service Charge for Rate RGS.
3		Therefore, after taking into account the resetting of the GLT, the proposed increase in
4		the Basic Service Charge is $4.17$ per month ( $10.50 - 6.33 = 4.17$ per month).
5		The Company is proposing to decrease the Distribution Cost Component from
6		\$0.28693 per CCF to \$0.25385 per CCF. LG&E is not proposing to change the Gas
7		Supply Cost Component in this rate case proceeding or to make any other structural
8		changes to Rate RGS.
9	Q.	What is the basis for the proposed increase in the Basic Service Charge for Rate
10		RGS?
11	A.	The Company is proposing a cost-based Basic Service Charge that reflects the
12		customer-related costs from the Company's cost of service study. The cost-based
13		charge will also appropriately reflect the GLT costs that are being transferred to base
14		rates. As will be explained in greater detail later in my testimony regarding the gas
15		cost of service study, the methodology that is used to classify costs as customer
16		related corresponds to the methodology that has been accepted by the Commission in
17		prior rate case orders.
18	Q.	Have you prepared an exhibit showing the calculation of the rate components for

A. Yes. Exhibit WSS-7 shows the calculation of the unit customer cost and distribution

<sup>&</sup>lt;sup>1</sup> As of the date of this testimony, the GLT rate for Rate RGS is \$5.14 per customer per month; however, on October 31, 2016, the Company filed in Case No. 2016-00383 a proposal to increase the GLT for Rate RGS from \$5.14 to \$6.33 per customer per month. The GLT amounts that would be placed into base rates in the general rate case would reflect revenue requirements corresponding to the \$6.33 charge.

delivery cost. From this exhibit, the customer cost is calculated to be \$24.05 per
customer per month; the distribution delivery cost is \$0.25288 per CCF. In the
proposed rate, LG&E is proposing a Basic Service Charge of \$24.00 which is slightly
below the unit cost from the cost of service study. LG&E is rounding the Basic
Service Charge so that it is simpler and easier to use.

- 6
- 7

#### C. COMMERCIAL GAS SERVICE (CGS)

#### 8 Q. Please provide a brief description of Rate CGS.

9 A. Rate CGS is the standard gas rate schedule available to commercial customers for gas 10 sales service. Approximately 25,000 commercial customers are served under this rate 11 Rate CGS consists of a Basic Service Charge, Distribution Cost schedule. 12 Component and Gas Supply Cost Component. The Basic Service Charge is 13 differentiated between customers whose meters have a capacity less than 5,000 cubic 14 feet per hour (cf/hr) and customers whose meters have a capacity equal to or greater 15 than 5,000 cf/hr.

#### 16 Q. What are the charges that LG&E is proposing for Rate CGS?

A. LG&E is proposing to increase the Basic Service Charge from \$40.00 per month to
\$60.00 per month for customers with meter capacity less than 5,000 cf/hr and from
\$180.00 to \$285.00 for customers with mater capacity equal to or greater than 5,000
cf/hr. As mentioned earlier in connection with Rate RGS, LG&E is proposing to
reset the GLT by removing all Gas Line Program projects performed prior to July 1,
2017, and to place the cost of those projects in base rates. The Company is proposing

to increase the Distribution Cost Component from \$0.21504 per CCF to \$0.26267 per
CCF. The rate includes a \$0.05 per CCF discount for off-peak usage from April
through October, and the Company is not proposing to change the differential.
LG&E is not proposing to change the Gas Supply Cost Component in this rate case
proceeding or to make any other structural changes to Rate CGS.

- 6
- 7

#### **D. INDUSTRIAL GAS SERVICE (IGS)**

#### 8 Q. Please provide a brief description of Rate IGS.

9 A. Rate IGS is the standard gas rate schedule available to industrial customers for gas 10 sales service. Approximately 260 industrial customers are served under this rate 11 schedule. Rate IGS consists of a Basic Service Charge, Distribution Cost Component 12 and Gas Supply Cost Component. The Basic Service Charge is differentiated 13 between customers whose meters have a capacity less than 5,000 cubic feet per hour 14 (cf/hr) and customers whose meters have a capacity equal to or greater than 5,000 15 cf/hr.

#### 16 Q. What are the charges that LG&E is proposing for Rate IGS?

A. As mentioned earlier, LG&E is proposing to reset the GLT by removing all Gas Line Program projects performed prior to July 1, 2017, and to place the cost of those projects in base rates. LG&E is proposing to *increase* the Basic Service Charge from \$40.00 per month to \$165.00 per month for customers with meter capacity less than 5,000 cf/hr and from \$180.00 to \$750.00 for customers with mater capacity equal to or greater than 5,000 cf/hr. The Company is proposing to *decrease* the Distribution

1		Cost Component from \$0.22779 per CCF to \$0.21929 per CCF. LG&E is not
2		proposing to change the Gas Supply Cost Component in this rate case proceeding or
3		to make any other structural changes to Rate IGS. Overall, the rate adjustments are
4		revenue neutral.
5		
6		E. AS AVAILABLE GAS SERVICE (AAGS)
7	Q.	Please provide a brief description of Rate AAGS.
8	A.	Rate AAGS is the rate schedule available to commercial and industrial customers that
9		agree to take gas sales service on a non-firm basis. There are currently only 6
10		customers on this rate schedule. Rate AAGS consists of a Basic Service Charge,
11		Distribution Delivery Charge (Distribution Cost Component) and Gas Supply Cost
12		Component.
13	Q.	What are the charges that LG&E is proposing for Rate AAGS?
14	A.	As mentioned earlier, LG&E is proposing to reset the GLT by removing all Gas Line
15		Program projects performed prior to July 1, 2017, and to place the cost of those
16		projects in base rates. LG&E is proposing to increase the Basic Service Charge from
17		\$400.00 per month to \$500.00 per month. The Company is proposing to increase the
18		Distribution Cost Component from \$0.7009 per Mcf to \$1.06436 per Mcf. LG&E is
19		not proposing to change the Gas Supply Cost Component in this rate case proceeding
20		or to make any other structural changes to Rate AAGS. Overall, after accounting for
21		transferring GLT revenues into base rates, the proposed rate adjustments result in a
22		decrease for Rate AAGS customers. The GLT charge for AAGS is currently

1		\$2,838.87 per customer per month. Although the Company is transferring these
2		revenues in base rates, LG&E is only proposing to increase the Basic Service Charge
3		by \$100.00 per month. Consequently, there is an effective decrease in the customer
4		charges billed to the customers under this rate schedule of \$2,738.87 (calculated as
5		100 - 2,838.87 = -2,737.87.) The proposed increase in the Distribution Cost
6		Component from \$0.7009 per Mcf to \$1.06436 per Mcf is less than the effective
7		decrease in the customer charge, resulting in an overall decrease in revenue to the
8		class. As mentioned earlier, the Company is proposing a 6.66 percent revenue
9		decrease to this rate class because of its extremely high rate of return of 30.69
10		percent.
11	Q.	Have you prepared an exhibit showing the calculation of the rate components for
12		Rate AAGS?
12 13	A.	Rate AAGS? Yes. Exhibit WSS-8 shows the calculation of the unit customer cost and distribution
	A.	
13	A.	Yes. Exhibit WSS-8 shows the calculation of the unit customer cost and distribution
13 14	A.	Yes. Exhibit WSS-8 shows the calculation of the unit customer cost and distribution delivery cost. From this exhibit, the customer cost is calculated to be \$508.41 per
13 14 15	A.	Yes. Exhibit WSS-8 shows the calculation of the unit customer cost and distribution delivery cost. From this exhibit, the customer cost is calculated to be \$508.41 per customer per month. In the proposed rate, LG&E is proposing a Basic Service
13 14 15 16	A.	Yes. Exhibit WSS-8 shows the calculation of the unit customer cost and distribution delivery cost. From this exhibit, the customer cost is calculated to be \$508.41 per customer per month. In the proposed rate, LG&E is proposing a Basic Service Charge of \$500 which is slightly below the unit cost from the cost of service study.
13 14 15 16 17	A.	Yes. Exhibit WSS-8 shows the calculation of the unit customer cost and distribution delivery cost. From this exhibit, the customer cost is calculated to be \$508.41 per customer per month. In the proposed rate, LG&E is proposing a Basic Service Charge of \$500 which is slightly below the unit cost from the cost of service study.
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> </ol>	А. <b>Q.</b>	Yes. Exhibit WSS-8 shows the calculation of the unit customer cost and distribution delivery cost. From this exhibit, the customer cost is calculated to be \$508.41 per customer per month. In the proposed rate, LG&E is proposing a Basic Service Charge of \$500 which is slightly below the unit cost from the cost of service study. Again, LG&E is rounding the Basic Service Charge for ease and simplicity.
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> </ol>		Yes. Exhibit WSS-8 shows the calculation of the unit customer cost and distribution delivery cost. From this exhibit, the customer cost is calculated to be \$508.41 per customer per month. In the proposed rate, LG&E is proposing a Basic Service Charge of \$500 which is slightly below the unit cost from the cost of service study. Again, LG&E is rounding the Basic Service Charge for ease and simplicity. <b>F. FIRM TRANSPORTATION SERVICE (FT)</b>

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per delivery point each month, have purchased gas from a party other than LG&E,
 and who have obtained all requisite authority to transport gas through Texas Gas
 Pipeline Company's (LG&E's Pipeline Transporter's) system.

#### 4 Q. What are the charges that LG&E is proposing for Rate FT?

5 A. LG&E is proposing to increase the Distribution Charge from \$0.4302 per Mcf to 6 \$0.4428 per Mcf. The Company is also proposing to increase the Daily Storage 7 Charge component of the Utilization Charge for Daily Imbalances ("UCDI") from 8 \$0.1833 per Mcf to \$0.2785 per Mcf. The UCDI is a charge that is applied to daily 9 transportation imbalances that exceed  $\pm 5\%$ . The cost support for the charge is shown 10 in Exhibit WSS-9. It should also be noted that the Company is proposing that a 11 component of the GLT associated with replacement of transmission facilities would 12 apply to customers taking service under Rate FT. This will be discussed in the 13 portion of my testimony dealing with the proposed changes to the GLT.

- 14
- 15

#### G. PROPOSED SUBSTITUTE GAS SALES SERVICE (SGSS)

16 Q. Please describe LG&E's proposed Rate SGSS.

A. As explained in Mr. Conroy's testimony, Rate SGSS is being proposed to provide
substitute gas sales service for any customer who desires to receive firm sales service
from LG&E in addition to gas received from other sources with which the customer is
physically connected. This rate would therefore apply to customers who normally
purchase gas supply directly from a pipeline, from another local distribution
company, or from a local producer but desire to rely on LG&E as an alternative or

1 substitute supplier of natural gas. In its role as a substitute supplier, LG&E would 2 maintain sufficient storage and distribution delivery capacity on its system to provide 3 firm service to a customer under Rate SGSS, just as it would any other commercial or 4 industrial customer that receives firm sales service from the Company under either 5 Rate CGS or Rate IGS. As with any sales service, the Company must also secure firm gas supplies and pipeline capacity to serve customers under the rate, and, as with 6 7 any sales service, gas costs are recovered through the Company's Gas Supply Clause. 8 Because the delivery of natural gas under this rate schedule is expected to be 9 intermittent, it is necessary to implement a rate structure that ensures that the actual 10 cost of providing service is being collected from customers desiring backup service 11 and that customers taking service under Rate SGSS are not being subsidized by 12 LG&E's other customers.

# Q. Please describe the rate components for Rate SGSS and the cost basis for the charges.

A. Rate SGSS consists of a Basic Service Charge (customer charge), Demand Charge,
and Distribution Charge. The Basic Service Charge will be applied to each customer
delivery point. The will be applied to the customer's Monthly Billing Demand. The
Customer's Monthly Billing Demand is the greater of the customer's Maximum Daily
Quantity ("MDQ") or the highest daily volume of gas delivered to the delivery point
during the current or preceding 11 monthly billing periods. The Distribution Charge
will be applied to the quantity of gas (Mcf) delivered to the customer.

22

For commercial customers under Rate SGSS, LG&E is proposing a Basic

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Service Charge of \$285.00 per month, a Demand Charge of \$6.27 per Mcf of
 Monthly Billing Demand, and a Distribution Charge of \$0.3767 per Mcf. For
 industrial customers under Rate SGSS, LG&E is proposing a Basic Service Charge of
 \$750.00 per month, a Demand Charge of \$10.90 per Mcf of Monthly Billing
 Demand, and a Distribution Charge of \$0.2992 per Mcf.

6 These charges reflect the unbundled unit costs from the Company's gas cost 7 of service study filed in this proceeding for Rate CGS and Rate IGS. Specifically, for 8 commercial customers, the unbundled unit costs are determined based on revenue 9 requirements for Rate CGS, and for industrial customers, the unbundled unit costs are 10 determined based on revenue requirements for Rate IGS.

### 11 Q. How does this rate design differ from LG&E's standard rates for sales service?

12 A. LG&E's standard rates for commercial and industrial gas sales service (Rates CGS 13 and IGS) consist of a Basic Service Charge, Distribution Cost Component, and Gas 14 Supply Cost Component (GSCC). The GSCC provides recovery of the cost of natural 15 gas and pipeline services that LG&E purchases to serve customers. The costs 16 incurred by LG&E to operate its own delivery system are recovered through the Basic 17 Service Charge and the Distribution Cost Component of its rates. For customers 18 substituting LG&E's gas supplies for those from other physical sources, and who 19 might only fall back on LG&E on an *intermittent* basis, a rate that consists of a fixed 20 customer charge and a volumetric distribution delivery charge does not allow the 21 Company to recover the fixed demand costs that such customers place on the system. 22 A customer under Rate SGSS would likely impose a large intermittent and perhaps

1 infrequent daily demand on LG&E's system. Nevertheless, LG&E must have 2 adequate delivery capacity to meet the customer's maximum daily demand whenever the customer calls upon it. With a rate structure that includes only a volumetric 3 4 charge but no demand charge, it is virtually impossible for the Company to recover 5 the distribution capacity costs necessary to serve the customer. For this reason, LG&E is proposing to incorporate a demand charge for Rate SGSS. A demand 6 7 charge will help ensure that other customers are not subsidizing those customers who 8 take substitution or backup service from LG&E.

9

Q.

#### How were the charges for Rate SGSS determined?

10 A. The unbundled unit costs were determined based on revenue requirements for Rate 11 CGS and Rate IGS. The cost elements included in Rate SGSS include: (1) customer-12 related costs, (2) demand-related costs associated with LG&E's transmission and 13 distribution delivery system, (3) demand-related underground storage costs, and (4) 14 variable volumetric-related costs.

15 The customer-related costs included in Rate SGSS are fixed costs that tend to 16 vary according to the number of natural gas customers on the system. These are costs 17 that do not vary with the demand placed on the system or the amount of natural gas 18 throughput. Customer-related costs include items such as operating and maintenance 19 expenses ("O&M"), depreciation, taxes, and return associated with investment in 20 meters, company service lines, a portion of distribution mains, and pressure 21 regulators. These costs also include meter reading and billing, and customer service 22 Because customer-related costs are fixed, they should be recovered expenses.

1 through a fixed monthly charge.

2 The demand-related transmission and distribution costs included in Rate 3 SGSS are costs associated with having adequate transmission and distribution 4 capacity available on LG&E's delivery system to meet maximum system demands. 5 These costs include O&M, depreciation, taxes, and return associated primarily with the non-customer-related portions of transmission and distribution mains. Because 6 7 these are capacity-related costs, they should be recovered through a demand charge. 8 Demand-related underground storage costs are costs related to peak day deliveries 9 required from storage to meet winter season customer demands. Because these costs 10 are capacity-related, the appropriate means for recovering these costs is through a 11 demand charge. Demand-related distribution costs and demand-related underground 12 storage costs will be recovered through the Demand Charge for Rate SGSS.

Variable volumetric-related costs are those costs that vary with the volume of
natural gas that flows through the system. This cost element is best recovered
through a volumetric distribution charge.

Q. Is LG&E proposing a demand charge to recover fixed costs associated with
 reserving pipeline capacity and securing firm gas supplies to serve customers
 under Rate SGSS?

A. No. As mentioned earlier, the Company must secure firm gas supplies and pipeline
capacity to serve customers under this rate. While an argument can be made to
recover fixed pipeline and gas supply costs through a demand charge that is
applicable to the customer's maximum daily requirement, LG&E is not proposing to

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recover these costs through a demand charge but through the Gas Supply Cost
Component ("GSCC") of the Company's Gas Supply Clause ("GSC"), which is billed
as a commodity charge. Recovering pipeline demand charges through a demand
charge would result in an even larger percentage increase to a customer that LG&E is
proposing to transfer to Rate SGSS, as will be discussed below.

# Q. Have you prepared a schedule showing the calculation of the unbundled unit costs for commercial customers served under Rate SGSS?

A. Yes. The calculation supporting the unit charges for the rate is shown in Exhibit
WSS-10. The costs shown in this exhibit are derived from the Company's gas cost of
service study discussed later in my testimony. Specifically, Exhibit WSS-10 reflects
cost elements from the cost of service study for Rates CGS and IGS. The cost
components applicable to commercial customers under Rate SGSS consist of the
following unit costs:

14

Cost Component/Charge	Commercial Customers	Industrial Customers
Basic Service Charge	\$285	\$750
Monthly Demand Charge	\$6.27/Mcf	\$10.90/Mcf
Distribution Charge	\$0.3767/Mcf	\$0.2992 /Mcf

15

### Table 10

2	Q.	Are there any customers currently taking substitute/backup service from
3		LG&E?
4	A.	Yes, there is currently one customer that calls LG&E from time to time to act as a
5		substitute supplier in lieu of taking natural gas from other sources with which the
6		customer is physically connected. The customer is a commercial customer that is
7		currently served under Rate CGS. LG&E is proposing to serve this customer under
8		Rate SGSS.
9	Q.	Was this customer shown as an SGSS customer in the consumption analysis for
10		the proposed rates?
11	A.	Yes. The customer was shown as an SGSS customer on page 9 of Schedule M-2.3-G
12		of the Company's Filing Requirements.
13	Q.	What is the percentage increase for this customer?
14	A.	The percentage increase is 215%.
15	Q.	Why is this revenue increase so high?
16	A.	As I mentioned earlier, customers taking service under Rate SGSS will only use gas
17		service from LG&E intermittently. The customer that LG&E is proposing to move to
18		Rate SGSS only falls back on LG&E for natural gas sale service from time to time.
19		The customer has a high daily demand but purchases very little gas from the
20		Company. Under Rate CGS, which does not include a demand charge, the customer
21		pays a very low charge to receive full backup service. However, the Company must
22		maintain adequate delivery capacity to serve the customer's large demand. The

1 volumetric charge in Rate CGS does not allow the Company to recover the high 2 demand costs incurred to serve this customer. By serving this customer under Rate 3 CGS, which does not include a demand charge, costs incurred to serve this customer 4 are being unfairly shifted to LG&E's other customers. When the service is billed 5 under a rate structure that includes a demand charge, the actual cost of serving the customer is collected. This results in a large percentage increase for this customer, 6 7 but the amount billed is appropriate given the kind of firm service that is provided. 8 Ultimately, customers desiring this service have a choice whether to receive or not 9 to receive substitute sales service from LG&E. Customers desiring service under 10 Rate SGSS would already have the capability to receive gas supply from another 11 source or provider. In this instance, LG&E is not the customer's primary supplier. 12 Therefore, the customer must perform its own economic evaluation to determine 13 whether it wants to be connected to LG&E to receive substitute gas service from the 14 Company.

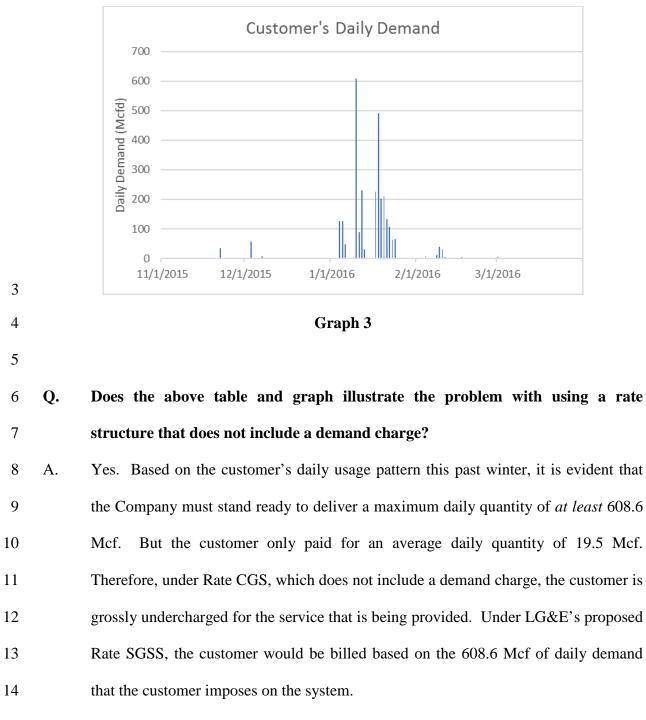
# Q. Please discuss the usage pattern for the commercial customer that LG&E is proposing to move to Rate SGSS?

17A.During this past winter (November 2015 through March 2016), the customer18purchased 2,968.5 Mcf of natural gas from the Company. The customer's average19demand during this period was 19.5 Mcf per day [2,968.5 Mcf  $\div$  152 days = 19.5 Mcf20per day]. But the customer's maximum daily demand during this five-month period21was 608.6 Mcf. Therefore, the customer's purchased load factor was only 3.2% [19622Mcf/day  $\div$  608.6 Mcf/day = 3.2%].

The following table (Table 11) and graph (Graph 3) show how sporadic the customer's daily demands from this past winter were:

	Cu	stomer's Dail	y Demands (M	cfd)	
Day of					
Month	November	December	January	February	Marc
1	0	0.1	0	0	3.
2	0	0	0	0	0.
3	0	56.3	0	0	
4	0	0	127	6.1	
5	0	0	127.1	0	
6	0	0	47.5	0	
7	0	6.3	0	0	
8	0	0.1	0	10.5	
9	0	0	0	39.4	
10	0	0	608.6	31.5	
11	0	0	88.2	4.3	
12	0	0	231.2	3.4	
13	0	0	30	2	
14	0.7	0	0	3.2	
15	0	0.1	0	0	
16	0	0	0	0.3	
17	0	0	226.1	4.2	
18	0	0.1	490.1	0	
19	0	0	201	0	
20	0	0	210.2	0	
21	0	0	132.3	0	
22	35.2	0.4	106.6	0	
23	0	0.3	64.1	0	
24	0.2	0	64.6	0.1	
25	0	0	0	0	
26	0	0	2.2	0	
27	0	0	2.7	0	
28	0	0.4	0	0	
29	0	0	0	0	
30	0	0	0	0	
31	0	0	0	0	
Total	36.1	64.1	2759.5	105	3
	55.1	04.1	Gas consump		2,968.
			Average Dem		19.
			Maximum De		608.
			Load Factor		3.2

Table 11



#### H. PROPOSED LOCAL GAS DELIVERY SERVICE (LGDS)

#### 2 Q. Please describe LG&E's proposed Rate LGDS.

A. Rate LGDS is a rate schedule that is available to parties who contract with LG&E to
provide firm transportation service of locally produced gas. The rate schedule is
described in more detail in Mr. Conroy's testimony.

# 6 Q. Please describe the rate components for Rate LGDS and cost basis for the 7 charges.

A. Rate LGDS consists of an Administrative Charge, Basic Service Charge (customer charge), Demand Charge, and Distribution Charge. The Basic Service Charge will be applied to each customer receipt point. The Demand Charge will be applied to the customer's monthly billing demand, which is the greater of the Maximum Daily Quantity ("MDQ") or the highest daily volume of gas delivered to the delivery point during the current or preceding 11 monthly billing periods. The Distribution Charge will be applied to the net nominated volumes of gas (Mcf) at the delivery point.

15 LG&E is proposing the same Administrative Charge for Rate LGDS as Firm 16 Transportation Service (Rate FT). The Demand Charge is designed to recover 17 demand-related transmission and distribution costs on LG&E's system. The 18 Distribution Charge is designed to recover variable costs on LG&E's transmission 19 and distribution delivery system. The cost support for these charges is based on the 20 cost of providing service to customers served under Rate FT. Like Rate FT, Rate 21 LGDS would also include a Utilization Charges for Daily Imbalances ("UCDI") 22 consisting of (i) a Daily Storage Charge component of \$0.2785 per Mcf, and (ii) a 1 Daily Demand Charge, currently \$0.1673 per Mcf, designed to recover pipeline 2 demand costs on imbalances, which would change with each GSCC filing. The 3 UCDI is a charge that is applied to daily transportation imbalances that exceed  $\pm 5\%$ . 4 Q. Have you prepared a schedule showing the calculation of the unbundled unit 5 costs? 6 Yes. The calculation supporting the unit charges for Rate LGDS is shown in Exhibit A. 7 WSS-11. This exhibit reflects cost elements from the cost of service study for Rate 8 FT. The proposed Rate LGDS consists of the following unit charges: 9

Cost Component/Charge	Unit Cost
Administrative Charge	\$550.00
Basic Service Charge	\$1,310.00
Demand Charge	\$2.57/Mcfd
Distribution Charge	\$0.0388/Mcf

10

11

#### Table 12

12

### 13 I. MODIFICATIONS TO THE GAS LINE TRACKER (GLT)

### 14 Q. Please describe the changes proposed to the GLT.

### 15 A. The Company is proposing three modifications to its GLT mechanism. The first

1 modification would move the GLT rate base as of June 30, 2017, from the GLT 2 mechanism into general rate base to be recovered through base rates. The second 3 modification is to combine the application of the GLT for a number of rate schedules. 4 Specifically, the GLT charge for Rate IGS will be combined with Rate AAGS and 5 Rate DGGS customers. The GLT for Rate SGSS will be combined with CGS or IGS, as appropriate. The GLT for Rate FT and LGDS will also be combined. The third 6 7 modification is a change in the rate design. As discussed in Mr. Bellar's testimony, 8 the Company is proposing two additional programs to be included in the GLT 9 mechanism. In the first program, LG&E will implement a systematic replacement of 10 steel gas distribution customer service lines and the targeted removal of county loops 11 In the second program, LG&E will modernize its and steel curbed services. 12 transmission pipeline. I discuss below the rate design modifications to the GLT 13 mechanism that the Company is proposing to properly recover these costs.

# 14 Q. What pricing structure is currently used in the GLT to recover Gas Line 15 Program Costs?

- A. Under the GLT mechanism, program costs for distribution line replacements are
   recovered through a flat charge per customer. This is the same approach used by
   other utilities in Kentucky for their trackers.
- 19

#### Q. What changes in its pricing structure is the Company proposing?

A. For future expenditures, LG&E is proposing to continue to recover program costs of the distribution line replacement program as a customer charge. It is appropriate to recover distribution replacement costs as a customer charge because the majority of 1 the costs of distribution services and mains are classified as customer-related costs in 2 a cost of service study. For the transmission pipeline modernization program 3 discussed in Mr. Bellar's testimony, the Company is proposing to recover the cost of 4 the project through a delivery charge priced on a per Ccf basis. Because no portion 5 of transmission costs are classified as customer-related in the cost of service study, it is appropriate to recover these costs through a delivery charge applied to both sales 6 7 and transportation customers. Because transportation customers served under Rate 8 FT and Rate LGDS would utilize the transmission lines that are being modernized, 9 these customers should be allocated a portion of these costs.

- 10
- 11

### V. MISCELLANEOUS SERVICE CHARGES

#### 12 A. POLE AND STRUCTURE ATTACHMENTS (RATE PSA)

#### 13 Q. Is the Company proposing to adjust the pole attachment charge?

14 A. Yes. Changes to the tariff language are discussed in Mr. Conroy's testimony. As 15 described in Mr. Conroy's testimony, the Company is broadening the tariff to include 16 not only charges for cable television attachments but also charges for 17 telecommunication wireline and wireless facilities that are attached to LG&E's poles 18 and cable television and telecommunications wireline facilities utilizing the 19 Company's underground electric infrastructure. In the proposed schedule, the 20 Company is proposing three charges: (1) an annual charge per standard pole 21 attachment which is based on one foot of the usable space on the pole; (2) an annual 22 charge per attachment for wireless telecommunication facilities such as antennas,

1 risers, transmitters, and receivers when they are attached to the Company's poles; (3) 2 an annual charge per linear foot of duct that will be applicable when the Company's 3 infrastructure utilized for cable television underground electric is or 4 telecommunication wireline facilities. Cable television companies are currently 5 covered by the Company's rate schedule, but other telecommunication attachments are billed pursuant to individual contracts with the companies or organizations that 6 7 attach to LG&E's poles. LG&E is proposing that as these individual contracts expire 8 then the attachments would be transitioned to and covered by Rate PSA. I will 9 address the derivation of the charges for the rate schedule in my testimony below.

# 10 Q. Is LG&E proposing any increases to the attachment charges that would be 11 applicable to cable television companies?

A. No. The Company is proposing to maintain the pole attachment charge applicable to cable television companies at the current level of \$7.25 per attachment. When I calculated the attachment charges using forecasted costs based on a revenue requirements reflecting net cost plant (net cost rate base), the analysis resulted in a unit cost for LG&E and KU of \$7.45 per attachment. Because the current charge reasonably reflects the updated cost based on forecasted net plant, the Company decided not to propose a change in the rate at this time.

# 19 Q. Is the Company proposing to apply this same rate to other wireline attachments? 20 A. Yes.

#### 21 Q. Please describe the methodology used to calculate the charges.

22 A. In its Order in Administrative Case No. 251, the Commission prescribed a

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1 methodology for determining the attachment charges. The calculations set forth in 2 Exhibit WSS-12 follow the guidelines established in Administrative Case No. 251. In 3 this exhibit, the weighted average carrying costs are calculated for 35, 40 and 45 foot 4 poles. The charge is calculated by multiplying a usage factor of 0.0759 by the annual 5 carrying costs of a bare pole. The 0.0759 usage factor was the prescribed percentage for a three-user pole set forth in the Commission's Order in Administrative Case No. 6 7 251 dated September 17, 1982, and assumes that a cable television attachment would 8 utilize one foot of the usable space on the pole. In calculating bare pole costs, 15% of 9 the pole costs have been removed from plant in service costs for 35, 40 and 45 foot 10 poles to reflect the elimination of appurtenances.

11 The calculations set forth in Exhibit WSS-13 for the duct attachment charge 12 follow the same carrying charge methodology except the cost of conduit investment is 13 utilized. In calculating the cost per foot of duct, the methodology for determining the 14 applicable linear feet of duct is consistent with the methodology described in the 15 *Report and Order* issued in CS Docket No. 97-98 by the Federal Communications 16 Commission on April 3, 2000.

17 Q. How are the carrying charges calculated?

A. They are calculated using a standard revenue requirement (cost of service)
methodology. The carrying charges include the following cost-of-service
components: (1) return on net investment (rate base), (2) income taxes, (3)
depreciation expenses, (4) O&M expenses, and (5) property taxes. These are the
standard items included in a utility's revenue requirements.

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#### **Q**. Are the charges based on net depreciated plant?

2 A. Yes. Net depreciated plant (or rate base), along with straight line depreciation, is 3 used in the carrying charge calculation. This approach is consistent with the way that 4 all other revenue requirements are determined in this proceeding. Therefore, the charges shown in Exhibits WSS-12 and WSS-13 are reflective of current revenue 5 6 requirements associated with the cost of providing attachment service.

#### 7 **Q**. What is the proposed charge for attaching wireless facilities to a pole?

- 8 The proposed charge for attaching a wireless facility is \$84.00 per year per A. 9 attachment. This charge was determined by multiplying the annual charge for a 10 standard attachment by 11.585 feet, which corresponds to the average space currently 11 used for each wireless facility.
- 12 **Q**.

#### What is the proposed duct attachment charge?

13 A. The proposed charge for a duct attachment is \$0.81 per year per linear foot of duct.

- 14 0. Is there a revenue impact for these changes?
- 15 Yes. There is a small revenue impact. While LG&E is not proposing to change the A. 16 rate applicable to cable television companies, the Company will apply the rate to all 17 other wireline attachments as the contracts that are currently in place for such 18 attachments expire. For purposes of calculating the impact on miscellaneous 19 revenues in this proceeding, the Company assumes that all wireline contracts will 20 expire during the test year, resulting in a reduction in miscellaneous revenue of 21 \$22,391. (For KU, there is a revenue increase that is approximately equal to this 22 amount.) The support for the change in miscellaneous revenues is shown in Exhibit

WSS-14.

2

3

#### **B. UNAUTHORIZED RECONNECTION CHARGE**

#### 4 Q. Is LG&E proposing an Unauthorized Reconnection Charge and what is it?

5 A. Yes. LG&E is proposing to add an Unauthorized Reconnection Charge to the electric 6 and gas tariffs that will allow the Company to recover the cost of addressing theft of 7 service in excess of any back-billing of energy and/or demand charges for stolen 8 service. Specifically, the Unauthorized Reconnection Charge is a set of charges that 9 would apply when a customer either connects or reconnects to the Company's service 10 without authorization. Because these reconnects will typically involve some type of 11 meter tampering, the charge will vary depending on whether the Company's metering 12 equipment has been damaged and needs to be replaced. The need for the charge is 13 discussed in Mr. Conroy's testimony. I will discuss the calculation of the standard 14 charges that would apply.

## Q. Please describe the various Unauthorized Reconnection Charges that LG&E is proposing and how they are calculated?

A. The Company is proposing the following charges: (1) an Unauthorized Reconnection
Charge of \$70.00 for an unauthorized connection or reconnection that does not
require the replacement of the electric meter; (2) an Unauthorized Reconnection
Charge of \$90.00 for an unauthorized connection or reconnection that requires the
replacement of a single-phase standard electric meter; (3) an Unauthorized
Reconnection Charge of \$110.00 for an unauthorized connection or reconnection that

1 requires the replacement of a single-phase Automatic Meter Reading ("AMR") 2 electric meter; (4) an Unauthorized Reconnection Charge of \$174.00 for an 3 unauthorized connection or reconnection that requires the replacement of a single-4 phase Automatic Metering System ("AMS") electric meter; (5) an Unauthorized 5 Reconnection Charge of \$177.00 for an unauthorized connection or reconnection that requires the replacement of a three-phase electric meter; (6) an Unauthorized 6 7 Reconnection Charge of \$70.00 for an unauthorized connection or reconnection that 8 does not require the replacement of the gas meter; and (7) an Unauthorized 9 Reconnection Charge of \$132.00 for an unauthorized connection or reconnection that 10 requires the replacement of a gas meter. The cost support for these charges is 11 included in Exhibit WSS-15. The charge includes the labor cost of a field 12 investigator and back-office support, transportation costs, cost associated with the 13 installation of a locking device to prevent future meter tampering, and the cost of 14 replacing the meter if necessary.

15 **Q.** 

### Will implementing this rate result in increased miscellaneous revenues?

A. No. The Company has been recovering the costs from customers who have tampered with their meter based on the out-of-pocket expenses incurred by the Company. Since the proposed rate is determined on the same basis (i.e., on the basis of average out-of-pocket expenses), there will be no difference between the forecasted charges reflected in the determination of revenue requirements and the revenues that would be collected from the implementation of a standard charge in the tariff.

#### 1 VI. ELECTRIC COST OF SERVICE STUDY

Q. Did The Prime Group prepare a cost of service study for LG&E's electric
operations based on forecasted financial and operating results for the 12 months
beginning July 1, 2017?

5 A. Yes. The Prime Group prepared a fully allocated embedded cost of service study 6 based on a forecasted test year beginning July 1, 2017. The cost of service study 7 corresponds to the pro-forma financial exhibits that the Company has provided to 8 meet the requirements of Section 16(8). The objective in performing the electric cost 9 of service study is to allocate LG&E's revenue requirement as fairly as possible to all 10 of the classes of customers that LG&E serves, to determine the rate of return on rate 11 base that LG&E is earning from each customer class, and to provide the data 12 necessary to develop rate components that more accurately reflect cost causation.

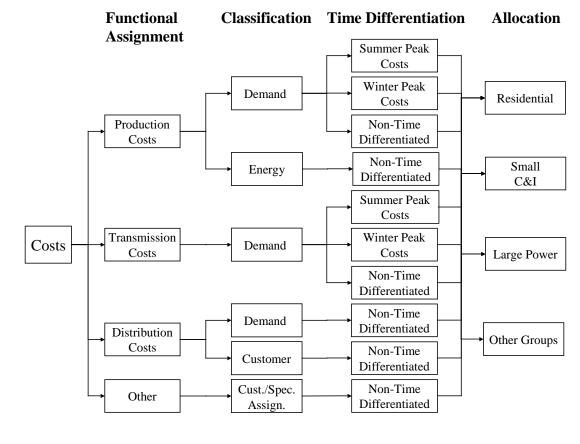
13 The Prime Group prepared two versions of the cost of service study using 14 alternative methodologies to time-differentiate and allocate fixed production costs. In 15 the first version of the cost of service study, the modified Base-Intermediate-Peak 16 ("BIP") methodology used in prior LG&E and KU cost of service studies was 17 utilized. In the second version of the study, a Loss-of-Load-Probability ("LOLP") 18 methodology was utilized. I will describe the two methodologies later in my 19 testimony. All other costs, including variable production costs, transmission costs, 20 and general plant are handled the same way in both versions of the study.

- 21 Q. What model was used to perform the cost of service study?

A. The cost of service study was performed using an EXCEL<sup>TM</sup> spreadsheet model that
 was developed by The Prime Group and that has been utilized in previous filings by
 LG&E to support requests for adjustments in its rates.

### 4 Q. What procedure was used in performing the cost of service study?

5 Regardless of whether a historic test year or a forecasted test year is used to develop a A. 6 cost of service study, the methodology for developing a cost of service study is 7 basically the same. The three traditional steps of an embedded cost of service study -8 functional assignment, classification, and allocation – were augmented to include a 9 fourth step, assigning costs to costing periods which time differentiates the costs. The 10 cost of service study was therefore prepared using the following procedure: (1) costs 11 were functionally assigned (functionalized) to the major functional groups; (2) costs 12 were then *classified* as commodity-related, demand-related, or customer-related; (3) 13 costs were assigned to the costing periods; and then finally (4) costs were allocated to 14 the rate classes. These steps are depicted in the following diagram (Figure 1).



#### Figure 1

1

2

The following functional groups were identified in the cost of service study: (1) Production, (2) Transmission, (3) Distribution Substation (4) Distribution Primary Lines, (5) Distribution Secondary Lines (6) Distribution Line Transformers, (7) Distribution Services, (8) Distribution Meters, (9) Distribution Street and Customer Lighting, (10) Customer Accounts Expense, (11) Customer Service and Information, and (12) Sales Expense.

# 9 Q. How were costs time differentiated and allocated in the version of the study that 10 utilized the BIP methodology?

The BIP method is used to assign production costs to the relevant costing periods.<sup>2</sup> 1 A. 2 Using this methodology, production demand-related costs (fixed costs) were assigned 3 to three categories of capacity - base, intermediate, and peak. The percentages of 4 production fixed cost that were assigned to the base period were determined by 5 dividing the minimum system demand by the maximum demand. The percentages of production fixed cost that were assigned to the intermediate period were calculated by 6 7 dividing the winter peak demand by the summer peak demand and subtracting the 8 base component. Peak costs included all costs not assigned to base and intermediate 9 components.

10 Costs that were assigned as base, intermediate, and peak were then either 11 assigned to the summer or winter peak periods or assigned as non-time-differentiated. 12 Base costs were assigned as non-time-differentiated. Intermediate costs were pro-13 rated to the winter and summer peak periods in the same ratio as the number of hours 14 contained in each costing period to the total. Peak costs are assigned to the summer 15 peak period.

### 16 Q. In applying the modified BIP methodology, what demands were used?

17 A Demands for the combined LG&E and KU systems were used to determine the 18 costing periods and in determining the percentages of production fixed cost assigned 19 to the costing periods. Since the two systems are planned and operated jointly, 20 developing costing periods and assigning costs to the costing periods based on the

 $<sup>^2</sup>$  In Case No. 90-158, the Commission found LG&E's cost of service study, which utilized the modified BIP methodology, to be "acceptable and suitable for use as a starting point for electric rate design." (Order in Case No. 90-158, dated December 21, 1990, at 58.)

combined loads for LG&E and KU accurately reflects cost causation. Developing the
costing periods and allocation factors in the cost of service study based on the
combined loads for LG&E and KU does not result in any shifting of booked expenses
from one utility to the other. LG&E's cost of service study relied on LG&E's
accounting costs, and KU's cost of service study relied on KU's accounting costs.
The modified BIP methodology simply affects how costs are assigned to the costing
periods within the LG&E and KU cost of service studies.

8

### Q. What percentages were assigned to the costing periods using the BIP methodology?

9 A. Exhibit WSS-16 shows the application of the BIP methodology. Using this
10 methodology 34.38% of LG&E's production and transmission fixed costs were
11 assigned to the winter peak period, 36.02% to the summer peak period, and 29.60%
12 as base period costs that are non-time-differentiated.

### 13 Q. How were costs time differentiated and allocated in the version of the study that 14 utilized the LOLP?

15 A. LOLP represents the probability that a utility system's total demand will exceed its 16 generation capacity during a given hour. Loss of load probability therefore takes into 17 consideration the magnitude of the load, installed generation capacity, forced outage 18 rates, maintenance schedules, and ramp-up rates of generating units. LOLP can be 19 calculated for any period – an hour, a day, a week, etc. LOLP is a critical 20 measurement used by LG&E and KU in planning its generation resources. 21 Specifically, it is used to evaluate the level of reserve margins that the Companies 22 target. Therefore, LOLP can serve as a foundation for allocating fixed production costs to the classes of customers. In other words, allocating fixed production costs on
 the basis of LOLP links the cost-of-service allocation methodology to a key
 measurement used by LG&E and KU to plan the system.

4 For the cost of service study, LOLP was calculated for each hour of the test year based on the hourly loads for the test year and the characteristics of LG&E and 5 6 KU's generating facilities, including capacity, forced outage rates, and maintenance 7 schedules. Hourly loads for each rate class were then weighted by the LOLP for 8 each hour to determine LOLP weighted hourly load for each rate class. The 9 weighted loads for each rate class are then summed for the test year to determine a 10 production fixed cost allocator. Mathematically, this is equivalent to calculating an 11 allocation vector for fixed production costs using the following formula:

12

13 
$$\overline{PROD \ ALLOCATOR} = \sum_{i=1}^{8760} LOLP_i * \overline{LOAD}_i$$

15	Where:	$\overline{PROD ALLOCATOR}$ is the allocation vector for
16		production fixed costs in the cost of service study;
17		$LOLP_i$ is the Loss of Load Probability for hour i;
18		$\overline{LOAD}_i$ is a vector of hourly load (in kW) for each rate
19		class at hour i; for example, $\overline{LOAD}_i$ = (load for Rate RS
20		at hour i, load for Rate GS for hour i, load for Rate PS
21		at hour i, );

1		i is the hour of the year;
2		
3		The allocation vector $\overline{PROD \ ALLOCATOR}$ is then used to allocate fixed production
4		costs to the customer classes in the cost of service study.
5	Q.	But is the LOLP approach a time-differentiated methodology?
6	A.	Yes, and at a fine level of granularity. With the LOLP methodology, costs are
7		differentiated for each hour of the test year. The approach can also be adapted to
8		calculate costs for any set of time periods during the test year, including the base,
9		intermediate and off-peak periods used in the BIP, or the approach can be adapted to
10		calculate costs for other time periods that may be more appropriate for rate design.
11		Exhibit WSS-17 is a summary of the production fixed cost allocators used in the
12		LOLP version of the study.
13	Q.	Why are you presenting an alternative methodology for allocating fixed production
14		costs?
15	A.	While the BIP methodology has been accepted by the Commission as a basis of
16		developing rates in prior rate cases, the LOLP methodology more closely reflects how
17		LG&E and KU's generation resources have been planned over the past 30 years or so
18		and how the Companies' generation resources are currently planned. Therefore, the
19		LOLP version of the study provides useful information for the development of rates.
20	Q.	How were costs classified as energy-related, demand-related or customer-related?
21	A.	Classification involves utilizing the appropriate cost driver for each functionally
22		assigned cost which provides a method of arranging costs so that the service

1 characteristics that give rise to the costs can serve as a basis for allocation. For costs 2 classified as *energy-related*, the appropriate cost driver is the amount of kilowatt-3 hours consumed. Fuel and purchased power expenses are examples of costs typically 4 classified as energy costs. Costs classified as *demand-related* tend to vary with the 5 capacity needs of customers, such as the amount of generation, transmission or distribution equipment necessary to meet a customer's needs. 6 The costs of 7 production plant and transmission lines are examples of costs typically classified as 8 demand-related costs. Costs classified as customer-related include costs incurred to 9 serve customers regardless of the quantity of electric energy purchased or the peak 10 requirements of the customers and include the cost of the minimum system necessary 11 to provide a customer with access to the electric grid. As will be discussed later in 12 my testimony, a portion of the costs related to Distribution Primary Lines, 13 Distribution Secondary Lines and Distribution Line Transformers were classified as 14 demand-related and customer-related using the zero-intercept methodology. Distribution Services, Distribution Meters, Distribution Street and Customer 15 16 Lighting, Customer Accounts Expense, Customer Service and Information and Sales 17 Expense were classified as customer-related because these costs do not vary with 18 customers' capacity or energy usage.

# Q. What methodologies are commonly used to classify distribution plant between customer-related and demand-related components?

A. Two commonly used methodologies for determining demand/customer splits of
distribution plant are the "minimum system" methodology and the "zero-intercept"

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In the minimum system approach, "minimum" standard poles, 1 methodology. 2 conductor, and line transformers are selected and the minimum system is obtained by 3 pricing all of the applicable distribution facilities at the unit cost of the minimum size 4 plant. The minimum system determined in this manner is then classified as customer-5 related and allocated on the basis of the average number of customers in each rate class. All costs in excess of the minimum system are classified as demand-related. 6 7 The theory supporting this approach maintains that in order for a utility to serve even 8 the smallest customer, it would have to install a minimum size system. Therefore, the 9 costs associated with the minimum system are related to the number of customers that 10 are served, instead of the demand imposed by the customers on the system.

11 In preparing this study, the "zero-intercept" methodology was used to determine the customer components of overhead conductor, underground conductor, 12 13 and line transformers. Because the zero-intercept methodology is less subjective than 14 the minimum system approach, the zero-intercept methodology is preferred over the 15 minimum system methodology when the necessary data is available. Additionally, 16 LG&E has utilized the zero-intercept methodology in determining customer-related 17 costs in prior rate case filings before this Commission. With the zero-intercept 18 methodology, we are not forced to choose a minimum size conductor or line 19 transformer to determine the customer-related component of distribution costs. In the 20 zero-intercept methodology, the estimated cost of a zero-size conductor or line 21 transformer is the absolute minimum system for determining customer-related costs.

22 Q. What is the theory behind the zero-intercept methodology?

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A. The theory behind the zero-intercept methodology is that there is a linear relationship
between the unit cost of conductor (\$/ft) or line transformers (\$/kVA of transformer
size) and the load flow capability of the plant measured as the cross-sectional area of
the conductor or the kVA rating of the transformer. After establishing a linear
relation, which is given by the equation:

$$y = a + bx$$

15

capability of the plant.

6 7	where: $\mathbf{y}$ is the unit cost of the conductor or transformer,
8	$\mathbf{x}$ is the size of the conductor (MCM) or transformer (kVA), and
9	a, b are the coefficients representing the intercept and slope,
10	respectively
11	it can be determined that, theoretically, the unit cost of a foot of conductor or
12	transformer with zero size (or conductor or transformer with zero load carrying
13	capability) is $\mathbf{a}$ , the zero-intercept. The zero-intercept is essentially the cost
14	component of conductor or transformers that is invariant to the size and load carrying

Like most electric utilities, the feet of conductor and the number of transformers on LG&E's system are not uniformly distributed over all sizes of wire and transformer. For this reason, it was necessary to use a weighted linear regression analysis, instead of a standard least-squares analysis, in the determination of the zero intercept. Without performing a weighted linear regression analysis all types of conductor and transformers would have the same impact on the analyses, even though the quantity of conductor and transformers are not the same for each size and type.

Using a weighted linear regression analysis, the cost and size of each type of conductor or transformer is weighted by the number of feet of installed conductor or the number of transformers. In a weighted linear regression analysis, the following 6 weighted sum of squared differences

$$\sum_{i} w_i (y_i - \hat{y}_i)^2$$

1

2

3

4

5

7 is minimized, where  $\mathbf{w}$  is the weighting factor for each size of conductor or transformer, and  $\mathbf{y}$  is the observed value and  $\mathbf{\hat{y}}$  is the predicted value of the dependent 8 9 variable.

#### 10 Has the Commission accepted the use of the zero-intercept methodology? 0.

11 A. Yes. The Commission found LG&E's cost of service studies (both electric and gas) 12 submitted in Case No. 2000-080 and Case No. 90-158 to be reasonable, thus 13 providing a means of measuring class rates of return that are suitable for use as a 14 guide in developing appropriate revenue allocations and rate design. The cost of 15 service studies in both proceedings utilized a zero-intercept methodology to calculate 16 the splits between demand-related and customer-related distribution costs. The 17 Commission also found the embedded cost of service study submitted by Union Light 18 Heat and Power in Case No. 2001-00092, which utilized a zero-intercept 19 methodology, to be reasonable. Furthermore, the zero-intercept methodology has 20 been used in every cost of service study filed by both LG&E and KU since the early

1 1980s, including the cost of service studies filed in Case Nos. 2014-00371 and 2014 2 00372, the Companies' last general rate case filings.

### 3 **O**.

### Q. Have you prepared exhibits showing the results of the zero-intercept analysis?

4 A. Yes. The zero-intercept analysis for overhead conductor, underground conductor,
5 and line transformers are included in Exhibits WSS-18, WSS-19 and WSS-20,
6 respectively.

# Q. Have you prepared an exhibit showing the results of the functional assignment, time-differentiation and classification steps of the electric cost of service study?

9 A. Yes. Exhibit WSS-21 shows the results of the first three steps of the electric cost of 10 service study for the BIP version of the study, namely functional assignment, 11 classification, and time differentiation. Exhibit WSS-22 shows the same three steps 12 for the LOLP version of the study. In the cost of service model used in this study, the 13 calculations for functionally assigning, classifying and time differentiating LG&E's 14 accounting costs are made using what are referred to in the model as "functional vectors". These vectors are multiplied (using scalar multiplication<sup>3</sup>) by the dollar 15 16 amount in the various accounts to simultaneously functionally assign, classify and 17 time differentiate LG&E's accounting costs. These calculations are made in the 18 portion of the cost of service model included in Exhibits WSS-21 and WSS-22. In 19 these exhibits, LG&E's accounting costs are functionally assigned, classified and 20 time differentiated using explicitly determined functional vectors and using internally

<sup>&</sup>lt;sup>3</sup> "Scalar multiplication" is the multiplication of each element of a vector by a constant (scalar). Scalar multiplication is different from "vector multiplication," in which one vector is multiplied by another vector either as a dot product (whose product is a scalar) or as a cross product (whose product is another vector).

1 generated functional vectors. The explicitly determined functional vectors, which are 2 primarily used to direct where costs are functionally assigned, classified, and time 3 differentiated, are shown on pages 43 through 45 of Exhibits WSS-21 and WSS-22. 4 Internally generated functional vectors are utilized throughout the study to 5 functionally assign, classify and time differentiate costs on the basis of similar costs or on the basis of internal cost drivers. The internally generated functional vectors 6 7 are also shown on pages 46 through 48 of Exhibits WSS-21 and WSS-22. An 8 example of this process is the use of total O&M expenses less purchased power 9 ("OMLPP") to allocate cash working capital included in rate base. Because cash 10 working capital is determined on the basis of 12.5% of operation and maintenance 11 expenses, exclusive of purchased power expenses, it is appropriate to functionally 12 assign, classify and time differentiate these costs on the same basis. (See Exhibits 13 WSS-21 and WSS-22, pages 7 through 9, for the functional assignment, classification 14 and time differentiation of cash working capital on the basis of OMLPP shown on 15 pages 22 through 24.) The functional vector used to allocate a specific cost is 16 identified in the column of the model labeled "Vector" and refers to a vector 17 identified elsewhere in the analysis by the column labeled "Name".

# 18 Q. Please describe how the functionally assigned, classified and time differentiated 19 costs were allocated to the various classes of customers that LG&E serves.

A. Exhibits WSS-23 and WSS-24 show the allocation of the functionally assigned, classified and time differentiated costs to the various classes of customers that LG&E serves using the BIP methodology and the LOLP methodology, respectively. For a forecasted test year, the average number of customers is used for allocating customer related costs rather than the year end number of customers that is used for a historic
 test year. The following allocation factors were used in the electric cost of service
 study to allocate the functionally assigned, classified and time differentiated costs:

- E01 The energy cost component of purchased power
  costs was allocated on the basis of the loss adjusted
  kWh sales to each class of customers during the test
  year.
- PPWDA and PPSDA The winter demand and
  summer demand cost components of production fixed
  costs were allocated on the basis of each class's
  contribution to the coincident peak demand during the
  winter and summer peak hour of the test year.
- NCPT The demand cost component is allocated
   based on the maximum class demands for transmission,
   primary and secondary voltage customers. This
   allocation vector is used to allocate transmission costs.
- NCPP The demand cost component is allocated on
   the basis of the maximum class demands for primary
   and secondary voltage customers. This allocation
   vector is used to allocate distribution substations and
   primary distribution demand-related costs.

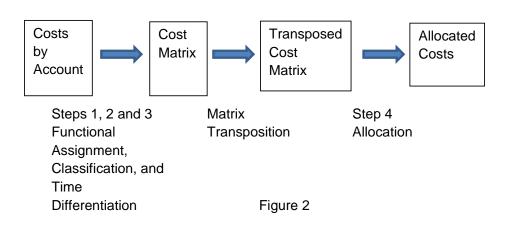
- SICD The demand cost component is allocated on the
  basis of the sum of individual customer demands for
  secondary voltage customers.
- C02 The customer cost component of customer
  services is allocated on the basis of the average number
  of customers for the test year.
- C03 Meter costs were specifically assigned by
   relating the costs associated with various types of
   meters to the class of customers for whom these meters
   were installed.
- Cust04 Customer-related costs associated with
   lighting systems were specifically assigned to the
   lighting class of customers.
- Cust05 and Cust06 Meter reading, billing costs and
   customer service expenses were allocated on the basis
   of a customer weighting factor calculated using the
   average number of customers for the test year based on
   discussions with LG&E's meter reading, billing and
   customer service departments.
- Cust07 Customer-related costs are allocated on the
   basis of the average number of customers using line
   transformers and secondary voltage conductor.

Cust08 – Customer-related costs are allocated on the
basis of the average number of customers using primary
voltage conductor.

4 Q. Once costs are functionally assigned, classified and time differentiated, what 5 calculations are used to allocate these costs to the various customer classes that 6 LG&E serves?

7 Once costs for all of the major accounts are functionally assigned, classified, and time A. 8 differentiated, the resultant cost matrix for the major cost groupings (e.g., Plant in 9 Service, Rate Base, O&M Expenses) is then transposed and allocated to the customer 10 classes using "allocation vectors" or "allocation factors". A transpose of a matrix is 11 formed by turning all the rows of a given matrix into columns and vice-versa. This 12 process results in the columns of functionally assigned, classified and time 13 differentiated costs becoming rows in the transposed matrix which then can be 14 allocated to the various classes of customers that LG&E serves. This process is 15 illustrated in Figure 2 below.

16



1		The results of the class allocation step of the cost of service study are included
2		in Exhibits WSS-23 and WSS-24. The costs shown in the column labeled "Total
3		System" in Exhibits WSS-23 and WSS-24 were carried forward from the
4		functionally assigned, classified and time differentiated costs shown in Exhibits
5		WSS-21 and WSS-22, respectively. The column labeled "Ref" in Exhibits WSS-23
6		and WSS-24 provides a reference to the results included in Exhibits WSS-21 and
7		WSS-22.
8	Q.	Please summarize the results of the electric cost of service study.
9	A.	The following table (Table 13) summarizes the rates of return for each customer class
10		after reflecting the rate adjustments proposed by LG&E under the BIP version of the
10 11		after reflecting the rate adjustments proposed by LG&E under the BIP version of the study and the LOLP version of the study. The Actual Adjusted Rate of Return was
11		study and the LOLP version of the study. The Actual Adjusted Rate of Return was
11 12		study and the LOLP version of the study. The Actual Adjusted Rate of Return was calculated by dividing the adjusted net operating income by the adjusted net cost rate
11 12 13		study and the LOLP version of the study. The Actual Adjusted Rate of Return was calculated by dividing the adjusted net operating income by the adjusted net cost rate base for each customer class. The adjusted net operating income and rate base reflect
11 12 13 14		study and the LOLP version of the study. The Actual Adjusted Rate of Return was calculated by dividing the adjusted net operating income by the adjusted net cost rate base for each customer class. The adjusted net operating income and rate base reflect the rate base, income and expenses discussed in the testimony of Mr. Garrett. The

			Rate of Return	n on Rate Base	Rate of Retur	n on Rate Base
			at Curre	nt Rates	at Propo	sed Rates
		Rate Class	<b>BIP Version</b>	LOLP Version	BIP Version	LOLP Version
		Residential Service	2.65%	2.04%	4.92%	4.17%
		General Service	7.34%	8.65%	9.86%	11.37%
		Primary Service-Secondary	8.84%	9.70%	11.35%	12.34%
		Primary Service-Primary	6.49%	7.03%	9.35%	10.00%
		Time-of-Day Secondary Service	11.92%	11.90%	14.41%	14.39%
		Time-of-Day Primary Service	4.57%	5.39%	7.25%	8.25%
		Retail Transmission Service	3.48%	4.83%	6.34%	8.05%
		Lighting Energy Service	8.01%	17.55%	7.98%	17.50%
		Traffic Energy Service	7.62%	10.39%	10.24%	13.48%
		Lighting Service & Restricted Lighting Service	5.39%	6.01%	6.85%	7.54%
		Special Contracts	1.94%	2.47%	4.45%	5.13%
1 2		Total All Classes	4.92%	4.92%	7.31%	7.31%
6 7 8		pages 43 through 30 and pages 49	through 51,	respectively	- f E-1:1:4	
0		WSS-24.		respectively	, of Exhibits	s WSS-23 an
9	VII.	WSS-24. GAS COST OF SERVICE STUD	Y	respectively	, of Exhibits	s WSS-23 an
	VII. Q.					
9		GAS COST OF SERVICE STUD	ce study fo	r LG&E's	gas operati	ons based o
9 10 11		GAS COST OF SERVICE STUD Did you prepare a cost of servi	ce study fo or the 12 mo	r LG&E's	gas operati June 30, 2(	ons based o )18?
9 10 11 12	Q.	GAS COST OF SERVICE STUD Did you prepare a cost of servi financial and operating results fo	<b>ce study fo</b> or the 12 mo f a fully allo	r LG&E's onths ended ocated, embe	gas operati June 30, 2( dded cost of	ons based o D18? f service stud
9 10	Q.	GAS COST OF SERVICE STUD Did you prepare a cost of servi financial and operating results for Yes. I supervised the preparation of	<b>ce study fo</b> <b>or the 12 mo</b> f a fully allo onths ended	r LG&E's onths ended ocated, embe June 30, 2	gas operati June 30, 20 dded cost of 2018, based	ons based o D18? f service stud f on LG&E <sup>3</sup>
9 10 11 12 13	Q.	GAS COST OF SERVICE STUD Did you prepare a cost of servi financial and operating results for Yes. I supervised the preparation of for gas operations for the 12 me	ce study for or the 12 mo f a fully allo onths ended cost of servio	r LG&E's ponths ended bocated, embe June 30, 2 ce study corr	gas operati June 30, 20 dded cost of 2018, based responds to	ons based o D18? f service stud l on LG&E <sup>2</sup> the pro-form

allocate LG&E's natural gas revenue requirement as fairly as possible to the various
 classes of customers that LG&E serves, to determine the rate of return on rate base
 that LG&E is earning from each customer class, and to provide the data necessary to
 develop rate components that more accurately reflect cost causation.

5 Q. Generally, were the procedures used in performing the gas cost of service study 6 the same as those that you described above for the electric cost of service study?

A. Yes, with the exception that the study was not time differentiated. The cost of service
study was prepared using the following procedure: (1) costs were functionally
assigned (*functionalized*) to the major functional groups, (2) costs were then *classified*as commodity-related, demand-related, or customer-related; and then finally (3) costs
were allocated to the various natural gas rate classes that LG&E serves. These steps
are depicted in the following diagram (Figure 3). This is a standard approach utilized
in the preparation of embedded cost of service studies for natural gas utilities.

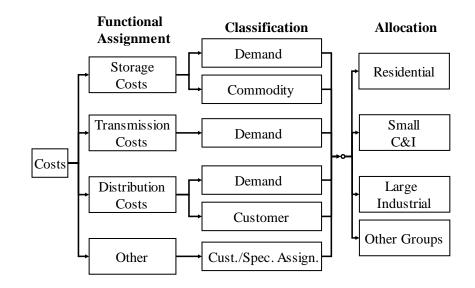


Figure 3

14

**Q**.

#### What functional groups were used in the natural gas cost of service study?

A. The following functional groups were identified in the cost of service study: (1)
Procurement, (2) Storage, (3) Storage-Related Transmission, (4) Non-Storage-Related
Transmission; (5) Distribution Commodity, (6) Distribution Structures and
Equipment, (7) Distribution Mains – Low- and Medium-Pressure, (8) Distribution
Mains – High-Pressure, (9) Services, (10) Meters, (11) Customer Accounts, and (12)
Customer Service Expense.

### 8 Q. Is a change being made to the functional groups in the cost of service study?

9 A. Yes. A change was made in this study to separate out transmission costs between 10 storage-related transmission costs and non-storage-related transmission costs. In 11 previous cost of service studies there was just one functional group for transmission 12 costs but there are now two functional groups - Storage-Related Transmission and 13 Non-Storage-Related Transmission. Storage-Related Transmission costs represent 14 the transmission facilities that are used to deliver natural gas from LG&E's storage 15 fields to the distribution system. The Non-Storage-Related Transmission functional group represents costs of transmission facilities used to deliver gas from interstate 16 17 pipelines both to the distribution system and directly to customers. It is important to 18 distinguish between the two types of costs because the Non-Storage-Related 19 Transmission facilities are used to serve all customer classes, including both sales and 20 transportation customers, by delivering gas to the distribution system and directly to 21 individual customers; whereas, the use of Storage-Related Transmission facilities is 22 limited to delivering storage gas to sales customers and to serving daily imbalances

1 created by transportation customers. Therefore, the use of Storage-Related 2 Transmission facilities to serve customers under Rate FT, and any other firm 3 transportation-only service, would be limited to their use of daily imbalance service 4 facilitated through storage. Exhibit WSS-25 shows the derivation of the functional 5 assignment for transmission plant.

# Q. How were costs classified as commodity-related, demand-related or customer related?

Classification involves identifying the appropriate cost driver for each account which 8 A. 9 provides a method of arranging costs so that the service characteristics that give rise 10 to the costs can serve as a basis for allocation. Costs classified as commodity-related 11 tend to vary with the quantity of gas delivered, such as gas supply and the operation 12 of compressors. Since gas supply costs were removed from the cost of service study, 13 it was not necessary to classify gas supply costs. Costs classified as *demand-related* 14 are costs related to facilities installed to meet design-day usage requirements. Costs 15 classified as *customer-related* include non-volumetric costs incurred to serve customers regardless of the quantity of gas purchased or the peak requirements of the 16 17 customers. All transmission plant costs were classified as demand-related. The 18 transmission plant used to deliver natural gas from and to storage is allocated on the 19 same basis as storage. The transmission plant used to deliver gas from the pipelines 20 service LG&E into the Company's distribution system was allocated on design-day 21 demands. Distribution Structures and Equipment costs were classified as demand-22 related. Costs related to Distribution Mains were functionally assigned as either lowand medium-pressure mains or high-pressure mains and then classified as demand related and customer-related using the zero-intercept methodology. Services, Meters,
 Customer Accounts, and Customer Service Expenses were classified as customer related.

# 5 Q. Explain the zero-intercept methodology that you used to classify the costs of mains 6 between demand-related and customer-related costs.

A. A portion of the cost of mains was classified as demand-related, and a portion was
classified as customer-related using the zero-intercept methodology, which was
described above in connection with the electric cost of service study. The zerointercept analysis is included in Exhibit WSS-26.

# 11 Q. How were distribution mains functionally separated between high-, low- and 12 medium-pressure categories?

13 A. The feet of high-pressure mains by size of pipe were identified from LG&E's maps 14 and records. The feet of low- and medium-pressure pipe were determined residually 15 by subtracting the specifically identified high-pressure mains from the total feet for 16 each pipe size. The zero-intercept unit cost of \$7.87 was then applied to the high-17 pressure mains and to the low- and medium-pressure mains to determine the customer-related portion of the mains.<sup>4</sup> By identifying high-pressure mains from 18 19 LG&E's maps and records, it was determined that LG&E's high-pressure distribution 20 mains represent 9.89% of the total installed cost, with 4.11% corresponding to 21 customer-related costs and 5.78% corresponding to demand-related costs. The low-

<sup>&</sup>lt;sup>4</sup> The cost of service study used the zero intercept results from the detailed analysis that was performed based on plant records as of June 30, 2016.

and medium-pressure pipe comprises the remaining 90.11% of installed cost, with
 55.81% classified as customer-related and 34.30% classified as demand-related. The
 breakdown is shown on Exhibit WSS-27.

4

## Q. Was a similar separation made in the electric cost of service study?

5 A. Yes. The electric cost of service study separates distribution conductor between 6 primary voltage conductor and secondary voltage conductor. The functional 7 separation in the gas cost of service study between high-pressure and low- and 8 medium-pressure pipe is analogous to the primary and secondary splits determined in 9 the electric cost of service study. Differences in the pressure in a pipe are often used 10 as an analogy to differences in voltages.

# Q. Have you prepared an exhibit showing the results of the functional assignment and classification steps of the cost of service study?

A. Yes. Exhibit WSS-28 shows the results of the first two steps of the natural gas cost of
 service study, functional assignment and classification.

## 15 Q. Please describe the allocation factors used in the gas cost of service study.

- 16 A. The results of allocating LG&E's functionally assigned and classified costs to the 17 various classes of customers that LG&E serves are provided in Exhibit WSS-29. The 18 following allocation factors were used in the gas cost of service study:
- 19
- DEM01 is used to allocate procurement demand-related
   costs; these costs are the procurement-related expenses
   that are not recovered through LG&E's Gas Supply

Clause.

- 3 DEM02 is used to allocate Storage demand-related 4 costs and represents a composite allocation based on 5 extreme winter season requirements and design day demands. The class allocation factor is the sum of (a) 6 7 the volumes (commodity) withdrawn from storage 8 during the design winter season and (b) the volumes 9 needed in storage to meet the design-day demands. 10 Rate FT is assigned an allocation based on its 11 utilization of balancing service in accordance with the 12 provision set forth in the rate schedule to allow 13 imbalances that do not exceed  $\pm$  5% of delivered 14 volumes when an Operational Flow Order ("OFO") has 15 not been issued. The calculation of this allocation factor is shown in Exhibit WSS-30. 16
- 17

1

2

DEM03 is used to allocate Transmission demand related costs for the portion of the transmission system
 that is used to move gas to and from storage. Because
 this portion of LG&E's transmission lines is used to
 either fill the storage fields or remove gas from storage,

1	transmission demand-related costs are allocated on the
2	same basis as storage demand-related costs.
3	
4 •	DEM04 is used to allocate Distribution Structures and
5	Equipment demand-related costs and represents
6	forecasted maximum class demands determined at
7	LG&E's -12° F design day mean temperature.
8	
9 •	<b>DEM05</b> is used to allocate the demand-related portion
10	of the cost of high-pressure distribution mains and the
11	cost of transmission lines used to move gas from the
12	pipelines to LG&E's distribution system. It represents
13	maximum class demands determined at the design day
14	mean temperature of customers served at high-pressure
15	or below. The high-pressure system consists of pipe
16	pressured above 60 psi. All of the gas delivered into
17	the low- and medium-pressure system must first pass
18	through the high-pressure system. Consequently, all
19	customers utilize the high-pressure system.
20	
21 •	<b>DEM05a</b> is used to allocate the demand-related portion

22

of the cost of low- and medium-pressure distribution

- 110 -

1 mains and represents maximum class demands 2 determined at the design day mean temperature of 3 customers served at medium pressure or low pressure. 4 The low- and medium- pressure system consists of pipe 5 pressured at 60 psi and below. The demands of customers served at high pressure are not included in 6 7 the determination of this allocation factor. The low-8 and medium-pressure system is not used to provide 9 distribution delivery service to customers served at high 10 pressure. 11 12 COM01 is used to allocate commodity-related 13 procurement expenses and represents annual throughput 14 volumes (including both sales and transportation). 15 Procurement expenses correspond to expenses incurred 16 by LG&E's gas supply department (including labor), 17 which are not recovered through the Gas Supply

which are not recovered through the Gas Supply Clause. This department not only purchases gas for sales customers but also administers LG&E's transportation service schedules.

21

22

18

19

20

• **COM02** is used to allocate Storage commodity-related

- 111 -

1	costs and represents forecasted customer class
2	deliveries during the winter withdrawal season (defined
3	as the months of November through March.)
4	
5 •	COM03 is used to allocate Transmission commodity-
6	related costs and represents forecasted customer class
7	deliveries during the winter withdrawal season (defined
8	as the months of November through March.)
9	
10 •	COM04 is used to allocate Distribution commodity-
11	related costs and represents annual throughput volumes
12	(including both sales and transportation.)
13	
14 •	CUST01 is used to allocate the customer-related
15	portion of LG&E's high-pressure distribution mains
16	and represents the average number of customers served
17	at high pressure and below.
18	
19 •	CUST01a is used to allocate the customer-related
20	portion of LG&E's low- and medium-pressure
21	distribution mains and represents the average number of
22	customers at low and medium pressure. The customers

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1		served at high pressure are not included in the
2		determination of this allocation factor because the low-
3		and medium-pressure system is not used to provide
4		distribution delivery service to customers served at high
5		pressure.
6		
7	•	CUST02 is used to allocate Services and is based on
8		the total estimated cost of installing a service line per
9		customer in each customer class weighted by the
10		average number of customers in each class.
11		
12	•	CUST03 is used to allocate Meters and is based on the
13		total cost of meters and meter installation costs per
14		customer in each customer class weighted by the
15		average number of customers in each class.
16		
17	•	CUST04 is used to allocate customer accounts

composite allocation factor.<sup>5</sup>
 CUST05 is used to allocate customer service expenses using the same customer-weighting factor used to allocate Accounts 901, 902, 903, and 905 as in the calculation of CUST04.
 Q. Summarize the results of the gas cost of service study.
 Table 14 summarizes the rates of return on net cost rate base for natural gas service

Fable 14 summarizes the fates of feturn on het cost fate base for natural gas service
for each customer class before and after reflecting the rate adjustments proposed by
LG&E. The rates of return shown in Table 14 can be found on pages 12 and 13 of
Exhibit WSS-29.

11

	Rate of Return on Rate Base					
Rate Class	Current Rates	Proposed Rates				
Residential Gas Service (RGS)	5.08%	6.32%				
Commercial Gas Service (CGS)	7.32%	8.48%				
Industrial Gas Service (IGS)	21.31%	21.29%				
As-Available Gas Service (AAGS)	30.69%	25.05%				
Firm Transportation (FT)	11.00%	11.56%				
Total All Classes	6.00%	7.19%				

# Table 14

14

12

13

<sup>&</sup>lt;sup>5</sup> This allocation factor is determined as follows: First, customer accounts supervision (Account 901), meter reading (Account 902), customer records and collections (Account 903), and miscellaneous customer account expenses (Account 905) were allocated to each customer class using a customer weighting factor based on discussions with LG&E's meter reading, billing and customer service departments. A cost weighting factor of 1.0 was utilized for Residential Gas Service, a cost weighting factor of 1.1 was utilized for Commercial Gas Service, a cost weighting factor of 10 was utilized for Industrial Gas Service, Rate AAGS, and a customer weighting factor of 20 was utilized for Firm Transportation Service Rate FT and special contracts. Using a cost weighting factor of 20 for Rate FT and special contracts, for example, means that the cost of performing the meter reading, billing and customer service functions for customers served under Rate FT is 20 times more than the cost of performing these same services for customers served under Rate RGS.

1 The Actual Adjusted Rate of Return was calculated by dividing the adjusted net 2 operating income by the adjusted net cost rate base for each customer class. The 3 adjusted net operating income and rate base reflect the forecasted amounts discussed 4 in the testimony of Mr. Garrett. The Proposed Rate of Return was calculated by 5 dividing the net operating income adjusted for the proposed rate increase by the 6 adjusted net cost rate base.

- 7 Q. Does this conclude your testimony?
- 8 A. Yes, it does.

## VERIFICATION

#### **COMMONWEALTH OF KENTUCKY** ) )) SS: **COUNTY OF JEFFERSON**

The undersigned, William Steven Seelye, being duly sworn, deposes and states that he is the Managing Partner with The Prime Group, LLC, and that he has personal knowledge of the matters set forth in the foregoing testimony and exhibits, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

William Steven Seelve

Subscribed and sworn to before me, a Notary Public in and before said County

and State, this 1st day of Noulember 2016.

Hedy Schooler tary Public (SEAL)

My Commission Expires: JUDY SCHOULER Notary Public, State at Large, KY My commission expires July 11, 2018 Notary ID # 512743

# **Exhibit WSS-1**

Qualifications

## WILLIAM STEVEN SEELYE

### **Summary of Qualifications**

Provides consulting services to numerous investor-owned utilities, rural electric cooperatives, and municipal utilities regarding utility rate and regulatory filings, cost of service and wholesale and retail rate designs; and develops revenue requirements for utilities in general rate cases, including the preparation of analyses supporting pro-forma adjustments and the development of rate base.

## **Employment**

Principal and Managing Partner The Prime Group, LLC (1996 to 2012) (2015-Present) (Associate Member 2012-2015) Provides consulting services in the areas of tariff development, regulatory analysis, revenue requirements, cost of service studies, rate design, fuel and power procurement, depreciation studies, lead-lag studies, and mathematical modeling.

Assists utilities with developing strategic resource and marketing plans. Assist with resource planning and cost benefit analyses for generation investment projects. Performs economic analyses evaluating the costs and benefits of an electric generation projects; performs business practice audits for electric utilities, gas utilities, and independent transmission organizations, including audits of production cost modeling, fuel procurement practices and controls, and wholesale marketing procedures. Assists investor-owned utilities in the development of testimony regarding the prudence of power supply decisions and of investments in specific generation and distribution assets.

Provides utility clients assistance regarding regulatory policy and strategy; project management support for utilities involved in complex regulatory proceedings; process audits; state and federal regulatory filing development; cost of service development and support; the development of innovative rates to achieve strategic objectives; unbundling of rates and the development of menus of rate alternatives for use with customers; performance-based rate development.

Prepared retail and wholesale rate schedules and filings submitted to the Federal Energy Regulatory Commission (FERC) and state regulatory commissions for numerous of electric and gas utilities. Performed cost of service or rate studies for over 150 utilities throughout North America. Prepared market power analyses in support of market-based rate filings submitted to the FERC for utilities and their marketing affiliates. Performed business practice audits for electric utilities, gas utilities, and independent transmission organizations (ISOs), including audits of production cost modeling, retail utility tariffs, retail utility billing practices, and ISO billing processes and procedures.

*Instructor in Mathematics* Walden School and Private Instruction (2012-2015)

Manager of Rates and Other Positions Louisville Gas & Electric Co. (May 1979 to July 1996) Taught advanced placement calculus, linear algebra, pre-calculus, college algebra and differential equations.

Held various positions in the Rate Department of LG&E. In December 1990, promoted to Manager of Rates and Regulatory Analysis. In May 1994, given additional responsibilities in the marketing area and promoted to Manager of Market Management and Rates.

### **Education**

Bachelor of Science Degree in Mathematics, University of Louisville, 1979 66 Hours of Graduate Level Course Work in Electrical and Industrial Engineering and Physics.

## **Associations**

Member of the Society for Industrial and Applied Mathematics

### **Expert Witness Testimony**

Alabama: Testified in Docket 28101 on behalf of Mobile Gas Service Corporation concerning rate design and pro-forma revenue adjustments.

Colorado: Testified in Consolidated Docket Nos. 01F-530E and 01A-531E on behalf of Intermountain Rural Electric Association in a territory dispute case.

Submitted expert report in No. 14-CV-30031 before District Court, Prowers County, State of Colorado, on behalf of Arkansas River Power Authority in the *City of Lamar et al v. Arkansas River Power Authority* regarding power planning and operations.

FERC: Submitted direct and rebuttal testimony in Docket No. EL02-25-000 et al. concerning Public Service of Colorado's fuel cost adjustment.

Submitted direct and responsive testimony in Docket No. ER05-522-001 concerning a rate filing by Bluegrass Generation Company, LLC to charge reactive power service to LG&E Energy, LLC.

Submitted testimony in Docket Nos. ER07-1383-000 and ER08-05-000 concerning Duke Energy Shared Services, Inc.'s charges for reactive power service.

Submitted testimony in Docket No. ER08-1468-000 concerning changes to Vectren Energy's transmission formula rate.

Submitted testimony in Docket No. ER08-1588-000 concerning a generation formula rate for Kentucky Utilities Company.

Submitted testimony in Docket No. ER09-180-000 concerning changes to Vectren Energy's transmission formula rate.

Submitted testimony in Docket No. ER11-2127-000 concerning transmission rates proposed by Terra-Gen Dixie Valley, LLC.

Submitted testimony in Docket No. ER11-2779 on behalf of Southern Illinois Power Cooperative concerning wholesale distribution service charges proposed by Ameren Services Company.

Submitted testimony in Docket No. ER11-2786 on behalf of Norris Electric Cooperative concerning wholesale distribution service charges proposed by Ameren Services Company.

Florida: Testified in Docket No. 981827 on behalf of Lee County Electric Cooperative, Inc. concerning Seminole Electric Cooperative Inc.'s wholesale rates and cost of service. Illinois: Submitted direct, rebuttal, and surrebuttal testimony in Docket No. 01-0637 on behalf of Central Illinois Light Company ("CILCO") concerning the modification of interim supply service and the implementation of black start service in connection with providing unbundled electric service.

Indiana: Submitted direct testimony and testimony in support of a settlement agreement in Cause No. 42713 on behalf of Richmond Power & Light regarding revenue requirements, class cost of service studies, fuel adjustment clause and rate design.

Submitted direct and rebuttal testimony in Cause No. 43111 on behalf of Vectren Energy in support of a transmission cost recovery adjustment.

Submitted direct testimony in Cause No. 43773 on behalf of Crawfordsville Electric Light & Power regarding revenue requirements, class cost of service studies, fuel adjustment clause and rate design.

- Kansas: Submitted direct and rebuttal testimony in Docket No. 05-WSEE-981-RTS on behalf of Westar Energy, Inc. and Kansas Gas and Electric Company regarding transmission delivery revenue requirements, energy cost adjustment clauses, fuel normalization, and class cost of service studies.
- Kentucky: Testified in Administrative Case No. 244 regarding rates for cogenerators and small power producers, Case No. 8924 regarding marginal cost of service, and in numerous 6-month and 2-year fuel adjustment clause proceedings.

Submitted direct and rebuttal testimony in Case No. 96-161 and Case No. 96-362 regarding Prestonsburg Utilities' rates.

Submitted direct and rebuttal testimony in Case No. 99-046 on behalf of Delta Natural Gas Company, Inc. concerning its rate stabilization plan.

Submitted direct and rebuttal testimony in Case No. 99-176 on behalf of Delta Natural Gas Company, Inc. concerning cost of service, rate design and expense adjustments in connection with Delta's rate case.

Submitted direct and rebuttal testimony in Case No. 2000-080, testified on behalf of Louisville Gas and Electric Company concerning cost of service, rate design, and pro-forma adjustments to revenues and expenses.

Submitted rebuttal testimony in Case No. 2000-548 on behalf of Louisville Gas and Electric Company regarding the company's prepaid metering program.

Testified on behalf of Louisville Gas and Electric Company in Case No. 2002-00430 and on behalf of Kentucky Utilities Company in Case No. 2002-00429 regarding the calculation of merger savings. Submitted direct and rebuttal testimony in Case No. 2003-00433 on behalf of Louisville Gas and Electric Company and in Case No. 2003-00434 on behalf of Kentucky Utilities Company regarding pro-forma revenue, expense and plant adjustments, class cost of service studies, and rate design.

Submitted direct and rebuttal testimony in Case No. 2004-00067 on behalf of Delta Natural Gas Company regarding pro-forma adjustments, depreciation rates, class cost of service studies, and rate design.

Testified on behalf of Kentucky Utilities Company in Case No. 2006-00129 and on behalf of Louisville Gas and electric Company in Case No. 2006-00130 concerning methodologies for recovering environmental costs through base electric rates.

Testified on behalf of Delta Natural Gas Company in Case No. 2007-00089 concerning cost of service, temperature normalization, year-end normalization, depreciation expenses, allocation of the rate increase, and rate design.

Submitted testimony on behalf of Big Rivers Electric Corporation and E.ON U.S. LLC in Case No 2007-00455 and Case No. 2007-00460 regarding the design and implementation of a Fuel Adjustment Clause, Environmental Surcharge, Unwind Surcredit, Rebate Adjustment, and Member Rate Stability Mechanism for Big Rivers Electric Corporation in connection with the unwind of a lease and purchase power transaction with E.ON U.S. LLC.

Submitted testimony in Case No. 2008-00251 on behalf of Kentucky Utilities Company and in Case No. 2008-00252 on behalf of Louisville Gas and Electric Company regarding pro-forma revenue and expense adjustments, electric and gas temperature normalization, jurisdictional separation, class cost of service studies, and rate design.

Submitted testimony in Case No. 2008-00409 on behalf of East Kentucky Power Cooperative, Inc., concerning revenue requirements, pro-forma adjustments, cost of service, and rate design.

Submitted testimony in Case No. 2009-00040 on behalf of Big Rivers Electric Corporation regarding revenue requirements and rate design.

Submitted testimony on behalf of Columbia Gas Company of Kentucky in Case No. 2009-00141 regarding the demand side management program costs and cost recovery mechanism.

Submitted testimony in Case No. 2009-00548 on behalf of Kentucky Utilities Company and in Case No. 2009-00549 on behalf of Louisville Gas and Electric

Company regarding pro-forma revenue and expense adjustments, electric and gas temperature normalization, jurisdictional separation, class cost of service studies, and rate design.

Submitted testimony in Case No. 2010-00116 on behalf of Delta Natural Gas Company concerning cost of service, temperature normalization, year-end normalization, depreciation expenses, allocation of the rate increase, and rate design.

Submitted testimony in Case No. 2011-00036 on behalf of Big Rivers Electric Cooperative concerning cost of service, rate design, pro-forma TIER adjustments, temperature normalization, and support of MISO Attachment O.

Submitted testimony in Case No. 2016-00107 on behalf of Columbia Gas Company of Kentucky regarding a tariff application to the continue its energy efficiency and conservation rider and programs.

Submitted testimony in Case No. 2016-00274 on behalf of Kentucky Utilities Company and Louisville Gas and Electric Company in support of community solar rates.

- Maryland Submitted direct testimony in PSC Case No. 9234 on behalf of Southern Maryland Electric Cooperative regarding a class cost of service study.
- Nevada: Submitted direct and rebuttal testimony in Case No. 03-10001 on behalf of Nevada Power Company regarding cash working capital and rate base adjustments.

Submitted direct and rebuttal testimony in Case No. 03-12002 on behalf of Sierra Pacific Power Company regarding cash working capital.

Submitted direct and rebuttal testimony in Case No. 05-10003 on behalf of Nevada Power Company regarding cash working capital for an electric general rate case.

Submitted direct and rebuttal testimony in Case No. 05-10005 on behalf of Sierra Pacific Power Company regarding cash working capital for a gas general rate case.

Submitted direct and rebuttal testimony in Case Nos. 06-11022 and 06-11023 on behalf of Nevada Power Company regarding cash working capital for a gas general rate case.

Submitted direct and rebuttal testimony in Case No. 07-12001 on behalf of Sierra Pacific Power Company regarding cash working capital for an electric general rate case.

Submitted direct testimony in Case No. Docket No. 08-12002 on behalf of Nevada Power Company regarding cash working capital for an electric general rate case.

Submitted direct testimony in Case No. Docket No. 10-06001 on behalf of Sierra Pacific Power Company regarding cash working capital for an electric general rate cases.

Submitted direct testimony in Case No. Docket No. 11-06006 on behalf of Nevada Power Company regarding cash working capital for an electric general rate case.

New Mexico Submitted testimony in support of filing of Advice Notice No. 60 on behalf of Kit Carson Electric Cooperative, Inc.

Submitted direct testimony in Case No. 15-00375-UT on behalf of Kit Carson Electric Cooperative, Inc. regarding revenue requirements, the need for a rate increase, class cost of service study, apportionment of the revenue increase to the classes of service, and rate design.

Submitted testimony in Advice Notices in Case No. 15-00087-UT on behalf of Jemez Mountain Electric Cooperative in support of tribal right of way cost recovery surcharge mechanisms.

Submitted direct testimony in Case. No. 16-00065-UT on behalf of Kit Carson Electric Cooperative in support of an application for continuation of its fuel and purchased power cost adjustment clause.

Nova Scotia: Testified on behalf of Nova Scotia Power Company in NSUARB – NSPI – P-887 regarding the development and implementation of a fuel adjustment mechanism.

Submitted testimony in NSUARB – NSPI – P-884 regarding Nova Scotia Power Company's application to approve a demand-side management plan and cost recovery mechanism.

Submitted testimony in NSUARB – NSPI – P-888 regarding a general rate application filed by Nova Scotia Power Company.

Submitted testimony on behalf of Nova Scotia Power Company in the matter of the approval of backup, top-up and spill service for use in the Wholesale Open Access Market in Nova Scotia.

Submitted testimony in NSUARB – NSPI – P-884 (2) on behalf of Nova Scotia Power Company's regarding a demand-side management cost recovery mechanism.

Virginia: Submitted testimony in Case No. PUE-2008-00076 on behalf of Northern Neck Electric Cooperative regarding revenue requirements, class cost of service, jurisdictional separation and an excess facilities charge rider.

> Submitted testimony in Case No. PUE-2009-00029 on behalf of Old Dominion Power Company regarding class cost of service, jurisdictional separation, allocation of the revenue increase, general rate design, time of use rates, and excess facilities charge rider.

Submitted testimony in Case No. PUE-2009-00065 on behalf of Craig-Botetourt Electric Cooperative regarding revenue requirements, class cost of service, jurisdictional separation and an excess facilities charge rider.

Submitted testimony in Case No. PUE-2011-00013 on behalf of Old Dominion Power Company regarding class cost of service, jurisdictional separation, allocation of the revenue increase, and rate design.

# **Exhibit WSS-2**

# **Cost Components for Residential Service Rate RS**

#### Louisville Gas and Electric Company

#### Unit Cost of Service Based on the Cost of Service Study For the 12 Months Ended June 30, 2018

Rate RS

				Produ	ictio	n		Transmission	Distribution		С	Customer Service Expenses				
Description		Amount	D	emand-Related	I	Energy-Related	1	Demand-Related	ľ	Demand-Related	с	Customer-Related		Customer-Related		Total
(1) Rate Base	\$	1,151,746,077		515,004,027		18,583,062		111,943,212		184,388,867	\$	319,519,898		2,307,010	\$	1,151,746,077
<ul><li>(2) Rate Base Adjustments</li><li>(3) Rate Base as Adjusted</li></ul>	\$ \$	- 1,151,746,077	\$ \$	- 515,004,027	\$ \$	- 18,583,062	\$ \$	- 111,943,212	\$ \$	- 184,388,867	\$ \$	- 319,519,898	\$ \$	2,307,010	\$ \$	- 1,151,746,077
(4) Rate of Return		4.92%		4.92%		4.92%		4.92%		4.92%		4.92%		4.92%		
(5) Return	\$	56,611,233	\$	25,313,751	\$	913,404	\$	5,502,292	\$	9,063,179	\$	15,705,211	\$	113,395	\$	56,611,233
(6) Interest Expenses	\$	30,245,175	\$	13,524,150	\$	487,996	\$	2,939,660	\$	4,842,103	\$	8,390,682	\$	60,583	\$	30,245,175
(7) Net Income	\$	26,366,058	\$	11,789,600	\$	425,408	\$	2,562,632	\$	4,221,076	\$	7,314,529	\$	52,813	\$	26,366,058
(8) Income Taxes	\$	19,030,527	\$	8,509,513	\$	307,052	\$	1,849,660	\$	3,046,693	\$	5,279,490	\$	38,119	\$	19,030,527
<ul><li>(9) Operation and Maintenance Expenses</li><li>(10) Depreciation Expenses</li><li>(11) Other Taxes</li></ul>	\$	287,977,479 66,956,529 15,333,622	\$	38,079,049 32,589,862 6,986,847	\$	168,422,502 - -	\$	9,843,945 5,230,792 1,492,321	\$	15,549,877 10,666,047 2,509,275	\$	37,393,231 18,469,829 4,345,179	\$	18,688,875 - -	\$ \$ \$	287,977,479 66,956,529 15,333,622
<ul> <li>(12) Other Depreciation Expenses</li> <li>(13) Expense Adjustments - Prod. Demand</li> <li>(14) Expense Adjustments - Tenrgy</li> <li>(15) Expense Adjustments - Trans. Demand</li> </ul>								- - -		-		-		-	\$ \$ \$	-
<ul> <li>(16) Expense Adjustments - Distribution</li> <li>(17) Expense Adjustments - Other</li> <li>(18) Revenue Adjustments - Prod Demand</li> </ul>		(297,350) 2,508,690		(132,960) 2,508,690		(4,798)		(28,901)		(47,604)		(82,492)		(596)	\$ \$	- (297,350) 2,508,690
(19) Proforma Adjustments - Total	\$	2,211,340	\$	2,375,730	\$	(4,798)	\$	(28,901)	\$	(47,604)	\$	(82,492)	\$	(596)	\$	2,211,340
(20) Total Cost of Service	\$	448,120,729	\$	113,854,751	\$	169,638,161	\$	23,890,108	\$	40,787,467	\$	81,110,448	\$	18,839,794	\$	448,120,729
<ul> <li>(21) Less: Misc Revenue - Prod Demand</li> <li>(22) Less: Misc Revenue - Energy</li> <li>(23) Less: Misc Revenue - Other</li> <li>(24) Less: Misc Revenue - Total</li> </ul>	\$	1,781,297 (15,545,980) (13,024,238) (26,788,921)	\$	1,781,297 - (5,823,797) (4,042,500)		(15,545,980) (210,142) (15,756,122)		- (1,265,882) (1,265,882)		- (2,085,116) (2,085,116)		- (3,613,212) (3,613,212)		- (26,088) (26,088)		1,781,297 (15,545,980) (13,024,238) (26,788,921)
(25) Net Cost of Service	\$	421,331,808	\$	109,812,251	\$	153,882,039	\$	22,624,226	\$	38,702,350	\$	77,497,236	\$	18,813,706	\$	421,331,808
(26) Billing Units				4,180,088,831		4,180,088,831		4,180,088,831		4,180,088,831		4,369,310		4,369,310		
(27) Unit Costs			\$	0.02627	\$	0.03681	\$	0.00541	\$	0.00926	\$	17.74	\$	4.31	\$	22.04

Customer Cost	22.04
Infrastructure Energy Cost	0.04094
ECR in Base Rates	0.00691
Total Infrastructure Energy Cost	0.04785
Variable Energy Cost	0.03681

# **Exhibit WSS-3**

# **Cost Support for CSR Credits**

## Louisville Gas & Electric Company

Fixed Cost of Large-Frame Combustion Turbines Based on 12 Months Ended June 30, 2018

Description		Brown CTs	Trimble County CTs	Paddys Run 13 CTs		Total
Plant	\$	84,366,777	\$ 130,992,227	\$ 44,779,461		260,138,465
Accumulated Depreciation	\$	39,753,883	\$ 58,228,903	\$ 18,010,212	Ş	115,992,998
Net Plant	\$	44,612,894	\$ 72,763,324	\$ 26,769,249	\$	144,145,467
Accumulated Deferred Income Taxes		12,875,811	24,015,326	9,124,081	\$	46,015,218
Net Cost Rate Base	\$	31,737,083	\$ 48,747,998	\$ 17,645,168	\$	98,130,249
Rate of Return		7.23%	7.23%	7.23%		7.23%
Return	\$	2,294,741	\$ 3,524,711	\$ 1,275,829	\$	7,095,281
Depreciation Expenses	\$	3,853,798	\$ 5,368,005	\$ 2,176,201	\$	11,398,004
Non-Burdened Non-Fuel Operation and Maintenance Expe	enses \$	962,488	\$ 953,783	\$ 414,082	\$	2,330,353
Burdened Non-Fuel Operation and Maintenance Expenses		200,083	\$ (251,785)	(45,732)		(97,434)
Income Taxes	0.3864 \$	1,091,539	\$ 1,676,598	\$ 606,873	\$	3,366,771
Property Taxes	\$	68,035	\$ 113,803	\$ 43,219	\$	225,057
Revenue Requirement	\$	8,470,684	\$ 11,385,115	\$ 4,470,472	\$	24,318,033
Nameplate Capacity		199,869	409,734	94,446		704,049
Cost per kW per Month (Nameplate Capacity)	\$	3.53	\$ 2.32	\$ 3.94	\$	2.88
Net Peak Demand on Plant		179,860	327,540	77,910		585,310
Cost per kW per Month (Net Peak Demand on Plant)	\$	3.92	\$ 2.90	\$ 4.78	\$	3.46
Loss Factor (Transmission)		0.0285	0.0285	0.0285		0.0285
Cost per kW per Month (Transmission)	\$	4.04	\$ 2.98	\$ 4.92	\$	3.56
Loss Factor (Primary)		0.0559	0.0559	0.0559		0.0559
Cost per kW per Month (Primary)	\$	4.16	\$ 3.07	\$ 5.06	\$	3.67
	+					

# **Exhibit WSS-4**

**Cost Support for Lighting Rates LS and RLS** 

Description	Carry Charge	LS	LS	LS
	Watt	422 Decorative Smooth Contemporary 471 50,000	441 Fixture Only Contemporary 471 50,000	421 Decorative Smooth Contemporary 294 28,500
Estimated Investment per Unit (\$)		\$3,236.83	\$749.89	\$3,236.39
Fixed Charges (\$ / yr)	16.80%	\$543.79	\$125.98	\$543.71
Distribution Energy per kWh (\$ / yr)	\$0.06934	\$130.64	\$130.64	\$81.54
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)		\$22.24	\$22.24	\$22.19
Monthly Unit Cost (\$ / mo)		\$58.06	\$23.24	\$53.95

Description	LS	LS	LS	LS
	440 Fixture Only Contemporary 294 28,500	420 Decorative Smooth Contemporary 181 16,000	439 Fixture Only Contemporary 181 16,000	425 Decorative Smooth Cobra Head 471 50,000
Estimated Investment per Unit (\$)	\$749.45	\$3,181.22	\$694.29	\$4,105.94
Fixed Charges (\$ / yr)	\$125.91	\$534.45	\$116.64	\$689.80
Distribution Energy per kWh (\$ / yr)	\$81.54	\$50.20	\$50.20	\$130.64
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$22.19	\$22.35	\$22.35	\$22.24
Monthly Unit Cost (\$ / mo)	\$19.14	\$50.58	\$15.77	\$70.22

Description	LS	LS	LS	LS
	424 Decorative Smooth Cobra Head 294 28,500	423 Decorative Smooth Cobra Head 181 16,000	956 Historic Fluted Westchester/Norfolk Bases N/A N/A	401 Decorative Smooth Dark Sky 117 9,500
Estimated Investment per Unit (\$)	\$4,048.87	\$4,015.09	\$589.97	\$2,077.21
Fixed Charges (\$ / yr)	\$680.21	\$674.54	\$99.11	\$348.97
Distribution Energy per kWh (\$ / yr)	\$81.54	\$50.20		\$32.45
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$22.19	\$22.35		\$22.10
Monthly Unit Cost (\$ / mo)	\$65.33	\$62.26	\$8.26	\$33.63

Description	LS	LS	LS	LS
	400 Decorative Smooth Dark Sky 60 4,000	433 Historic Fluted Victorian (On Fluted pole) 117 9,500	431 Historic Fluted Victorian (On Fluted pole) 83 5,800	429 Historic Fluted London (On Fluted pole) 117 9,500
Estimated Investment per Unit (\$)	\$2,055.29	\$3,206.17	\$3,232.86	\$3,159.16
Fixed Charges (\$ / yr)	\$345.29	\$538.64	\$543.12	\$530.74
Distribution Energy per kWh (\$ / yr)	\$16.64	\$32.45	\$23.02	\$32.45
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$22.10	\$22.10	\$22.02	\$22.10
Monthly Unit Cost (\$ / mo)	\$32.00	\$49.43	\$49.01	\$48.77

Description	LS	LS	LS	LS		
	427 Historic Fluted London (On Fluted pole) 83 5,800	445 Decorative Smooth Acorn 181 16,000	416 Decorative Smooth Acorn 117 9,500	415 Decorative Smooth Acorn 83 5,800		
Estimated Investment per Unit (\$)	\$3,266.88	\$2,034.27	\$2,023.60	\$2,085.35		
Fixed Charges (\$ / yr)	\$548.84	\$341.76	\$339.96	\$350.34		
Distribution Energy per kWh (\$ / yr)	\$23.02	\$50.20	\$32.45	\$23.02		
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$22.02	\$22.35	\$22.10	\$22.02		
Monthly Unit Cost (\$ / mo)	\$49.49	\$34.53	\$32.88	\$32.95		

Description	LS	LS	LS	LS
	444 Decorative Smooth Coach 181 16,000	413 Decorative Smooth Coach 117 9,500	412 Decorative Smooth Coach 83 5,800	457 Fixture Only Open Bottom 117 9,500
Estimated Investment per Unit (\$)	\$1,882.34	\$1,872.71	\$1,876.71	\$473.72
Fixed Charges (\$ / yr)	\$316.23	\$314.62	\$315.29	\$79.59
Distribution Energy per kWh (\$ / yr)	\$50.20	\$32.45	\$23.02	\$32.45
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$22.35	\$22.10	\$22.02	\$22.10
Monthly Unit Cost (\$ / mo)	\$32.40	\$30.76	\$30.03	\$11.18

Description	LS	LS	LS	LS
	456 Fixture Only Directional 471 50,000	455 Fixture Only Directional 181 16,000	454 Fixture Only Cobra Head 471 50,000	453 Fixture Only Cobra Head 294 28,500
Estimated Investment per Unit (\$)	\$612.21	\$564.92	\$615.60	\$558.53
Fixed Charges (\$ / yr)	\$102.85	\$94.91	\$103.42	\$93.83
Distribution Energy per kWh (\$ / yr)	\$130.64	\$50.20	\$130.64	\$81.54
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$22.24	\$22.35	\$22.24	\$22.19
Monthly Unit Cost (\$ / mo)	\$21.31	\$13.96	\$21.36	\$16.46

Description	LS	LS	LS	LS
	452 Fixture Only Cobra Head 181 16,000	470 Fixture Only Directional 150 12,000	473 Fixture Only Directional 350 32,000	476 Fixture Only Directional 1080 107,800
Estimated Investment per Unit (\$)	\$524.75	\$700.78	\$683.31	\$775.38
Fixed Charges (\$ / yr)	\$88.16	\$117.73	\$114.80	\$130.26
Distribution Energy per kWh (\$ / yr)	\$50.20	\$41.60	\$97.08	\$299.55
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$22.35	\$24.14	\$24.71	\$24.67
Monthly Unit Cost (\$ / mo)	\$13.39	\$15.29	\$19.72	\$37.87

Description	LS	LS	LS	LS
	479 Fixture Only Contemporary 150 12,000	481 Fixture Only Contemporary 350 32,000	483 Fixture Only Contemporary 1080 107,800	480 Decorative Smooth Contemporary 150 12,000
Estimated Investment per Unit (\$)	\$835.56	\$746.29	\$1,194.62	\$3,322.50
Fixed Charges (\$ / yr)	\$140.37	\$125.38	\$200.70	\$558.18
Distribution Energy per kWh (\$ / yr)	\$41.60	\$97.08	\$299.55	\$41.60
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$24.14	\$24.71	\$24.67	\$24.14
Monthly Unit Cost (\$ / mo)	\$17.18	\$20.60	\$43.74	\$51.99

Description	LS	LS	RLS	RLS
	482 Decorative Smooth Contemporary 350 32,000	484 Decorative Smooth Contemporary 1080 107,800	201 Fixture Only Open Bottom 100 4,000	252-1 Fixture Only Open Bottom 210 8,000
Estimated Investment per Unit (\$)	\$3,203.94	\$3,681.56	\$544.71	\$462.74
Fixed Charges (\$ / yr)	\$538.26	\$618.50	\$91.51	\$77.74
Distribution Energy per kWh (\$ / yr)	\$97.08	\$299.55	\$27.74	\$58.25
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$20.84	\$24.67	\$21.76	\$21.76
Monthly Unit Cost (\$ / mo)	\$54.68	\$78.56	\$11.75	\$13.15

Description	RLS	RLS	RLS	RLS
	252-2 Fixture Only Cobra Head 210 8,000	203 Fixture Only Cobra Head 298 13,000	204 Fixture Only Cobra Head 462 25,000	207 Fixture Only Directional 462 25,000
Estimated Investment per Unit (\$)	\$492.52	\$545.81	\$548.66	\$555.21
Fixed Charges (\$ / yr)	\$82.74	\$91.70	\$92.17	\$93.27
Distribution Energy per kWh (\$ / yr)	\$58.25	\$82.65	\$128.14	\$128.14
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$21.76	\$21.91	\$22.06	\$22.06
Monthly Unit Cost (\$ / mo)	\$13.56	\$16.35	\$20.20	\$20.29

Description	RLS	RLS	RLS	RLS
	210 Fixture Only Directional 1180 60,000	279 Fixture Only Contemporary 1000 120,000	471 Fixture & Wood Pole Directional 150 12,000	474 Fixture & Wood Pole Directional 350 32,000
Estimated Investment per Unit (\$)	\$705.37	\$1,253.83	\$700.78	\$683.31
Fixed Charges (\$ / yr)	\$118.50	\$210.64	\$117.73	\$114.80
Distribution Energy per kWh (\$ / yr)	\$327.28	\$277.36	\$41.60	\$97.08
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$26.36	\$26.52	\$24.14 \$7.00	\$24.71 \$7.00
Monthly Unit Cost (\$ / mo)	\$39.35	\$42.88	\$22.29	\$26.72

Description	RLS	RLS	RLS	RLS
	475 Fixture & Orn. Pole Directional 350 32,000	477 Fixture & Wood Pole Directional 1080 107,800	275-1 Decorative Smooth Cobra Head 181 16,000	266-1 Decorative Smooth Cobra Head 294 28,500
Estimated Investment per Unit (\$)	\$683.31	\$775.38	\$4,015.09	\$4,048.87
Fixed Charges (\$ / yr)	\$114.80	\$130.26	\$674.54	\$680.21
Distribution Energy per kWh (\$ / yr)	\$97.08	\$299.55	\$50.20	\$81.54
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$24.71 \$13.06	\$24.67 \$7.00	\$22.35 \$0.00	\$22.19 \$0.00
Monthly Unit Cost (\$ / mo)	\$32.78	\$44.87	\$62.26	\$65.33

Description	RLS	RLS	RLS	RLS
	267-1 Decorative Smooth Cobra Head 471 50,000	318 Decorative Smooth Cobra Head 210 8,000	314 Decorative Smooth Cobra Head 298 13,000	315 Decorative Smooth Cobra Head 462 25,000
Estimated Investment per Unit (\$)	\$4,105.94	\$3,982.86	\$4,036.15	\$4,038.99
Fixed Charges (\$ / yr)	\$689.80	\$669.12	\$678.07	\$678.55
Distribution Energy per kWh (\$ / yr)	\$130.64	\$58.25	\$82.65	\$128.14
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$22.24 \$0.00	\$21.76 \$0.00	\$21.91 \$0.00	\$22.06 \$0.00
Monthly Unit Cost (\$ / mo)	\$70.22	\$62.43	\$65.22	\$69.06

Description	RLS	RLS	RLS	RLS
	275-2 Decorative Smooth Contemporary 181 16,000	266-2 Decorative Smooth Contemporary 294 28,500	267-2 Decorative Smooth Contemporary 471 50,000	278 Decorative Smooth Contemporary 1000 120,000
Estimated Investment per Unit (\$)	\$3,181.22	\$3,236.39	\$3,236.83	\$3,740.77
Fixed Charges (\$ / yr)	\$534.45	\$543.71	\$543.79	\$628.45
Distribution Energy per kWh (\$ / yr)	\$50.20	\$81.54	\$130.64	\$277.36
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$22.35 \$0.00	\$22.19 \$0.00	\$22.24 \$0.00	\$26.52 \$0.00
Monthly Unit Cost (\$ / mo)	\$50.58	\$53.95	\$58.06	\$77.69

Description	RLS	RLS	RLS	RLS
	276-1	274-1	277-1	206
	Decorative Smooth	Decorative Smooth	Decorative Smooth	Decorative Smooth
	Coach	Coach	Coach	Coach
	83	117	181	100
	5,800	9,500	16,000	4,000
Estimated Investment per Unit (\$)	\$1,876.71	\$1,872.71	\$1,882.34	\$1,841.41
Fixed Charges (\$ / yr)	\$315.29	\$314.62	\$316.23	\$309.36
Distribution Energy per kWh (\$ / yr)	\$23.02	\$32.45	\$50.20	\$27.74
Operation and Maintenance (\$ / yr)	\$22.02	\$22.10	\$22.35	\$21.76
Excess Facilities (\$ / yr)	\$0.00	\$0.00	\$0.00	\$0.00
Monthly Unit Cost (\$ / mo)	\$30.03	\$30.76	\$32.40	\$29.90

Description	RLS	RLS	RLS	RLS
	208 Decorative Smooth Coach 210 8,000	276-2 Decorative Smooth Acorn 83 5,800	274-2 Decorative Smooth Acorn 117 9,500	277-2 Decorative Smooth Acorn 181 16,000
Estimated Investment per Unit (\$)	\$1,838.74	\$2,085.35	\$2,023.60	\$2,034.27
Fixed Charges (\$ / yr)	\$308.91	\$350.34	\$339.96	\$341.76
Distribution Energy per kWh (\$ / yr)	\$58.25	\$23.02	\$32.45	\$50.20
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$21.76 \$0.00	\$22.02 \$0.00	\$22.10 \$0.00	\$22.35 \$0.00
Monthly Unit Cost (\$ / mo)	\$32.41	\$32.95	\$32.88	\$34.53

Description	RLS	RLS	RLS	RLS
	417 Decorative Smooth Acorn (Bronze) 117 9,500	419 Decorative Smooth Acorn (Bronze) 180 16,000	426 Decorative Smooth London (On Smooth pole) 83 5,800	428 Decorative Smooth London (On Smooth pole) 117 9,500
Estimated Investment per Unit (\$)	\$2,111.13	\$2,115.94	\$3,229.08	\$3,121.36
Fixed Charges (\$ / yr)	\$354.67	\$355.48	\$542.48	\$524.39
Distribution Energy per kWh (\$ / yr)	\$32.45	\$49.92	\$23.02	\$32.45
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$22.10 \$0.00	\$22.35 \$0.00	\$22.02 \$0.00	\$22.10 \$0.00
Monthly Unit Cost (\$ / mo)	\$34.10	\$35.65	\$48.96	\$48.25

Description	RLS	RLS	RLS	RLS
	430 Decorative Smooth Victorian (On Smooth pole) 83 5,800	432 Decorative Smooth Victorian (On Smooth pole) 117 9,500	950 Decorative Smooth Old Town Base N/A N/A	951 Decorative Smooth Chesapeake Base N/A N/A
Estimated Investment per Unit (\$)	\$3,195.06	\$3,168.37	\$350.50	\$303.16
Fixed Charges (\$ / yr)	\$536.77	\$532.29	\$58.88	\$50.93
Distribution Energy per kWh (\$ / yr)	\$23.02	\$32.45		
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$22.02 \$0.00	\$22.10 \$0.00		
Monthly Unit Cost (\$ / mo)	\$48.48	\$48.90	\$4.91	\$4.24

Description	RLS	RLS	RLS	RLS
	958 Fixture Only Wd Pl Inst before 3/1/2010 N/A N/A	900 Fixture Only Wd PI Inst before 7/1/2004 N/A N/A	280 Fixture Only Victorian 83 5,800	281 Fixture Only Victorian 117 9,500
Estimated Investment per Unit (\$)	\$543.64	\$543.64	\$2,824.88	\$2,798.20
Fixed Charges (\$ / yr)	\$91.33	\$91.33	\$474.58	\$470.10
Distribution Energy per kWh (\$ / yr)	\$0.00	\$0.00	\$23.02	\$32.45
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$0.00	\$0.00	\$22.02	\$22.10
Monthly Unit Cost (\$ / mo)	\$7.61	\$7.61	\$43.30	\$43.72

Description	RLS	RLS	RLS	RLS
	282 Fixture Only London 83 5,800	283 Fixture Only London 117 9,500	901 Decorative Smooth 10" Smooth Pole N/A N/A	902 Decorative Smooth 10" Fluted Pole N/A N/A
Estimated Investment per Unit (\$)	\$2,858.90	\$2,751.19	\$370.17	\$407.97
Fixed Charges (\$ / yr)	\$480.30	\$462.20	\$62.19	\$68.54
Distribution Energy per kWh (\$ / yr)	\$23.02	\$32.45		
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$22.02	\$22.10		
Monthly Unit Cost (\$ / mo)	\$43.78	\$43.06	\$5.18	\$5.71

**Cost Support for LED Lighting Rates** 

### Cost Support for LED Lighting Charges

Description	Carry Charge	LED	LED	LED	LED	
		Overhead				
	Watt	Open Bottom Yard Light 50 WATT 5,007 Lumen 493	<b>Cobra</b> 80 WATT 8,179 Lumen 490	<b>Cobra</b> 134 WATT 14,166 Lumen 491	<b>Cobra</b> 228 WATT 23,214 lumen 492	
		Fixture, Arm & Wire	Fixture, Arm & Wire	Fixture, Arm & Wire	Fixture, Arm & Wire	
Estimated Investment per Unit (\$)		\$493.08	\$759.11	\$856.57	\$1,238.06	
Fixed Charges (\$ / yr)	16.80%	\$82.84	\$127.53	\$143.90	\$208.00	
Distribution Energy per kWh (\$ / yr)	\$0.06934	\$13.87	\$22.19	\$37.17	\$63.24	
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)		\$19.08	\$25.73	\$31.68	\$54.97	
Monthly Unit Cost (\$ / mo)		\$9.65	\$14.62	\$17.73	\$27.18	

### Cost Support for LED Lighting Charges

Description	LED	LED	LED	LED			
		Underground					
	<b>Cobra</b> 80 WATT 8,179 Lumen 496	<b>Cobra</b> 134 WATT 14,166 Lumen 497	<b>Cobra</b> 228 WATT 23,214 lumen 498	<b>Colonial</b> 68 WATT 5,665 Lumen 499			
	Pole, Fixture, Arm & Wire	Pole, Fixture, Arm & Wire	Pole, Fixture, Arm & Wire	Fixture, Pole & Wire			
Estimated Investment per Unit (\$)	\$3,564.69	\$3,662.16	\$4,043.65	\$2,832.50			
Fixed Charges (\$ / yr)	\$598.87	\$615.24	\$679.33	\$475.86			
Distribution Energy per kWh (\$ / yr)	\$22.19	\$37.17	\$63.24	\$18.86			
Operation and Maintenance (\$ / yr) Excess Facilities (\$ / yr)	\$25.73	\$31.68	\$54.97	\$62.62			
Monthly Unit Cost (\$ / mo)	\$53.90	\$57.01	\$66.46	\$46.45			

**Cost Support for Redundant Capacity Charge** 

### Louisville Gas and Electric Company

Derivation of Distribution Demand-Related Cost for Redundant Capacity Based on the 12 Months Ended June 30, 2018

Secondary Ser	rvice			
Distribution D	emand Costs			
	PSS	\$ 5,641,581		
	TODS	 3,062,438		
	Total Cost	\$ 8,704,019		
Billing Deman	d			
_	PSS	4,877,440		
	TODS	 3,038,571	_	
	Total Cost	7,916,011		
Unit Cost			\$	1.10
Rate Base				
	PSS	\$ 39,432,704		
	TODS	 21,357,683	_	
	Total Cost	\$ 60,790,387		
Return		\$ 4,449,856		
Unit Return			\$	0.56
Capacity Charg	ge		\$	1.66 / KW

### Louisville Gas and Electric Company

Derivation of Distribution Demand-Related Cost for Redundant Capacity Based on the 12 Months Ended June 30, 2018

### **Primary Service**

Distributio	on Demand Costs		
	PSP	\$ 441,839	
	TODP	4,667,092	
	Total Cost	\$ 5,108,931	
Billing De	mand		
C C	PSP	386,443	
	TODP	4,637,616	
	Total Cost	5,024,059	
Unit Cost			\$ 1.02
Rate Base			
	PSP	\$ 2,859,351	
	TODP	 30,190,373	
	Total Cost	\$ 33,049,724	
Return		\$ 2,419,240	
Unit Retur	'n		\$ 0.48
Capacity (	Charge		\$ 1.50 / KW

# **Cost Components for Residential Gas Service Rate RGS**

### Louisville Gas and Electric Company

### Unit Cost of Service Based on the Cost of Service Study For the 12 Months Ended June 30, 2018

#### Rate RGS

	Customer Costs								1								Tr	ansmission and	
Description	Low	t-Related Pressure ins Costs	Hig	st-Related h Pressure ain Costs		Cust-Related Direct Costs	(	Total Cust-Related Costs		Storage/Trans Demand-Related Costs	c	Storage Compressor Costs	Pro	Other curement Costs	L	mand Related Low Pressure Mains Costs	I	emand Related ligh Pressure Mains Costs	Total Costs
<ol> <li>Rate Base</li> <li>Rate Base Adjustments</li> <li>Rate Base as Adjusted</li> </ol>		17,517,386		9,486,636 - 9,486,636		201,074,216		328,078,239		112,132,808		907,417 - 907,417		180,464 - 180,464		51,197,869 - 51,197,869		-	\$ 519,446,947 \$ 519,446,947
(4) Rate of Return	* -	6.32%	Ť	6.32%	*	6.32%		6.32%	Ť	6.32%		6.32%		6.32%	Ŧ	6.32%	Ť	6.32%	6.32%
(5) Return [(3) x (4)]	\$	7,430,083	\$	599,796	\$	12,712,996	\$	20,742,876	\$	7,089,641	\$	57,372	\$	11,410	\$	3,237,005	\$	1,703,934	\$ 32,842,237
(6) Interest Expenses	\$	2,444,281	\$	180,050	\$	3,705,638	\$	6,329,968	\$	1,590,301	\$	-	\$	-	\$	1,046,192	\$	434,920	\$ 9,401,382
(7) Net Income [(5) - (6)]	\$	4,985,802	\$	419,747	\$	9,007,359	\$	14,412,908	\$	5,499,340	\$	57,372	\$	11,410	\$	2,190,814	\$	1,269,013	\$ 23,440,856
(8) Income Taxes	\$	3,163,391	\$	266,321	\$	5,714,988	\$	9,144,700	\$	3,489,221	\$	36,401	\$	7,239	\$	1,390,027	\$	805,164	\$ 14,872,752
<ul> <li>(9) Operation and Maintenance Expenses</li> <li>(10) Depreciation Expenses</li> <li>(11) Other Taxes</li> <li>(12) Other Expenses</li> <li>(13) Expense Adjustments (Non-Income Tax)</li> </ul>	\$	10,475,178 6,098,587 2,132,771 (6,959) 8,747	\$	771,619 449,232 157,103 (513) 644	\$	19,995,643 13,956,402 3,233,375 (10,678) 16,698		31,242,440 20,504,221 5,523,249 (18,150) 26,089		6,258,442 4,007,383 1,387,626 (4,161) 5,226	·	6,622,766 - - 5,530	\$	1,317,112 - - 1,100	\$	4,483,547 2,610,295 912,861 (2,979) 3,744	\$	3,173,104 1,297,378 379,492 (1,229) 2,650	\$ 53,097,411 28,419,277 8,203,228 (26,518) 44,340
(14) Total Cost of Service	\$	29,301,798	\$	2,244,204	\$	55,619,424	\$	87,165,426	\$	22,233,379	\$	6,722,069	\$	1,336,861	\$	12,634,500	\$	7,360,492	\$ 137,452,727
(15) Less: Misc Revenue		544,514		41,704		1,033,574		1,619,792		413,162		124,916		24,843		234,786		136,780	\$ 2,554,279
(16) Net Cost of Service	\$	28,757,284	\$	2,202,500	\$	54,585,850	\$	85,545,634	\$	21,820,217	\$	6,597,153	\$	1,312,018	\$	12,399,713	\$	7,223,712	\$ 134,898,448
(17) Billing Units		3,556,511		3,556,511		3,556,511		3,556,511		7,885,866		19,516,322	1	9,516,322		308,337		308,337	
(18) Unit Costs	\$8.0	)9/Cust/Mo	\$0	.62/Cust/Mo	\$1	5.35/Cust/Mo	\$2	24.05/Cust/Mo		\$2.7670/Mcf	\$	\$0.3380/Mcf	\$0.	0672/Mcf		\$40.2148/Mcf		\$23.4280/Mcf	

# Cost Components for As Available Gas Service Rate AAGS

### Louisville Gas and Electric Company

#### Unit Cost of Service Based on the Cost of Service Study For the 12 Months Ended June 30, 2018

Rate AAGS

	Customer Costs											1				Tı	ransmission and			
Description	Lov	st-Related w Pressure ains Costs	H	ust-Related igh Pressure Main Costs	-	Cust-Related Direct Costs	(	Total Cust-Related Costs		Storage/Tran emand-Related Costs		Storage ompressor Costs		Other ocurement Costs	1	emand Related Low Pressure Mains Costs		emand Related High Pressure Mains Costs	То	otal Costs
(1) Rate Base	\$	-	\$	192	\$	67,476	\$	67,668	\$	-	\$	-	\$	3,552	\$	439,147	\$	272,378	\$	782,745
<ul><li>(2) Rate Base Adjustments</li><li>(3) Rate Base as Adjusted</li></ul>	\$	-	\$	- 192	\$	67,476	\$	- 67,668	\$	-	\$	-	\$	3,552	\$	439,147	\$	272,378	\$	- 782,745
(4) Rate of Return		25.05%		25.05%		25.05%		25.05%		25.05%		25.05%		25.05%		25.05%		25.05%		25.05%
(5) Return	\$	-	\$	48	\$	16,905	\$	16,953	\$	-	\$	-	\$	890	\$	110,024	\$	68,242	\$	196,109
(6) Interest Expenses	\$	-	\$	4	\$	1,230	\$	1,234	\$	-	\$	-	\$	-	\$	8,974	\$	4,396	\$	14,603
(7) Net Income	\$	-	\$	44	\$	15,675	\$	15,719	\$	-	\$	-	\$	890	\$	101,050	\$	63,846	\$	181,506
(8) Income Taxes	\$	-	\$	28	\$	9,972	\$	10,000	\$	-	\$	-	\$	566	\$	64,285	\$	40,617	\$	115,468
<ul><li>(9) Operation and Maintenance Expenses</li><li>(10) Depreciation Expenses</li></ul>	\$	-	\$	16 9	\$	4,346 4,800	\$	4,362 4,809	\$	-	\$	-	\$	25,923	\$	38,457 22,390	\$	32,070 13,112	\$	100,812 40,311
(11) Other Taxes (12) Other Expenses		-		3 (0)		1,074 (4)		1,077 (4)		-		-		-		7,830 (26)		3,835 (12)		12,742 (42)
(12) Other Expenses (13) Expense Adjustments (Non-Income Tax)		-		0		(4)		(4)		-		-		23		34		(12)		90
(14) Total Cost of Service	\$	-	\$	104	\$	37,097	\$	37,201	\$	-	\$	-	\$	27,402	\$	242,995	\$	157,892	\$	465,490
(15) Less: Misc Revenue		-		2		594		595		-		-		439		3,890		2,527	\$	7,451
(16) Net Cost of Service	\$	-	\$	103	\$	36,503	\$	36,606	\$	-	\$	-	\$	26,964	\$	239,106	\$	155,365	\$	458,039
(17) Billing Units		72		72		72		72		-		384,116		384,116		2,645		3,116		
(18) Unit Costs	\$0	.00/Cust/Mo	\$	1.42/Cust/Mo	\$50	06.99/Cust/Mo	\$5	08.41/Cust/Mo	$\vdash$		\$0	0.0000/Mcf	\$0	0.0702/Mcf		\$90.4078/Mcf		\$49.8559/Mcf		

**Cost Support for Utilization Charge for Daily Imbalances** 

Louisville Gas and Electric Company Daily Utilization Charges Under Rate FT and LGDS

		LG&E System Storage Costs Firm Rate Classes	Total
Rate Base		166,889,448	166,889,448
Return (at Rate FT ROR) O&M Expenses Depreciation Taxes (Other than Income) Accretion Expenses Regulatory Credits Income Taxes	11.6% 54.12% _	19,300,386 9,314,562 5,964,267 2,065,231 - - 10,445,464	19,300,386 9,314,562 5,964,267 2,065,231 - - 10,445,464
Total		47,089,910	47,089,910
Design-Day Demands			463,195
Annual Cost			\$ 101.66
Monthly Cost			\$ 8.47
Unit Cost at 100 Percent Load	Factor		\$ 0.2785

# **Cost Support for Substitute Gas Sales Service Rate SGSS**

### Louisville Gas and Electric Company

### Unit Cost of Service Based on the Cost of Service Study For the 12 Months Ended June 30, 2018

### Cost Support for Rate SGSS Based on Unit Costs for Rate CGS

				Custom	er (	Costs											Tr	ansmission and		
	-	Cust-Related		ist-Related				Total		torage/Trans		Storage	_	Other	-	mand Related		emand Related		
Description		ow Pressure Mains Costs		gh Pressure Iain Costs		ust-Related Direct Costs	(	Cust-Related Costs	De	mand-Related Costs	Co	ompressor Costs	Pı	rocurement Costs		ow Pressure Mains Costs		High Pressure Mains Costs	Т	otal Costs
(1) Rate Base	\$	9,803,255	\$	791,372	\$	67,822,888	\$	78,417,515	\$	50,462,483	\$	431,830	\$	93,743	\$	23,398,539	\$	12,316,804	\$ 1	65,120,915
(2) Rate Base Adjustments		-		-		-		-		-		-		-		-		-		-
(3) Rate Base as Adjusted	\$	9,803,255	\$	791,372	\$	67,822,888	\$	78,417,515	\$	50,462,483	\$	431,830	\$	93,743	\$	23,398,539	\$	12,316,804	\$ 1	65,120,915
(4) Rate of Return		8.48%		8.48%		8.48%		8.48%		8.48%		8.48%		8.48%		8.48%		8.48%		8.48%
(5) Return	\$	831,732	\$	67,142	\$	5,754,258	\$	6,653,132	\$	4,281,359	\$	36,637	\$	7,953	\$	1,985,189	\$	1,044,987	\$	14,009,258
(6) Interest Expenses	\$	203,901	\$	15,020	\$	1,252,455	\$	1,471,375	\$	715,674	\$	-	\$	-	\$	478,132	\$	198,768	\$	2,863,950
(7) Net Income	\$	627,831	\$	52,122	\$	4,501,803	\$	5,181,756	\$	3,565,685	\$	36,637	\$	7,953	\$	1,507,056	\$	846,219	\$	11,145,308
(8) Income Taxes	\$	398,339	\$	33,070	\$	2,856,254	\$	3,287,663	\$	2,262,316	\$	23,245	\$	5,046	\$	956,180	\$	536,900	\$	7,071,350
(9) Operation and Maintenance Expenses	\$	873,835	\$	64,368	\$	4,877,346	\$	5,815,550	\$	2,816,451	\$	3,151,699	\$	684,184	\$	2,049,078	\$	1,450,178	\$	15,967,139
<ul><li>(10) Depreciation Expenses</li><li>(11) Other Taxes</li></ul>		508,742 177,915		37,475		4,736,473		5,282,690 1,283,857		1,803,420 624,465		-		-		1,192,961 417,197		592,930 173,436		8,872,001 2,498,956
(11) Other Taxes (12) Other Expenses		(581)		13,106 (43)		1,092,836 (3,609)		(4,232)		(1,872)		-		-		(1,361)		(562)		2,498,936 (8,028)
(12) State Expenses (13) Expense Adjustments (Non-Income Tax)		653		48		3,647		4,349		2,106		2,357		512		1,532		1,084		11,940
(14) Total Cost of Service	\$	2,790,636	\$	215,166	\$	19,317,206	\$	22,323,007	\$	11,788,245	\$	3,213,938	\$	697,695	\$	6,600,777	\$	3,798,954	\$	48,422,616
(15) Less: Misc Revenue		66,398		5,119		459,617		531,134		280,479		76,470		16,600		157,053		90,389	\$	1,152,126
(16) Net Cost of Service	\$	2,724,238	\$	210,046	\$	18,857,589	\$	21,791,873	\$	11,507,765	\$	3,137,468	\$	681,095	\$	6,443,723	\$	3,708,565	\$	47,270,490
(17) Billing Units		299,360		299,360		299,360		299,360		3,548,831	1	0,137,906		10,137,906		140,917		140,917		
(18) Unit Costs	\$	9.10/Cust/Mo	\$0	.70/Cust/Mo	\$62	2.99/Cust/Mo	\$	72.79/Cust/Mo	\$	3.2427	\$	0.3095	\$	0.0672	\$	45.7272	\$	26.3174		
N - 2							÷		÷		÷				ŕ	•	<u> </u>	nand	\$	6.27
																	Cor	nmodity	\$	0.3767

### Louisville Gas and Electric Company

### Unit Cost of Service Based on the Cost of Service Study For the 12 Months Ended June 30, 2018

### Cost Support for Rate SGSS Based on Unit Costs for Rate IGS

	T			Custor	mer	·Costs											Tr	ansmission and		
Description	L	Cust-Related ow Pressure Mains Costs	Н	Cust-Related ligh Pressure Main Costs		Cust-Related Direct Costs	(	Total Cust-Related Costs		torage/Trans mand-Related Costs	С	Storage Compressor Costs	Pr	Other ocurement Costs	I	mand Related Low Pressure Mains Costs	I	emand Related High Pressure Mains Costs	Т	Fotal Costs
(1) Rate Base	\$	104,631	\$	8,638	\$	2,693,394	s	2,806,663	\$	4,294,157	\$	59,569	\$	18,020	\$	2,164,099	\$	1,218,584	\$	10,561,092
(1) Rate Base Adjustments	Ψ	-	Ψ	-	Ψ	-	Ψ	-	Ψ	-	Ψ	-	Ψ	-	Ψ	-	Ψ	-	Ψ	-
(3) Rate Base as Adjusted	\$	104,631	\$	8,638	\$	2,693,394	\$	2,806,663	\$	4,294,157	\$	59,569	\$	18,020	\$	2,164,099	\$	1,218,584	\$	10,561,092
(4) Rate of Return		21.29%		21.29%		21.29%		21.29%		21.29%		21.29%		21.29%		21.29%		21.29%		21.29%
(5) Return	\$	22,278	\$	1,839	\$	573,470	\$	597,588	\$	914,301	\$	12,683	\$	3,837	\$	460,774	\$	259,458	\$	2,248,640
(6) Interest Expenses	\$	2,176	\$	164	\$	49,261	\$	51,601	\$	60,901	\$	-	\$	-	\$	44,222	\$	19,665	\$	176,389
(7) Net Income	\$	20,102	\$	1,675	\$	524,210	\$	545,986	\$	853,400	\$	12,683	\$	3,837	\$	416,553	\$	239,792	\$	2,072,251
(8) Income Taxes	\$	12,764	\$	1,064	\$	332,854	\$	346,682	\$	541,878	\$	8,053	\$	2,436	\$	264,496	\$	152,259	\$	1,315,804
(9) Operation and Maintenance Expenses	\$	9,327	\$	703	\$	167,876	\$	177,905	\$	239,669	\$	434,764	\$	131,516	\$	189,516	\$	143,476	\$	1,316,846
(10) Depreciation Expenses		5,430		409		190,987		196,826		153,464		-		-		110,335		58,663		519,288
(11) Other Taxes		1,899		143		42,983		45,025		53,140		-		-		38,586		17,159		153,910
<ul><li>(12) Other Expenses</li><li>(13) Expense Adjustments (Non-Income Tax)</li></ul>		(6)		(0)		(142) 130		(149) 137		(159) 185		- 335		- 101		(126) 146		(56) 111		(489) 1,016
(15) Expense Adjustments (Non-meome Tax)		/		1		150		157		185		555		101		140		111		1,010
(14) Total Cost of Service	\$	51,698	\$	4,158	\$	1,308,157	\$	1,364,013	\$	1,902,476	\$	455,837	\$	137,890	\$	1,063,728	\$	631,070	\$	5,555,015
(15) Less: Misc Revenue		934		75		23,633		24,642		34,370		8,235		2,491		19,217		11,401	\$	100,355
(16) Net Cost of Service	\$	50,764	\$	4,083	\$	1,284,525	\$	1,339,372	\$	1,868,107	\$	447,602	\$	135,399	\$	1,044,511	\$	619,669	\$	5,454,660
(17) Billing Units		3,210		3,210		3,210		3,210		301,991		1,948,741		1,948,741		13,033		13,942		
(18) Unit Costs	\$1:	5.81/Cust/Mo	\$1	1.27/Cust/Mo	400	).16/Cust/Mo	\$4	17.25/Cust/Mo	\$	6.1860	\$	0.2297	\$	0.0695	\$	80.1425	\$	44.4468		
																	Den	nand	\$	10.90
																	Cor	nmodity	S	0.2992

# **Cost Support for Local Gas Delivery Service LGDS**

### Louisville Gas and Electric Company

### Unit Cost of Service Based on the Cost of Service Study For the 12 Months Ended June 30, 2018

### Cost Support for Rate LGDS Based on Unit Costs for Rate FT

				Cust	om	er Costs											Tr	ransmission and		
		st-Related v Pressure		ust-Related gh Pressure		Cust-Related		Total Cust-Related		torage/Trans mand-Related		Storage	D.,	Other		mand Related		emand Related High Pressure		
Description		ains Costs		gii Fressure Iain Costs		Direct Costs		Cust-Kelateu Costs	De	Costs	U	Costs	ГГ	Costs		Mains Costs		Mains Costs	1	Fotal Costs
(1) Rate Base	\$	793	\$	2,336	\$	3,550,559	\$	3,553,687	\$	1,469,039	\$	-	\$	64,397	\$	2,507,228	\$	8,878,679	\$	16,473,029
(1) Rate Base Adjustments	φ	-	φ	-	φ	-	φ	-	φ	-	φ	-	φ		φ	2,507,228	φ	-	φ	-
(3) Rate Base as Adjusted	\$	793	\$	2,336	\$	3,550,559	\$	3,553,687	\$	1,469,039	\$	-	\$	64,397	\$	2,507,228	\$	8,878,679	\$	16,473,029
(4) Rate of Return		11.56%		11.56%		11.56%		11.56%		11.56%		11.56%		11.56%		11.56%		11.56%		11.56%
(5) Return	\$	92	\$	270	\$	410,614	\$	410,976	\$	169,891	\$	-	\$	7,447	\$	289,955	\$	1,026,799	\$	1,905,068
(6) Interest Expenses	\$	16	\$	44	\$	65,003	\$	65,064	\$	20,834	\$	-	\$	-	\$	51,233	\$	143,344	\$	280,476
(7) Net Income	\$	75	\$	226	\$	345,611	\$	345,912	\$	149,057	\$	-	\$	7,447	\$	238,722	\$	883,455	\$	1,624,593
(8) Income Taxes	\$	48	\$	143	\$	219,339	\$	219,530	\$	94,597	\$	-	\$	4,726	\$	151,503	\$	560,676	\$	1,031,032
(9) Operation and Maintenance Expenses	\$	71	\$	190	\$	218,828	\$	,	\$	81,991	\$	-	\$	469,997	\$	219,565		1,018,625	\$	2,009,268
(10) Depreciation Expenses		41		111		251,506		251,657		52,500		-		-		127,830		427,598		859,585
<ul><li>(11) Other Taxes</li><li>(12) Other Expenses</li></ul>		14		39		56,719 (187)		56,772 (187)		18,179 (55)		-		-		44,704 (146)		125,075 (405)		244,731 (793)
(12) Other Expenses (13) Expense Adjustments (Non-Income Tax)		(0) 0		(0) 0		(187)		(187)		(33)		-		165		(140)		(403) 359		(793) 708
(14) Total Cost of Service	\$	266	\$	753	\$	1,156,895	\$	1,157,913	\$	417,133	\$	-	\$	482,337	\$	833,488	\$	3,158,728	\$	6,049,599
(15) Less: Misc Revenue		2		7		10,156		10,165		3,662		-		4,234		7,317		27,730	\$	53,109
(16) Net Cost of Service	\$	263	\$	746	\$	1,146,738	\$	1,147,748	\$	413,471	\$	-	\$	478,102	\$	826,171	\$	3,130,998	\$	5,996,490
(17) Billing Units		876		876		876		876		103,312		-	1	2,313,888		15,100		101,624		
(18) Unit Costs	\$0.3	0/Cust/Mo	\$0.	85/Cust/Mo	\$1	309.06/Cust/Mo	\$1	310.21/Cust/Mo	\$	4.0022			\$	0.0388	\$	54.7145	\$	30.8097		
																	Der	mand	\$	2.57
																	Сог	mmodity	\$	0.0388

**Cost Support for Pole Attachment Charge** 

### Kentucky Utilities Company and Louisville Gas & Electric Company

Cost Support for Attachment Charges for Wireline Pole Attachments Based on 12 Months Ended June 30, 2018

Pole Description		35'		40'		45'		Total
Gross Plant	\$	36,350,278	\$	128,380,719	\$	112,705,295	Ś	277,436,291
Remove Appurtenances	Ŷ	15%	Ŧ	15%	Ŧ	15%	Ŧ	2777 1007202
Gross Plant less Appurtenances	\$	30,897,736	\$	109,123,611	\$	95,799,500	\$	235,820,847
Accumulated Depreciation		(14,287,553)		(50,460,312)		(44,299,054)	·	(109,046,920)
Remove Appurtenances		15%		15%		15%		( , , , ,
Accumulated Depreciation less Appurtenances	\$	(12,144,420)	\$	(42,891,266)	\$	(37,654,196)	\$	(92,689,882)
Net Plant	\$	18,753,316	\$	66,232,345	\$	58,145,305	\$	143,130,966
Accumulated Deferred Income Taxes	\$	(4,870,028)	\$	(17,199,804)	\$	(15,099,689)	\$	(37,169,520)
Cash Working Capital		284,427		1,004,530		881,876		2,170,833
Common Plant		1,053,963		3,722,352		3,267,849		8,044,164
Net Cost Rate Base	\$	15,221,678	\$	53,759,424	\$	47,195,340	\$	116,176,442
Rate of Return		7.27%		7.27%		7.27%		
Return	\$	1,106,082	\$	3,906,424	\$	3,429,445	\$	8,441,951
Income Taxes 38.59%	\$	521,284	\$	1,841,055	\$	1,616,260	\$	3,978,599
Property Taxes	\$	213,257	\$	753,175	\$	661,212	\$	1,627,644
Depreciation Expenses	\$	857,942	\$	3,030,050	\$	2,660,078	\$	6,548,069
Maintenance of Poles	\$	458,229	\$	1,618,358	\$	1,420,754	\$	3,497,341
Tree Trimming of Poles		1,497,833		5,289,996		4,644,082	\$	11,431,911
A&G Expense Allocation to Poles		297,181		1,049,573		921,419	\$	2,268,173
Revenue Requirement	\$	4,951,807	\$	17,488,631	\$	15,353,250	\$	37,793,688
Quantity		103,454		192,111		89,471		385,036
Average Installed Cost	\$	47.86	\$	91.03	\$	171.60	\$	98.16
Space Usage Factor		0.0759		0.0759		0.0759		0.0759
Pole Attachment Rate	\$	3.63	\$	6.91	\$	13.02	\$	7.45

Cost Support for Duct Attachment Charge

### Kentucky Utilities Company and Louisville Gas & Electric Company

Calculation Of Attachment Charges for Underground Conduit Based on 12 Months Ended June 30, 2018

Pole Description			Total
Gross Plant Remove Appurtenances		\$	79,957,770 15%
Gross Plant less Appurtenances		\$	67,964,105
Accumulated Depreciation		Ŧ	(23,190,169)
Remove Appurtenances			15%
Accumulated Depreciation less Appurtenances		\$	(19,711,644)
Net Plant		\$	48,252,461
Accumulated Deferred Income Taxes		\$	(11,956,770)
Cash Working Capital			673,647
Common Plant			5,747,707
Net Cost Rate Base		\$	42,717,045
Rate of Return			7.27%
Return		\$	3,104,030
Income Taxes	38.59%	\$	1,462,896
Property Taxes		\$	498,222
Depreciation Expenses		\$	1,061,872
Maintenance of UG Lines		\$	694,791
A&G Expense Allocation to UG Lines		Ŷ	580,351
			,
Revenue Requirement		\$	7,402,163
Quantity			4,557,311
Average Installed Cost		\$	1.62
Space Usage Factor			0.50
Underground Conduit Attachment Rate		\$	0.81

Change in Miscellaneous Revenues for Attachment Charges

### Kentucky Utilities Company and Louisville Gas and Electric Company

Forecasted Miscellaneous Revenue at Proposed Attachment Charges For the 12 Months Ended June 30, 2018

Attachment Type	Total Attachments			Annual Revenue		Current Rate		Proposed Rate		Annual Revenue It Proposed Rate		Increase (Decrease) in Revenue
Telecom Wireline												
Telecom Wireline (KU)		11,067	Ś	61,750.83	Ś	5.58	Ś	7.25	¢	80,236	¢	18,485
Telecom Wireline (LG&E)		4,344		54,201.15		12.48		7.25		31,494		(22,707)
	\$	15,411.00	\$	115,951.98		12.40	Ŷ	1.25	Ŷ	51,454	Ŷ	(22,707)
Total CATV												
CATV (KU)		149,547	\$	1,083,117.44	\$	7.25	\$	7.25				
CATV (LG&E)			\$	639,921.25		7.25		7.25				
	\$		\$	1,723,038.69	•							
Wireless												
Telecom Wireless (KU)							\$	84.00	\$	1,235	\$	1,235
Telecom Wireless (LG&E)							\$	84.00	\$	317	\$	317
Total KU Total LG&E											\$ \$	19,720 (22,391)

# **Cost Support for Unauthorized Reconnection Charge**

Louisville Gas and Electric Company Unauthorized Meter Reconnect Charges Cost Justification

Charge Description		Cost
Electric Charges		
Field Investigator - (1/2 hour)	\$	34.39
Transportation - (1/2 hour)		3.15
Back Office Admin Labor - (1/2 hour)		21.04
Lock Costs		11.82
Total Charge without meter replacement at August 31, 2016	\$	70.41
Total Charge if meter replacement necessary:		
UAR Charge for 1/0 Standard Meter Replacement		
Charge without meter replacement	\$	70.41
Charge for 1/0 Standard Meter Replacement		19.18
	\$	89.59
UAR Charge for 1/0 AMR Meter Replacement		
Charge without meter replacement	\$	70.41
Charge for 1/0 AMR Meter Replacement	Ψ	40.01
	\$	110.41
UAR Charge for 1/0 AMS Meter Replacement		
Charge without meter replacement	\$	70.41
Charge for 1/0 AMS Meter Replacement		103.70
	\$	174.10
UAR Charge for 3/0 Standard Meter Replacement		
Charge without meter replacement	\$	70.41
Charge for 3/0 Standard Meter Replacement		106.73
	\$	177.13
Gas Charge		
Field Investigator - (1/2 hour)	\$	34.39
Transportation - (1/2 hour)		3.15
Back Office Admin Labor - (1/2 hour)		21.04
Lock Costs		11.82
Total Charge without meter replacement at August 31, 2016	\$	70.41
Total Charge if meter replacement necessary:		
UAR Charge for Standard Meter Replacement	•	
Charge without meter replacement	\$	70.41
Charge for Standard Meter Replacement	-	62.00
	\$	132.41

# **BIP Analysis** for Electric Cost of Service Study

# LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES

Assignment of Production and Transmission Demand-Related Costs Based on Forecasted 12 Months Ended June 30, 2018

Minimum System Demand Winter System Peak Demand Summer System Peak Demand	2,303 6,021 6,698		
Assignment of Production and Transmission Demand-Related Costs to the Costing Periods			
Non-Time-Differentiated Capacity Costs			
1. Minimum System Demand		2,303	
2. Maximum System Demand		6,698	
3. Non-Time-Differentiated Capacity Factor (Line	1/Line 2)	0.3438	
4. Non-Time-Differentiated Cost (Line 3)			34.38%
Winter Peak Period Costs			
5. Maximum Winter System Demand		6,021	
6. Intermediate Peak Period Capacity Factor (Line	e 5/Line2 - Line 3)	0.5551	
7. Winter Peak Period Hours		2,416	
8. Summer Peak Period Hours		1,308	
9. Total Summer and Winter Peak Period Hours (	(Line 7 + Line 8)	3,724	
10. Winter Peak Period Costs (Line 8/Line 9 x Line	e 6)		36.02%
Summer Peak Period Costs			
11. Peak Capacity Factor (1.0000 - Line 3 - Line 6	i)	0.1011	
12. Summer Peak Period Costs (Line 11 + Line 7/	′Line 9 x Line 6)		29.60%

# **Exhibit WSS-17**

# LOLP Analysis for Electric Cost of Service Study

# Louisville Gas and Electric Company

LOLP Fixed Production Cost Allocation Factor For the 12 Months Ended June 30, 2018

Rate Class	Weighted LOLP
	$\sum_{i=1}^{8760} LOLP_i * \overline{LOAD}_i$
Residential	15,474.68
General Service	3,909.82
PS Primary	395.56
PS Secondary	5,008.72
TOD Primary	4,137.47
TOD Secondary	2,636.21
RTS	2,345.00
Special Contract Cust 2	115.79
Special Contract Cust 1	268.03
Unmetered Lighting	8.26
Traffic Energy Svc	5.22
Lighting Energy Svc	0.27
Total	34,305.02

# **Exhibit WSS-18**

Zero Intercept Overhead Conductor

# Zero Intercept Analysis Account 365 -- Overhead Conductor

# Weighted Linear Regression Statistics

		Standard	
	Estimate	Error	LINEST ARRAY
Size Coefficient (\$ per MCM) Zero Intercept (\$ per Unit)	0.0042381 1.1481694	0.0007242 0.2165379	0.004238076 1.148169 0.000724158 0.216538
	1.1401074	0.2105575	0.8382354 1682.393
R-Square	0.8382354		82.90915541 32
Plant Classification			469339999.2 90574315
Total Number of Units		98,977,688	
Zero Intercept		1.1481694	
Zero Intercept Cost		\$ 113,643,149	
Total Cost of Sample		\$ 191,986,396	
Percentage of Total		0.591933343	
Percentage Classified as Customer-Related	[	59.19%	
Percentage Classified as Demand-Related	[	40.81%	

# Zero Intercept Analysis Account 365 -- Overhead Conductor

Description	Size	Cost	Quantity	Avg Cost
#2 Triplex	66.369	12,049,980.44	9,444,024.00	1.275937
#4 Aluminum Poly	41.74	107,147.80	24,198.00	4.427961
1 CONDUCTOR	83.69	1,411,598.65	182,059.00	7.753523
1/0 CONDUCTOR	105.6	4,290,230.09	690,429.00	6.213861
1/0 Triplex	105.6	4,992.80	1,000.00	4.9928
1/0 Aluminum	105.6	19,519.07	5,787.00	3.372917
123,270 ACAR WIRE	123.27	16,001,355.25	9,030,733.00	1.771878
195,700 ACAR WIRE	195.7	2,350,342.57	1,867,358.00	1.258646
2/0 COPPER CONDUCTOR	133.1	814,744.67	619,229.00	1.31574
20 M.A.W. MESSENGER WIRE	20	2,835,873.99	1,331,916.00	2.129169
336,400 19 STR. ALL ALUMINUM	336.4	8,877,286.87	5,632,629.00	1.576047
350 MCM COPPER CONDUCTOR	350	1,343,426.45	74,915.00	17.93268
392,500 24/13 ACAR WIRE	392.5	1,018,369.50	863,538.00	1.179299
4 COPPER CONDUCTOR	41.74	17,171,210.51	11,636,815.00	1.475594
4A COPPER CONDUCTOR	41.74	619,277.91	70,532.00	8.780099
6 COPPER CONDUCTOR	26.25	9,672,518.55	15,184,951.00	0.636981
6A COPPER CONDUCTOR	26.25	752,935.77	101,691.00	7.404153
750 MCM COPPER CONDUCTOR	750	854,930.69	26,529.00	32.22627
795 MCM ALUMINUM CONDUCTOR	795	50,420,186.86	10,820,405.00	4.659732
8 COPPER CONDUCTOR	16.51	692,062.17	334,246.00	2.070517
840,200 24/13 ACAR WIRE	840.2	580,130.00	211,997.00	2.736501
1/0 CABLE	105.6	40,927,306.48	22,040,786.00	1.85689
101 MCM ACSR CONDUCTOR	101	1,181.18	250.00	4.72472
1272 MCM ACSR CONDUCTOR	1272	80,155.38	31,063.00	2.580413
200 MCM CABLE	200	3,238.76	500.00	6.47752
3/0 CONDUCTOR	167.8	5,943,955.85	2,037,913.00	2.916688
300 MCM COPPER CONDUCTOR	300	3,564.60	260.00	13.71
4/0 CONDUCTOR	211.6	12,422,874.97	6,559,680.00	1.893823
520 MCM CONDUCTOR	520	688.25	112.00	6.145089
600 MCM CONDUCTOR	600	105,138.81	15,810.00	6.650146
636 MCM ALUMINUM CONDUCTOR	636	21,911.09	3,040.00	7.207595
7/C CONDUCTOR	20.92	18,059.98	4,050.00	4.459254
80 MCM ACSR CONDUCTOR	80	16,623.99	7,500.00	2.216532
954 MCM ACSR CONDUCTOR	954	553,575.80	121,743.00	4.547085

# Zero Intercept Analysis Account 365 -- Overhead Conductor

n	У	x	est y	y*n^.5	n^.5	xn^.5
9,444,024	1.27594	66.37	1.429	3921.09894	3,073.11	203959.4
24,198	4.42796	41.74	1.325	688.8006086	155.56	6492.952
182,059	7.75352	83.69	1.503	3308.302079	426.68	35709.16
690,429	6.21386	105.60	1.596	5163.225253	830.92	87745.21
1,000	4.99280	105.60	1.596	157.886199	31.62	3339.365
5,787	3.37292	105.60	1.596	256.5856596	76.07	8033.238
9,030,733	1.77188	123.27	1.671	5324.701495	3,005.12	370440.9
1,867,358	1.25865	195.70	1.978	1719.956145	1,366.51	267426.6
619,229	1.31574	133.10	1.712	1035.370733	786.91	104737.9
1,331,916	2.12917	20.00	1.233	2457.24529	1,154.09	23081.73
5,632,629	1.57605	336.40	2.574	3740.457124	2,373.32	798383.5
74,915	17.93268	350.00	2.631	4908.281955	273.71	95797.12
863,538	1.17930	392.50	2.812	1095.884179	929.27	364737.5
11,636,815	1.47559	41.74	1.325	5033.65965	3,411.28	142386.7
70,532	8.78010	41.74	1.325	2331.806397	265.58	11085.25
15,184,951	0.63698	26.25	1.259	2482.177725	3,896.79	102290.7
101,691	7.40415	26.25	1.259	2361.112448	318.89	8370.869
26,529	32.22627	750.00	4.327	5248.926212	162.88	122157.9
10,820,405	4.65973	795.00	4.517	15327.90121	3,289.44	2615104
334,246	2.07052	16.51	1.218	1197.0492	578.14	9545.093
211,997	2.73650	840.20	4.709	1259.970761	460.43	386854.4
22,040,786	1.85689	105.60	1.596	8717.653933	4,694.76	495766.8
250	4.72472	101.00	1.576	74.70438253	15.81	1596.95
31,063	2.58041	1,272.00	6.539	454.7900756	176.25	224186.2
500	6.47752	200.00	1.996	144.8417505	22.36	4472.136
2,037,913	2.91669	167.80	1.859	4163.731874	1,427.55	239543.7
260	13.71000	300.00	2.420	221.0671075	16.12	4837.355
6,559,680	1.89382	211.60	2.045	4850.436099	2,561.19	541947.2
112	6.14509	520.00	3.352	65.03351214	10.58	5503.163
15,810	6.65015	600.00	3.691	836.174891	125.74	75442.69
3,040	7.20760	636.00	3.844	397.3993852	55.14	35066.62
4,050	4.45925	20.92	1.237	283.7852072	63.64	1331.341
7,500	2.21653	80.00	1.487	191.957302	86.60	6928.203
121,743	4.54709	954.00	5.191	1586.55487	348.92	332866.7

# Louisville Gas & Electric Company

Pri/Sec Splits for Overhead Conductor

		Customer	Demand
Overhead		59.19%	40.81%
Primary	73.18%	0.433152	0.298648
Secondary	26.82%	0.158748	0.109452

# **Exhibit WSS-19**

Zero Intercept Underground Conductor

# Zero Intercept Analysis Account 367 -- Underground Conductor

# Weighted Linear Regression Statistics

Weighten Linear Regression Statistics				
		Standard		
	Estimate	Estimate Error LINEST ARRAY		
			0.009226863	3.398647368
Size Coefficient (\$ per MCM)	0.0092269	0.0017924	0.00179235	0.577593983
Zero Intercept (\$ per Unit)	3.3986474	0.5775940	0.887568642	2342.223904
			82.89031589	21
R-Square	0.8875686		909474670.5	115206269.1
Plant Classification				
Total Number of Units		27,413,053		
Zero Intercept		3.3986474		
Zero Intercept Cost		\$93,167,300		
Total Cost of Sample		144,727,446		
Percentage of Total		0.643743138		
Percentage Classified as Customer-Related	C	64.37%	]	
Percentage Classified as Demand-Related	C	35.63%	]	

# Zero Intercept Analysis Account 367 -- Underground Conductor

	Size	Cost	Quantity	Avg Cost
#12 CABLE	13.12	1,081,345.75	280,834	3.850480177
1 CONDUCTOR	83.69	1,546,022.61	156,438	9.882653895
1/0 CONDUCTOR	105.6	6,044,157.92	488,240	12.37948124
1000 MCM CONDUCTOR	1000	25,683,630.16	2,126,583	12.07741723
2/0 COPPER CONDUCTOR	133.1	1,844,499.63	557,414	3.309029967
200 MCM 1/C 500/600V CABLE	200	28,562.39	1,550	18.42734839
250 MCM COPPER CONDUCTOR	250	235,557.28	175,014	1.345933925
350 MCM COPPER CONDUCTOR	350	13,760,841.68	979,059	14.05517102
4 COPPER CONDUCTOR	41.74	817,127.43	653,992	1.249445605
6 COPPER CONDUCTOR	26.25	1,123,954.76	421,411	2.6671225
750 MCM COPPER CONDUCTOR	750	2,773,925.55	265,617	10.44332836
795 MCM ALUMINUM CONDUCTOR	795	502,850.86	53,029	9.482563503
8 COPPER CONDUCTOR	16.51	34,590.47	23,274	1.48622798
#2 Triplex	66.36	17,345,221.60	3,597,812	4.821047236
1/0 CABLE	105.6	48,980,377.75	12,334,000	3.971167322
123,270 ACAR WIRE	123.27	7,397.12	496	14.91354839
195,700 ACAR WIRE	195.7	10,289.60	7,611	1.351937984
3/0 CONDUCTOR	167.8	327,842.85	31,894	10.27913871
336,400 19 STR. ALL ALUMINUM	336.4	95,736.62	2,289	41.82464832
4/0 CONDUCTOR	211.6	22,154,469.14	5,201,977	4.25885565
600 MCM CONDUCTOR	600	21,636.43	1,634	13.24138923
6A COPPER CONDUCTOR	26.25	307,231.56	52,777	5.821315346
840,200 24/13 ACAR WIRE	840.2	177.03	108	1.639166667

# Zero Intercept Analysis Account 367 -- Underground Conductor

n	У	Х	est y	y*n^.5	n^.5	xn^.5
280,834	3.85048	13.12	3.520	2040.514733	529.94	6952.783046
156,438	9.88265	83.69	4.171	3908.811375	395.52	33101.27295
488,240	12.37948	105.60	4.373	8650.060091	698.74	73787.12629
2,126,583	12.07742	1,000.00	12.626	17612.26611	1,458.28	1458280.837
557,414	3.30903	133.10	4.627	2470.527181	746.60	99372.6775
1,550	18.42735	200.00	5.244	725.4854315	39.37	7874.007874
175,014	1.34593	250.00	5.705	563.0670782	418.35	104586.6865
979,059	14.05517	350.00	6.628	13907.22773	989.47	346315.936
653,992	1.24945	41.74	3.784	1010.42381	808.70	33755.04277
421,411	2.66712	26.25	3.641	1731.393956	649.16	17040.49639
265,617	10.44333	750.00	10.319	5382.287188	515.38	386535.3315
53,029	9.48256	795.00	10.734	2183.647227	230.28	183072.8099
23,274	1.48623	16.51	3.551	226.736244	152.56	2518.735645
3,597,812	4.82105	66.36	4.011	9144.513801	1,896.79	125870.9791
12,334,000	3.97117	105.60	4.373	13946.65822	3,511.98	370865.0351
496	14.91355	123.27	4.536	332.1404929	22.27	2745.353252
7,611	1.35194	195.70	5.204	117.9444831	87.24	17073.07258
31,894	10.27914	167.80	4.947	1835.740213	178.59	29967.21967
2,289	41.82465	336.40	6.503	2001.037347	47.84	16094.55167
5,201,977	4.25886	211.60	5.351	9713.531082	2,280.78	482613.9568
1,634	13.24139	600.00	8.935	535.2535765	40.42	24253.65952
52,777	5.82132	26.25	3.641	1337.345055	229.73	6030.476893
108	1.63917	840.20	11.151	17.03471969	10.39	8731.614531

# Louisville Gas & Electric Company

Pri/Sec Splits for Underground Conductor

		Customer	Demand
Underground		64.37%	35.63%
Primary	88.10%	0.567100	0.313900
Secondary	11.90%	0.076600	0.042400

# **Exhibit WSS-20**

Zero Intercept Line Transformers

# LOUISVILLE GAS AND ELECTRIC COMPANY

# Zero Intercept Analysis Account 368 - Line Transformers

# Weighted Linear Regression Statistics

weighten Linear Regression Statistics				
		Standard		
	Estimate	Error	LINEST A	RRAY
			15.12052704	804.7315813
Size Coefficient (\$ per kVA)	15.1205270	0.8084628	0.808462805	160.9792737
Zero Intercept (\$ per Unit)	804.73	160.9792737	0.937229105	27317.72973
			261.291629	35
R-Square	0.9372291		3.89982E+11	26119042509
Plant Classification				
Total Number of Units	33,723			
Zero Intercept	\$ 804.73			
Zero Intercept Cost	\$ 27,137,963			
Total Cost of Sample	\$ 65,942,384			
Percentage of Total	0.411540522			
Percentage Classified as Customer-Related	41.15%			
Percentage Classified as Demand-Related	58.85%			

# LOUISVILLE GAS AND ELECTRIC COMPANY

# Zero Intercept Analysis Account 368 - Line Transformers

	Size	Cost	Quantity	Avg Cost
TRANSFORMERS - OH 1P - 100 KVA	100	1,318,285.94	578	2280.77
TRANSFORMERS - OH 1P - 1 KVA	1	90,092.52	163	552.71
TRANSFORMERS - OH 1P - 15 KVA	15	2,693,406.67	3,676	732.70
TRANSFORMERS - OH 1P - 150 KVA	150	239,101.48	64	3735.96
TRANSFORMERS - OH 1P - 167 KVA	167	753,682.14	325	2319.02
TRANSFORMERS - OH 1P - 25 KVA	25	5,705,480.52	5,637	1012.15
TRANSFORMERS - OH 1P - 250 KVA	250	105,545.90	36	2931.83
TRANSFORMERS - OH 1P - 3 KVA	3	16,304.27	16	1019.02
TRANSFORMERS - OH 1P - 333 KVA	333	26,809.90	3	8936.63
TRANSFORMERS - OH 1P - 37.5 KVA	37.5	6,056,949.07	5,452	1110.96
TRANSFORMERS - OH 1P - 50 KVA	50	5,070,025.96	3,371	1504.01
TRANSFORMERS - OH 1P - 500 KVA	500	381,419.35	98	3892.03
TRANSFORMERS - OH 1P - 75 KVA	75	1,852,640.35	969	1911.91
TRANSFORMERS - PM 1P - 100 KVA	100	1,982,206.46	804	2465.43
TRANSFORMERS - PM 1P - 150 KVA	150	583,737.81	175	3335.64
TRANSFORMERS - PM 1P - 225 KVA	225	540,183.84	104	5194.08
TRANSFORMERS - PM 1P - 25 KVA	25	1,928,855.74	1,919	1005.14
TRANSFORMERS - PM 1P - 37.5 KVA	37.5	3,038,316.77	2,332	1302.88
TRANSFORMERS - PM 1P - 50 KVA	50	5,658,194.12	3,183	1777.63
TRANSFORMERS - PM 1P - 75 KVA	75	5,120,702.73	2,571	1991.72
TRANSFORMERS - PM 3P - 1000 KVA	1000	3,617,531.17	176	20554.15
TRANSFORMERS - PM 3P - 150 KVA	150	1,137,721.34	202	5632.28
TRANSFORMERS - PM 3P - 1500 KVA	1500	1,957,162.39	95	20601.71
TRANSFORMERS - PM 3P - 2000 KVA	2000	1,510,446.74	54	27971.24
TRANSFORMERS - PM 3P - 225 KVA	225	607,029.03	81	7494.19
TRANSFORMERS - PM 3P - 2500 KVA	2500	1,171,905.55	41	28583.06
TRANSFORMERS - PM 3P - 300 KVA	300	3,143,129.68	386	8142.82
TRANSFORMERS - PM 3P - 3000 KVA	3000	479,602.96	11	43600.27
TRANSFORMERS - PM 3P - 500 KVA	500	3,026,510.95	260	11640.43
TRANSFORMERS - OH 1P - 7.5 KVA	7.5	2,397.60	1	2397.60
TRANSFORMERS - PM 3P - 75 KVA	75	595,709.62	85	7008.35
TRANSFORMERS - PM 3P - 750 KVA	750	3,192,655.31	236	13528.20
TRANSFORMERS - OH 1P - 10 KVA	10	193,616.12	209	926.39
TRANSFORMERS - PM 1P - 15 KVA	15	1,495.78	2	747.89
TRANSFORMERS - PM 1P - 167 KVA	167	1,150,599.98	314	3664.33
TRANSFORMERS - PM 1P - 250 KVA	250	450,730.40	60	7512.17
TRANSFORMERS - PM 1P - 500 KVA	500	542,197.87	34	15947.00

# LOUISVILLE GAS AND ELECTRIC COMPANY

# Zero Intercept Analysis Account 368 - Line Transformers

$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	n	у	X	est y	y*n^.5	n^.5	xn^.5
3,676         733         15.00         12.086         44423.64398         60.63         909.4503335           64         3,736         150.00         120,725         2987.685         8.00         1200           325         2,319         167.00         134.405         41806.7639         18.03         3010.635315           5,637         1.012         25.00         201,138         75992.0585         75.08         1876.99834           36         2.932         250.00         201,198         17590.98333         6.00         1500           16         1.019         3.00         2.67.991         15478.70298         1.73         576.7729189           5,452         1.111         37.50         30.193         8200.60281         73.84         276.8912241           3,371         1.504         50.00         402,52         87323.43415         58.06         2903.015673           98         3.892         500.00         402,381         38529.17269         9.90         4949.747468           969         1.912         75.00         60.370         5951.53264         31.13         2334.657362           1804         2.465         100.00         80,488         69907.03181         28.35		2,281	100.00	80,488	54833.46634	24.04	2404.163056
64 $3.736$ $150.00$ $120.725$ $29887.685$ $8.00$ $1200$ $325$ $2.319$ $167.00$ $134.405$ $41806.76309$ $18.03$ $3010.63315$ $5.637$ $1.012$ $25.00$ $201.133$ $75992.08859$ $75.08$ $1876.998934$ $36$ $2.932$ $250.00$ $201.198$ $17590.98333$ $6.00$ $1500$ $16$ $1.019$ $3.00$ $2.429$ $4076.0675$ $4.00$ $12$ $3$ $8.937$ $333.00$ $267.991$ $15478.70298$ $1.73$ $576.7729189$ $5.452$ $1.111$ $37.50$ $30.193$ $82030.62081$ $73.84$ $276.8912241$ $3.371$ $1.504$ $50.00$ $40.252$ $87323.43415$ $58.06$ $2903.015673$ $98$ $3.892$ $500.00$ $40.252$ $87323.43415$ $58.06$ $2903.015673$ $98$ $3.892$ $500.00$ $40.252$ $87323.43415$ $88.06$ $2933.1657362$ $804$ $2.465$ $100.00$ $80.488$ $6907.01811$ $28.35$ $2335.489376$ $175$ $3.336$ $150.00$ $120.725$ $44126.43075$ $13.23$ $1984.313483$ $104$ $5.194$ $225.00$ $81.080$ $52969.38348$ $10.20$ $294.58781$ $1.919$ $1.005$ $25.00$ $20.133$ $4031.37629$ $43.81$ $10295.15896$ $2.332$ $1.303$ $37.50$ $30.193$ $6217.11173$ $48.29$ $1810.90477$ $3.183$ $1.778$ $50.00$ $120.725$ $800$	163	553	1.00	820	7056.590776	12.77	12.76714533
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3,676	733	15.00	12,086	44423.64398	60.63	909.4503835
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	64	3,736	150.00	120,725	29887.685	8.00	1200
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	325	2,319	167.00	134,405	41806.76309	18.03	3010.635315
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	5,637	1,012	25.00	20,133	75992.05859	75.08	1876.998934
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	36	2,932	250.00	201,198	17590.98333	6.00	1500
5,4521,111 $37.50$ $30,193$ $82030.62081$ $73.84$ $2768.912241$ $3,371$ $1,504$ $50.00$ $40.252$ $87323.43415$ $58.06$ $2903.015673$ $98$ $3,892$ $500.00$ $402,381$ $38529.17269$ $9.90$ $4949.747468$ $969$ $1.912$ $75.00$ $60,370$ $59515.38264$ $31.13$ $2334.657362$ $804$ $2,465$ $100.00$ $80,488$ $69907.03181$ $28.35$ $2835.489376$ $175$ $3,336$ $150.00$ $120,725$ $44126.43075$ $13.23$ $1984.313483$ $104$ $5.194$ $225.00$ $21,033$ $44031.37629$ $43.81$ $1095.159806$ $2,332$ $1,303$ $37.50$ $30,193$ $62917.11173$ $48.29$ $1810.90447$ $3,183$ $1,778$ $50.00$ $40,252$ $100290.437$ $56.42$ $2820.90411$ $2,571$ $1.992$ $75.00$ $60,370$ $100990.0358$ $50.71$ $3802.8772$ $176$ $20,554$ $1,000.00$ $804,747$ $272681.6718$ $13.27$ $13266.49916$ $202$ $5,632$ $150.00$ $120,725$ $80049.79414$ $14.21$ $2131.900561$ $95$ $20,602$ $1,500.00$ $120,725$ $80049.79414$ $14.21$ $2131.900561$ $95$ $20,602$ $1,500.00$ $2,011.844$ $183020.8983$ $6.40$ $1600.781059$ $386$ $8,143$ $300.00$ $241.4210$ $144605.7333$ $3.32$ $9949.874371$ $260$ $11,640$ </td <td>16</td> <td>1,019</td> <td>3.00</td> <td>2,429</td> <td>4076.0675</td> <td>4.00</td> <td>12</td>	16	1,019	3.00	2,429	4076.0675	4.00	12
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3	8,937	333.00	267,991	15478.70298	1.73	576.7729189
983,892500.00402,38138529.172699.904949.7474689691.91275.0060,37059515.3826431.132334.6573628042,465100.0080,48869907.0318128.352835.4893761753,336150.00120,72544126.4307513.231984.3134831045,194225.00181,08052969.3834810.202294.5587811.9191,00525.0020,13344031.3762943.811095.1598062,3321,30337.5030,19362917.1117348.291810.904473,1831,77850.0040.252100290.43756.422820.904112,5711,99275.0060,370100990.035850.713802.877217620,5541,000.00804,747272681.671813.2713266.499162025,632150.001,207,112200800.62449.7514620.191529520,6021,500.001,207,112200800.62449.7514620.191529427,9712,000.001,609,478205545.76657.3514696.93846817,494225.002011,844183020.89836.4016007.810593868,143300.0024,1435159981.088519.655894.064811143,6003,000.0024,14,210144605.73333.329949.87437126011,640500.0060,37064613.78039.22691.4658343 <td>5,452</td> <td>1,111</td> <td>37.50</td> <td>30,193</td> <td>82030.62081</td> <td>73.84</td> <td>2768.912241</td>	5,452	1,111	37.50	30,193	82030.62081	73.84	2768.912241
9691,91275.0060,37059515.3826431.132334.6573628042,465100.0080,48869907.0318128.352835.4893761753,336150.00120,72544126.4307513.231984.3134831045,194225.00181,08052969.3834810.202294.5587811,9191,00525.0020,13344031.3762943.811095.1598062,3321,30337.5030,19362917.1117348.291810.904473,1831,77850.0040,252100290.43756.422820.904112,5711,99275.0060,370100990.035850.713802.877217620,5541,000.00804,747272681.671813.2713266.499162025,632150.00120,72580049.7941414.212131.9005619520,6021,500.001,207,11220080.62449.7514620.191525427,9712,000.001,609,478205545.76657.3514696.93846817,494225.001810.8067447.679.0020254128,5832,500.002,011,844183020.89836.4016007.810593868,143300.00241,435159981.088519.655894.0648111143,6003,000.002,414,210144605.73333.329949.87437126011,640500.0060,512397.61.007.585	3,371	1,504	50.00	40,252	87323.43415	58.06	2903.015673
8042,465100.0080,48869907.0318128.352835.4893761753,336150.00120,72544126.4307513.231984.3134831045,194225.00181,08052969.3834810.202294.5587811,9191,00525.0020,13344031.3762943.811095.1598062,3321,30337.5030,19362917.1117348.291810.904473,1831,77850.0040,252100290.43756.422820.904112,5711,99275.0060,370100990.035850.713802.877217620,5541,000.00804,747272681.671813.2713266.499162025,632150.00120,72580049.7941414.212131.9005619520,6021,500.001,609,478205545.76657.3514696.93846817,494225.002011.84418302.88836.4016007.810593868,143300.002,41,435159981.088519.655894.0648111143,6003,000.002,41,4210144605.73333.329949.87437126011,640500.0060,370660312.397.61.007.5187,00875.0060,37064613.78039.22691.465834323613,528750.0060,37064613.78039.22691.465834323613,528750.00603,564207824.15915.3611521.71862 <t< td=""><td>98</td><td>3,892</td><td>500.00</td><td>402,381</td><td>38529.17269</td><td>9.90</td><td>4949.747468</td></t<>	98	3,892	500.00	402,381	38529.17269	9.90	4949.747468
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	969	1,912	75.00	60,370	59515.38264	31.13	2334.657362
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	804	2,465	100.00	80,488	69907.03181	28.35	2835.489376
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	175	3,336	150.00	120,725	44126.43075	13.23	1984.313483
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	104	5,194	225.00	181,080	52969.38348	10.20	2294.558781
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1,919	1,005	25.00	20,133	44031.37629	43.81	1095.159806
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	2,332	1,303	37.50	30,193	62917.11173	48.29	1810.90447
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	3,183	1,778	50.00	40,252	100290.437	56.42	2820.90411
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	2,571	1,992	75.00	60,370	100990.0358	50.71	3802.8772
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	176	20,554	1,000.00	804,747	272681.6718	13.27	13266.49916
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	202	5,632	150.00	120,725	80049.79414	14.21	2131.900561
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	95	20,602	1,500.00	1,207,112	200800.6244	9.75	14620.19152
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	54	27,971	2,000.00	1,609,478	205545.7665	7.35	14696.93846
3868,143300.00241,435159981.088519.655894.0648111143,6003,000.002,414,210144605.73333.329949.87437126011,640500.00402,381187696.241216.128062.25774812,3987.506,0512397.61.007.5857,00875.00603,7064613.78039.22691.465834323613,528750.00603,564207824.15915.3611521.7186220992610.008,06213392.7070614.46144.5683229274815.0012,0861057.6761811.4121.213203443143,664167.00134,40564932.1133517.722959.247539607,512250.00201,19858189.044437.751936.491673	81	7,494	225.00	181,080	67447.67	9.00	2025
1143,6003,000.002,414,210144605.73333.329949.87437126011,640500.00402,381187696.241216.128062.25774812,3987.506,0512397.61.007.5857,00875.0060,37064613.78039.22691.465834323613,528750.00603,564207824.15915.3611521.7186220992610.008,06213392.7070614.46144.5683229274815.0012,0861057.6761811.4121.213203443143,664167.00134,40564932.1133517.722959.247539607,512250.00201,19858189.044437.751936.491673	41	28,583	2,500.00	2,011,844	183020.8983	6.40	16007.81059
26011,640500.00402,381187696.241216.128062.25774812,3987.506,0512397.61.007.5857,00875.0060,37064613.78039.22691.465834323613,528750.00603,564207824.15915.3611521.7186220992610.008,06213392.7070614.46144.5683229274815.0012,0861057.6761811.4121.213203443143,664167.00134,40564932.1133517.722959.247539607,512250.00201,19858189.044437.751936.491673	386	8,143	300.00	241,435	159981.0885	19.65	5894.064811
12,3987.506,0512397.61.007.5857,00875.0060,37064613.78039.22691.465834323613,528750.00603,564207824.15915.3611521.7186220992610.008,06213392.7070614.46144.568329274815.0012,0861057.6761811.4121.213203443143,664167.00134,40564932.1133517.722959.247539607,512250.00201,19858189.044437.751936.491673	11	43,600	3,000.00	2,414,210	144605.7333	3.32	9949.874371
857,00875.0060,37064613.78039.22691.465834323613,528750.00603,564207824.15915.3611521.7186220992610.008,06213392.7070614.46144.5683229274815.0012,0861057.6761811.4121.213203443143,664167.00134,40564932.1133517.722959.247539607,512250.00201,19858189.044437.751936.491673	260	11,640	500.00	402,381	187696.2412	16.12	8062.257748
23613,528750.00603,564207824.15915.3611521.7186220992610.008,06213392.7070614.46144.5683229274815.0012,0861057.6761811.4121.213203443143,664167.00134,40564932.1133517.722959.247539607,512250.00201,19858189.044437.751936.491673	1	2,398	7.50	6,051	2397.6	1.00	7.5
20992610.008,06213392.7070614.46144.5683229274815.0012,0861057.6761811.4121.213203443143,664167.00134,40564932.1133517.722959.247539607,512250.00201,19858189.044437.751936.491673	85	7,008	75.00	60,370	64613.7803	9.22	691.4658343
274815.0012,0861057.6761811.4121.213203443143,664167.00134,40564932.1133517.722959.247539607,512250.00201,19858189.044437.751936.491673	236	13,528	750.00	603,564	207824.159	15.36	11521.71862
3143,664167.00134,40564932.1133517.722959.247539607,512250.00201,19858189.044437.751936.491673	209	926	10.00	8,062	13392.70706	14.46	144.5683229
607,512250.00201,19858189.044437.751936.491673	2	748	15.00	12,086	1057.676181	1.41	21.21320344
	314	3,664	167.00	134,405	64932.11335	17.72	2959.247539
34 15.947 500.00 402.381 92986.16757 5.83 2915.475947	60	7,512	250.00	201,198	58189.04443	7.75	1936.491673
5. 15,777 50000 -102,501 72,000077 5.05 2715.7577	34	15,947	500.00	402,381	92986.16757	5.83	2915.475947

# **Exhibit WSS-21**

# Electric Cost of Service Study Functional Assignment and Classification BIP Methodology

## BIP METHODOLOGY

							Production	Transmission
Description	Nama	Functional	Total	Pro Base	on Demand	 Summer Peak	Energy	Demand
Description	Name	Vector	System	Dase	Winter Peak	Summer Peak		Demand
Plant in Service								
Intangible Plant								
301.00 ORGANIZATION 302.00 FRANCHISE AND CONSENTS	P301 P301	PT&D PT&D	\$ 2,240	432	453	372	-	241
303.00 SOFTWARE - COMMON	P302	PT&D		_	_	-	_	-
301.00 ORGANIZATION - COMMON	P301	PT&D		-	-	-	-	-
302.00 FRANCHISE AND CONSENTS - COMMON	P301	PT&D		-	-	-	-	-
Total Intangible Plant	PINT		\$ 2,240	\$ 432 \$	\$ 453	\$ 372	\$ -	\$ 241
Steam Production Plant								
Total Steam Production Plant	PSTPR	F017	\$ 1,762,102,621	605,813,181	634,627,651	521,661,789	-	-
Hydraulic Production Plant								
Total Hydraulic Production Plant	PHDPR	F017	\$ 146,463,608	50,354,379	52,749,400	43,359,829	-	-
Other Production Plant								
Total Other Production Plant	POTPR	F017	\$ 396,983,699	136,483,514	142,975,119	117,525,066	-	-
Total Production Plant	PPRTL		\$ 2,305,549,928	\$ 792,651,074	\$ 830,352,170	\$ 682,546,684	\$ -	\$-
Transmission								
Total Transmission Plant	PTRAN	F011	\$ 442,223,222	-	-	-	-	442,223,222
Total Transmission Plant	PTRTL		\$ 442,223,222	\$ - 9	\$ -	\$ -	\$ -	\$ 442,223,222
Distribution								
TOTAL ACCTS 360-362	P362	F001	\$ 152,675,045	-	-	-	-	-
364 & 365-OVERHEAD LINES	P365	F003	528,239,740	-	-	-	-	-
366 & 367-UNDERGROUND LINES	P367	F004	329,188,953	-	-	-	-	-
368-TRANSFORMERS	P368	F005	168,599,875	-	-	-	-	-
369-SERVICES 370-METERS	P369 P370	F006 F007	34,458,226 39,970,580	-	-	-	-	-
371-CUSTOMER INSTALLATION	P371	F007	39,970,380	-	-	-	-	-
373-STREET LIGHTING	P373	F008	109,522,342	-	-	-	-	-
374-ASSET RETIRE OBLIGATIONS DIST PLANT	P374	F003	-	-	-	-	-	-
Total Distribution Plant	PDIST		\$ 1,362,654,761	\$ - 9	\$ -	\$ -	\$ -	\$-
Total Prod, Trans, and Dist Plant	PT&D		\$ 4,110,427,912	\$ 792,651,074	\$ 830,352,170	\$ 682,546,684	\$ -	\$ 442,223,222

## BIP METHODOLOGY

			_							r			
				<b>B</b>									
		Functional		Distributior Substatior	Dis	stribu	tion Primary Li	ines			Distribution	Sec	Lines
Description	Name	Vector		Genera	Specifi		Demand		Customer		Demand		Customer
Plant in Service													
Intangible Plant													
301.00 ORGANIZATION	P301	PT&D		83	-		142		226		39		59
302.00 FRANCHISE AND CONSENTS	P301	PT&D		-	-		-		-		-		-
303.00 SOFTWARE - COMMON	P302	PT&D		-	-		-		-		-		-
301.00 ORGANIZATION - COMMON 302.00 FRANCHISE AND CONSENTS - COMMON	P301 P301	PT&D PT&D		-	-		-		-		-		-
302.00 FRANCHISE AND CONSENTS - COMMON	P301	PTAD		-	-		-		-		-		-
Total Intangible Plant	PINT		\$	83	\$ -	\$	142	\$	226	\$	39	\$	59
Steam Production Plant													
Total Steam Production Plant	PSTPR	F017		-	-		-		-		-		-
Hydraulic Production Plant													
Total Hydraulic Production Plant	PHDPR	F017		-	-		-		-		-		-
Other Production Plant													
Total Other Production Plant	POTPR	F017		-	-		-		-		-		-
Total Production Plant	PPRTL				\$ -	\$	-						
Transmission													
Total Transmission Plant	PTRAN	F011		-	-		-		-		-		-
Total Transmission Plant	PTRTL		\$	-	\$ -	\$	-	\$	-	\$	-	\$	-
Distribution													
TOTAL ACCTS 360-362	P362	F001		152,675,045	-		-		-		-		-
364 & 365-OVERHEAD LINES	P365	F003		-	-		157,757,520		228,808,322		57,817,118		83,856,780
366 & 367-UNDERGROUND LINES	P367	F004		-	-		103,332,511		186,682,956		13,957,513		25,215,973
368-TRANSFORMERS	P368	F005		-	-		-		-		-		-
369-SERVICES	P369	F006		-	-		-		-		-		-
370-METERS	P370	F007		-	-		-		-		-		-
371-CUSTOMER INSTALLATION	P371	F008		-	-		-		-		-		-
373-STREET LIGHTING 374-ASSET RETIRE OBLIGATIONS DIST PLANT	P373 P374	F008 F003		-	-		-		-		-		-
Total Distribution Plant	PDIST		\$	152,675,045	\$ -	\$	261,090,031	\$	415,491,278	\$	71,774,631	\$	109,072,753
Total Prod, Trans, and Dist Plant	PT&D		\$	152,675,045	\$ -	\$	261,090,031	\$	415,491,278	\$	71,774,631	\$	109,072,753

## BIP METHODOLOGY

	<b>N</b>	Functional	Distribution Lir		Distribution Services	Distribution Meters	Distribution St. & Cust. Lighting		Customer Service & Info.	Sales Expense
Description	Name	Vector	Demand	Customer	Customer					
Plant in Service										
Intangible Plant 301.00 ORGANIZATION 302.00 FRANCHISE AND CONSENTS 303.00 SOFTWARE - COMMON 301.00 ORGANIZATION - COMMON 302.00 FRANCHISE AND CONSENTS - COMMON Total Intangible Plant	P301 P301 P302 P301 P301 PINT	PT&D PT&D PT&D PT&D PT&D PT&D	\$ 54 - - - 54 \$	38 - - - - 38	\$ 19 - - - - 19 \$	22 - - - - - -	60 - - - - \$ 60	- - - - - S -	- - - - \$	- - - - \$
Steam Production Plant										
Total Steam Production Plant	PSTPR	F017	-	-	-	-	-	-	-	-
Hydraulic Production Plant										
Total Hydraulic Production Plant	PHDPR	F017	-	-	-	-	-	-	-	-
Other Production Plant										
Total Other Production Plant	POTPR	F017	-	-	-	-	-	-	-	-
Total Production Plant	PPRTL		\$ - \$	-			\$-	\$-	\$-	\$-
Transmission										
Total Transmission Plant	PTRAN	F011	-	-	-	-	-	-	-	-
Total Transmission Plant	PTRTL		\$ - \$	-	\$ - \$	-	\$-	\$-	\$-	\$-
Distribution TOTAL ACCTS 360-362 364 & 365-OVERHEAD LINES 366 & 367-UNDERGROUND LINES 368-TRANSFORMERS 369-SERVICES 370-METERS 371-CUSTOMER INSTALLATION 373-STREET LIGHTING 374-ASSET RETIRE OBLIGATIONS DIST PLANT	P362 P365 P367 P368 P369 P370 P371 P373 P374	F001 F003 F004 F005 F006 F007 F008 F008 F008 F003	- - - - - - - - - - - - - - -	- - 69,385,680 - - - - - -	- - - 34,458,226 - - - -	- - - 39,970,580 - - - -	- - - - - - - - - - - - - - - - - - -			
Total Distribution Plant	PDIST		\$ 99,214,195 \$	69,385,680	\$ 34,458,226 \$	39,970,580	\$ 109,522,342	\$ -	\$ -	\$ -
Total Prod, Trans, and Dist Plant	PT&D		\$ 99,214,195 \$	69,385,680	\$ 34,458,226 \$	39,970,580	\$ 109,522,342	\$-	\$-	\$-

## BIP METHODOLOGY

		Functional	Total		Produ	uction Demand		Production Energy	Transmission Demand
Description	Name	Vector	System	L	Base	Winter Peak	Summer Peak		Demand
Plant in Service (Continued)									
General Plant									
Total General Plant	PGP	PT&D	\$ 15,832,612		3,053,146	3,198,364	2,629,044	-	1,703,362
TOTAL COMMON PLANT 106.00 COMPLETED CONSTR NOT CLASSIFIED 105.00 PLANT HELD FOR FUTURE USE - DIST	PCOM P106 P105	PT&D PT&D PDIST	\$ 202,237,020 - 2,915,340		38,999,198 - -	40,854,128 - -	33,581,956 - -	- -	21,757,809 - -
105.00 PLANT HELD FOR FUTURE USE - PROD PROPERTY HELD UNDER CAPITAL LEASE OTHER	P105	F017 F017 PDIST	\$ 211,410 - -		72,683 0 -	76,140 0 -	62,587 0 -	- 0 -	- 0 -
Total Plant in Service	TPIS		\$ 4,331,626,534	\$	834,776,533 \$	874,481,255 \$	718,820,643	\$-\$	465,684,635
Construction Work in Progress (CWIP)									
CWIP Production CWIP Transmission CWIP Distribution CWIP General & Common	CWIP1 CWIP2 CWIP3 CWIP4	F017 F011 PDIST PT&D	\$ 67,084,848 6,861,294 30,927,921 18,667,667		23,063,858 - - 3,599,855	24,160,851 - - 3,771,076	19,860,138 - - 3,099,812	- - -	- 6,861,294 - 2,008,374
Total Construction Work in Progress	TCWIP		\$ 123,541,729	\$	26,663,714 \$	27,931,928 \$		\$ - \$	
Total Utility Plant			\$ 4,455,168,263	\$	861,440,246 \$	902,413,182 \$	741,780,593	\$-\$	474,554,303

## BIP METHODOLOGY

Description	Name	Functional Vector	Distribution Substation General	Distribu Specific	ition Primary Lines Demand Custome	Distribution Sec. Li	ines Customer
Plant in Service (Continued)							
General Plant							
Total General Plant	PGP	PT&D	588,076	-	1,005,671 1,600,39	276,463	420,128
TOTAL COMMON PLANT 106.00 COMPLETED CONSTR NOT CLASSIFIED 105.00 PLANT HELD FOR FUTURE USE - DIST 105.00 PLANT HELD FOR FUTURE USE - PROD PROPERTY HELD UNDER CAPITAL LEASE OTHER Total Plant in Service	PCOM P106 P105 P105 TPIS	PT&D PT&D PDIST F017 F017 PDIST	7,511,760 - 326,642 - 0 - \$ 161,101,605 \$	- - - - 0 - - \$	12,845,881 20,442,57: 558,591 888,924 	5 153,559 0 0	5,366,485 - 233,356 - 0 - 5,092,782
Construction Work in Progress (CWIP)							
CWIP Production CWIP Transmission CWIP Distribution CWIP General & Common	CWIP1 CWIP2 CWIP3 CWIP4	F017 F011 PDIST PT&D	3,465,237 693,380	-	5,925,912 9,430,32 1,185,750 1,886,97	325,967	- - 2,475,604 495,358
Total Construction Work in Progress Total Utility Plant	TCWIP		\$ 4,158,617 \$ \$ 165,260,222 \$	- \$ - \$	7,111,662 \$ 11,317,29 282,611,978 \$ 449,740,69		2,970,962 8,063,744
			. ····,-···, Ψ	+		· · · · · · · · · · · · · · · · · · ·	.,,

## BIP METHODOLOGY

#### 12 Months Ended June 30, 2018

Description	Name	Functional Vector	Distribution Lin Demand	ne Trans. Customer	Distribution Services Customer	Distribution Meters	Distribution St. & Cust. Lighting	Customer Accounts Expense	Customer Service & Info.	Sales Expense
· ·		100101	2011414							
Plant in Service (Continued)										
General Plant										
Total General Plant	PGP	PT&D	382,155	267,261	132,727	153,959	421,860	-	-	-
TOTAL COMMON PLANT	PCOM	PT&D	4,881,434	3,413,842	1,695,378	1,966,591	5,388,605	-	-	-
106.00 COMPLETED CONSTR NOT CLASSIFIED 105.00 PLANT HELD FOR FUTURE USE - DIST	P106 P105	PT&D PDIST	- 212,264	- 148.448	- 73,722	- 85,515	- 234,318	-	-	-
105.00 PLANT HELD FOR FUTURE USE - PROD	P105	F017	-	-	-	-	-	-	-	-
PROPERTY HELD UNDER CAPITAL LEASE		F017	0	0	0	0	0	0	0	0
OTHER		PDIST	-	-	-	-	-	-	-	-
Total Plant in Service	TPIS		\$ 104,690,102 \$	73,215,269	\$ 36,360,072 \$	42,176,668	\$ 115,567,185	\$-	\$ - \$	ş -
Construction Work in Progress (CWIP)										
CWIP Production	CWIP1	F017	-	-	-	-	-	-	-	-
CWIP Transmission	CWIP2	F011						-	-	-
CWIP Distribution CWIP General & Common	CWIP3 CWIP4	PDIST PT&D	2,251,846 450,585	1,574,834 315,118	782,092 156,493	907,205 181,528	2,485,808 497,400	-	-	-
CWIP General & Common	CWIP4	PTAD	450,565	315,116	150,495	101,520	497,400	-	-	-
Total Construction Work in Progress	TCWIP		\$ 2,702,431 \$	1,889,952	\$ 938,585 \$	1,088,733	\$ 2,983,208	\$-	\$-\$	6 -
Total Utility Plant			\$ 107,392,533 \$	75,105,221	\$ 37,298,657 \$	43,265,400	\$ 118,550,393	\$ -	\$ - \$	- 5

\$ 1,356,429,546

## BIP METHODOLOGY

								Production	Transmission
		Functional		Total		 ction Demand	_	Energy	Demand
Description	Name	Vector		System	Base	Winter Peak	Summer Peak		Demand
Rate Base									
Utility Plant									
Plant in Service			\$	4,331,626,534	\$ 834,776,533	\$ 874,481,255	\$ 718,820,643 22,959,950.35	\$ -	\$ 465,684,635
Construction Work in Progress (CWIP)				123,541,729	26,663,713.60	27,931,927.66	22,959,950.35	-	8,869,667.54
Total Utility Plant	TUP		\$	4,455,168,263	\$ 861,440,246	\$ 902,413,182	\$ 741,780,593	\$ -	\$ 474,554,303
Less: Accumulated Provision for Depreciation and RWIP									
Production Transmission	ADEPREPA ADEPRTP	F017 PTRAN	\$	903,942,138 159,969,049	310,776,487	325,558,040	267,607,611	-	- 159,969,049
Distribution	ADEPRD11	PDIST		508,037,556				-	-
General & Common Plant	ADEPRD12	PT&D		71,121,012	13,714,909	14,367,236	11,809,819	-	7,651,603
Intangible Plant	ADEPRGP	PT&D		40,982,991	7,903,122	8,279,020	6,805,327	-	4,409,183
Total Accumulated Depreciation	TADEPR		\$	1,684,052,746	\$ 332,394,518	\$ 348,204,296	\$ 286,222,757	\$ -	\$ 172,029,835
Net Utility Plant	NTPLANT		\$	2,771,115,517	\$ 529,045,729	\$ 554,208,886	\$ 455,557,836	\$ -	\$ 302,524,467
Working Capital									
Cash Working Capital - Operation and Maintenance Expenses	CWC	OMLPP	\$	75,842,724	3,319,543	3,477,432	2,858,437	51,365,920	2,659,628
Materials and Supplies Prepayments	M&S PREPAY	TPIS TPIS		36,896,266 13,972,166	7,110,525 2,692,669	7,448,725 2,820,741	6,122,826 2,318,640	-	3,966,645 1,502,120
Field Stock	FREFAT	F017		36,289,311	12,476,312	13,069,727	10,743,272	-	1,302,120 -
Total Working Capital	TWC		\$	163,000,467	\$ 25,599,049	\$ 26,816,625	\$ 22,043,175	\$ 51,365,920	\$ 8,128,393
Deferred Debits									
Service Pension Cost	PENSCOST	TLB	\$	-	-	-	-	-	-
Other Deferred Debits	DDEBPP	OMSUB2		-	-	-	-	-	-
Total Deferred Debits			\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Less: Customer Advances	CSTDEP	F027	\$	6,724,404	-	-	-	-	-
Accumulated Deferred Income Taxes	DIT	TDIO	¢	E 40 457 050	405 044 405	440 000 447	00 000 005		50 740 500
Accumulated Deferred Income Taxes FAS 109 Deferred Income Taxes	DIT DIT	TPIS TPIS	\$ \$	546,457,652	105,311,485	110,320,447	90,683,035	-	58,748,586
Asset Retirement Obligation-Net Assets	DIT	TPIS	\$	-	-	-	-	-	-
Asset Retirement Obligation-Regulatory Liabilities	DIT	TPIS	\$	-	-	-	-	-	-
Total Accumulated Deferred Income Tax			\$	546,457,652	\$ 105,311,485	\$ 110,320,447	\$ 90,683,035	\$ -	\$ 58,748,586
Investment Tax Credits									
Total Production Plant	DIT	F017	\$	-	-	-	-	-	-
Total Transmission Plant	DIT DIT	PTRAN PDIST		-	-	-	-	-	-
Total Distribution Plant Total General Plant	DIT	PDIST PT&D		-	-	-	-	-	-
	511	. 100		-	-	-		-	-
Total Investment Tax Credit			\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Net Rate Base	RB		\$	2,380,933,927	\$ 449,333,293	\$ 470,705,064	\$ 386,917,976	\$ 51,365,920	\$ 251,904,274

## BIP METHODOLOGY

			_										
				Distribution									
		Functional		Substation		Distrib	ution Primary L	ino	•		Distribution	50	Lines
Description	Name	Vector		General		Specific	Demand		Customer		Demand	1000	Customer
Description	Name	Vector		General		Specific	Demanu		Customer		Demanu		Customer
Rate Base													
1410 8400													
Utility Plant													
Plant in Service			\$	161,101,605	\$	- \$	275,500,316	\$	438,423,398	\$	75,736,072	\$	115,092,782
Construction Work in Progress (CWIP)				4,158,616.59		-	7,111,662.12		11,317,297.60		1,955,022.64		2,970,962.02
<b>č</b> ( <i>'</i> ,													
Total Utility Plant	TUP		\$	165,260,222	\$	- \$	282,611,978	\$	449,740,695	\$	77,691,095	\$	118,063,744
Less: Accumulated Provision for Depreciation and RWIP													
Production	ADEPREPA	F017		-		-	-		-		-		-
Transmission	ADEPRTP	PTRAN		-		-	-		-		-		-
Distribution	ADEPRD11	PDIST		56,921,723		-	97,342,001		154,907,303		26,759,682		40,665,513
General & Common Plant	ADEPRD12	PT&D		2,641,672		-	4,517,531		7,189,072		1,241,886		1,887,240
Intangible Plant	ADEPRGP	PT&D		1,522,245		-	2,603,196		4,142,653		715,628		1,087,509
5				,- , -			,,		, ,		-,		,,
Total Accumulated Depreciation	TADEPR		\$	61,085,641	\$	- \$	104,462,729	\$	166,239,027	\$	28,717,197	\$	43,640,262
Net Utility Plant	NTPLANT		\$	104,174,581	\$	- \$	178,149,250	\$	283,501,669	\$	48,973,898	\$	74,423,481
Working Capital													
Cash Working Capital - Operation and Maintenance Expenses	CWC	OMLPP		983,238		-	1,708,534		2,557,456		574,567		844,069
Materials and Supplies	M&S	TPIS		1,372,244		-	2,346,678		3,734,437		645,111		980,346
Prepayments	PREPAY	TPIS		519,652		-	888,658		1,414,186		244,296		371,245
Fuel Stock		F017				-							
Total Working Capital	TWC		\$	2,875,134	\$	- \$	4,943,870	\$	7,706,078	\$	1,463,973	\$	2,195,660
Deferred Debits													
Service Pension Cost	PENSCOST	TLB											
Other Deferred Debits	DDEBPP	OMSUB2				_	_				_		_
Other Deletted Debits	DDLDFF	OMISODZ		-		-	-		-		-		-
Total Deferred Debits			\$	-	\$	- \$	-	\$	-	\$	-	\$	-
Less: Customer Advances	CSTDEP	F027		-		-	2,047,604		3,258,500		562,894		855,406
Accumulated Deferred Income Taxes							,- ,		-,,				,
Accumulated Deferred Income Taxes	DIT	TPIS		20,323,822		-	34,755,826		55,309,436		9,554,507		14,519,565
FAS 109 Deferred Income Taxes	DIT	TPIS		-		-	-		-		-		-
Asset Retirement Obligation-Net Assets	DIT	TPIS		-		-	-		-		-		-
Asset Retirement Obligation-Regulatory Liabilities	DIT	TPIS		-		-	-		-		-		-
Total Accumulated Deferred Income Tax			\$	20,323,822	\$	- \$	34,755,826	\$	55,309,436	\$	9,554,507	\$	14,519,565
Investment Tax Credits													
Total Production Plant	DIT	F017		-		-	-		-		-		-
Total Transmission Plant	DIT	PTRAN		-		-	-		-		-		-
Total Distribution Plant	DIT	PDIST		-		-	-		-		-		-
Total General Plant	DIT	PT&D		-		-	-		-		-		-
Total Investment Tax Credit			\$	-	\$	- \$	-	\$	-	\$	-	\$	-
Net Rate Base	RB		\$	86,725,894	\$	- \$	146,289,690	\$	232,639,811	\$	40,320,470	\$	61,244,172
			-		Ŧ	Ŷ	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Ŧ	,,	Ŧ		-	· ·, <b>_</b> · ·, · · <b>_</b>

## BIP METHODOLOGY

						<b>B</b>				Customer			
		Functional	Distribution	Lin	o Trans	Distribution Services	Distribution Meters		stribution St. & Cust. Lighting	Accounts Expense	Ser	Customer vice & Info.	Sales Expense
Description	Name	Vector	 Demand		Customer	Customer	metero	1	ouot. Eighting	 Expense	001	tiee a line.	
Rate Base													
Utility Plant													
Plant in Service			\$ - ,, -	\$	73,215,269	\$ 36,360,072	\$ 42,176,668	\$	115,567,185	\$ -	\$	-	\$ -
Construction Work in Progress (CWIP)			2,702,431.13		1,889,951.57	938,585.29	1,088,732.72		2,983,208.08	-		-	-
Total Utility Plant	TUP		\$ 107,392,533	\$	75,105,221	\$ 37,298,657	\$ 43,265,400	\$	118,550,393	\$ -	\$	-	\$ -
Less: Accumulated Provision for Depreciation and RWIP													
Production Transmission	ADEPREPA ADEPRTP	F017 PTRAN	-		-	-	-		-	-		-	-
Distribution	ADEPRD11	PDIST	- 36,989,954		- 25,869,011	- 12,847,035	- 14,902,201		- 40,833,133	-			-
General & Common Plant	ADEPRD12	PT&D	1,716,662		1,200,551	596,216	691,594		1,895,019	-		-	-
Intangible Plant	ADEPRGP	PT&D	989,214		691,809	343,565	398,526		1,091,992	-		-	-
Total Accumulated Depreciation	TADEPR		\$ 39,695,830	\$	27,761,372	\$ 13,786,816	\$ 15,992,322	\$	43,820,144	\$ -	\$	-	\$ -
Net Utility Plant	NTPLANT		\$ 67,696,703	\$	47,343,849	\$ 23,511,840	\$ 27,273,078	\$	74,730,249	\$ -	\$	-	\$ -
Working Capital													
Cash Working Capital - Operation and Maintenance Expenses	CWC	OMLPP	134,472		94,043	35,516	2,061,649		156,821	2,471,536		539,863	-
Materials and Supplies	M&S	TPIS	891,738		623,639	309,711	359,256		984,387	-		-	-
Prepayments Fuel Stock	PREPAY	TPIS F017	337,690		236,164	117,284	136,046		372,775	-		-	-
Total Working Capital	TWC	1017	\$ 1,363,899	\$	- 953,846	\$ - 462,510	\$ 2,556,951	\$	- 1,513,984	\$ - 2,471,536	\$	539,863	\$ -
Defermed Debite													
Deferred Debits Service Pension Cost	PENSCOST	TLB											
Other Deferred Debits	DDEBPP	OMSUB2	-		-	-	-		-	-		-	-
Total Deferred Debits	CSTDEP	F007	\$ -	\$	-	\$ -	\$ -	\$	-	\$ -	\$	-	\$ -
Less: Customer Advances Accumulated Deferred Income Taxes	CSIDEP	F027	-		-	-	-		-	-		-	-
Accumulated Deferred Income Taxes	DIT	TPIS	13,207,211		9,236,494	4,587,016	5,320,810		14,579,413	-		-	-
FAS 109 Deferred Income Taxes	DIT	TPIS	-		-	-	-		-	-		-	-
Asset Retirement Obligation-Net Assets	DIT	TPIS	-		-	-	-		-	-		-	-
Asset Retirement Obligation-Regulatory Liabilities	DIT	TPIS	-		-	-	-		-	-		-	-
Total Accumulated Deferred Income Tax			\$ 13,207,211	\$	9,236,494	\$ 4,587,016	\$ 5,320,810	\$	14,579,413	\$ -	\$	-	\$ -
Investment Tax Credits													
Total Production Plant	DIT	F017	-		-	-	-		-	-		-	-
Total Transmission Plant	DIT	PTRAN	-		-	-	-		-	-		-	-
Total Distribution Plant Total General Plant	DIT DIT	PDIST PT&D	-		-	-	-		-	-		-	-
I Utal General Piant	ווט	FIQU	-		-	-	-		-	-		-	-
Total Investment Tax Credit			\$ -	\$	-	\$ -	\$ -	\$	-	\$ -	\$	-	\$ -
Net Rate Base	RB		\$ 55,853,391	\$	39,061,200	\$ 19,387,335	\$ 24,509,219	\$	61,664,820	\$ 2,471,536	\$	539,863	\$ -

## BIP METHODOLOGY

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									Dreduction	Tronomiosis
		Functional		Total		Brog	duction Demand		Productior Energy	
Description	Name	Vector		System	L	Base	Winter Peak	Summer Peak		Demand
Operation and Maintenance Expenses										
Steam Power Generation Operation Expenses										
500 OPERATION SUPERVISION & ENGINEERING	OM500	LBSUB1	\$	4,922,985		1,431,481	1,499,567	1,232,639	759,298	-
501 FUEL	OM501	Energy		293,912,722		-	-	-	293,912,722	-
502 STEAM EXPENSES 504 STEAM TRANSFER EXPENSES	OM502 OM504	PROFIX PROFIX		18,526,106		6,369,300	6,672,244	5,484,562	-	-
505 ELECTRIC EXPENSES	OM504 OM505	PROFIX		- 2,617,219		- 899,803	- 942,601	- 774,815	-	-
506 MISC. STEAM POWER EXPENSES	OM506	PROFIX		9,946,165		3,419,505	3,582,147	2,944,513	-	-
507 RENTS	OM507	PROFIX				-	-	-	-	-
509 ALLOWANCES	OM509	PROFIX		-		-	-	-	-	-
Total Steam Power Operation Expenses			\$	329,925,198	\$	12,120,089 \$	12,696,560	\$ 10,436,529	\$ 294,672,020	\$-
Steam Power Generation Maintenance Expenses										
510 MAINTENANCE SUPERVISION & ENGINEERING	OM510	LBSUB2	\$	4,351,845		-	-	-	4,351,845	-
511 MAINTENANCE OF STRUCTURES 512 MAINTENANCE OF BOILER PLANT	OM511 OM512	PROFIX Energy		4,128,301 34,257,481		1,419,315	1,486,823	1,222,163	- 34,257,481	-
513 MAINTENANCE OF BOILER FLANT	OM512 OM513	Energy		15,421,014		-	-	-	15,421,014	-
514 MAINTENANCE OF MISC STEAM PLANT	OM514	Energy		1,072,820		-	-	-	1,072,820	-
Total Steam Power Generation Maintenance Expense			\$	59,231,461	\$	1,419,315 \$	1,486,823	\$ 1,222,163	\$ 55,103,160	\$-
Total Steam Power Generation Expense			\$	389,156,659	\$	13,539,404 \$	14,183,382	\$ 11,658,693	\$ 349,775,180	\$-
Hydraulic Power Generation Operation Expenses										
535 OPERATION SUPERVISION & ENGINEERING	OM535	LBSUB3	\$	121,406		41,740	43,725	35,942	-	-
536 WATER FOR POWER	OM536	PROFIX		40,614		13,963	14,627	12,024	-	-
537 HYDRAULIC EXPENSES	OM537	PROFIX		-		-	-	-	-	-
538 ELECTRIC EXPENSES 539 MISC. HYDRAULIC POWER EXPENSES	OM538 OM539	PROFIX PROFIX		180,161 348,792		61,940 119,915	64,886 125,619	53,336 103,258	-	-
539 MISC. HTDRAULIC POWER EXPENSES 540 RENTS	0101559	PROFIX		546,792 545,400		187,509	125,619	161,463	-	-
Total Hydraulic Power Operation Expenses			\$	1,236,373	\$	425,067 \$	445,284		\$ -	\$ -
				, ,		-,	-, -			
Hydraulic Power Generation Maintenance Expenses 541 MAINTENANCE SUPERVISION & ENGINEERING	OM541	LBSUB4	\$							
542 MAINTENANCE OF STRUCTURES	OM541 OM542	PROFIX	φ	- 244.992		- 84,229	- 88,235	- 72,529	-	-
543 MAINT. OF RESERVES, DAMS, AND WATERWAYS	OM543	PROFIX		190,785		65,592	68,712	56,481	-	-
544 MAINTENANCE OF ELECTRIC PLANT	OM544	Energy		371,119		-	-	-	371,119	-
545 MAINTENANCE OF MISC HYDRAULIC PLANT	OM545	Energy		58,972		-	-	-	58,972	-
Total Hydraulic Power Generation Maint. Expense			\$	865,868	\$	149,821 \$	156,947	\$ 129,010	\$ 430,091	\$-
Total Hydraulic Power Generation Expense			\$	2,102,241	\$	574,887 \$	602,231	\$ 495,032	\$ 430,091	\$-
Other Power Generation Operation Expense										
546 OPERATION SUPERVISION & ENGINEERING	OM546	LBSUB5	\$	604,185		207,720	217,599	178,866	-	-
547 FUEL	OM547	Energy		57,317,664		-	-	-	57,317,664	-
548 GENERATION EXPENSE	OM548	PROFIX		280,735		96,517	101,108	83,110	-	-
549 MISC OTHER POWER GENERATION 550 RENTS	OM549 OM550	PROFIX PROFIX		1,105,538 5,706		380,085 1,962	398,164 2,055	327,289 1,689	-	-
	0101000					1,302	2,000	1,009	-	-
Total Other Power Generation Expenses			\$	59,313,828	\$	686,284 \$	718,926	\$ 590,955	\$ 57,317,664	\$ -

## BIP METHODOLOGY

					T						1			
			1		1						1			
			1 0	Distributior	ı						1			
		Functional		Substation	1	Dis	stributio	on Primary	Lines			Distributi	on Sec.	Lines
Description	Name	Vector		Genera	ľ	Specifie		Demar		Custome	er	Deman	ıd	Customer
Operation and Maintenance Expenses														
Steam Power Generation Operation Expenses														
500 OPERATION SUPERVISION & ENGINEERING	OM500	LBSUB1		-						-		-		-
501 FUEL	OM501	Energy		-						-		-		-
502 STEAM EXPENSES	OM502	PROFIX		-		-		-		-		-		-
504 STEAM TRANSFER EXPENSES	OM504	PROFIX		-		-				-		-		-
505 ELECTRIC EXPENSES	OM505	PROFIX		-		-		-		-		-		-
506 MISC. STEAM POWER EXPENSES	OM506	PROFIX		-				-		-		-		-
507 RENTS	OM507	PROFIX		-		-		-		-		-		-
509 ALLOWANCES	OM509	PROFIX		-		-		-		-		-		-
Total Steam Power Operation Expenses			\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Steam Power Generation Maintenance Expenses														
510 MAINTENANCE SUPERVISION & ENGINEERING	OM510	LBSUB2												
511 MAINTENANCE OF STRUCTURES	OM510 OM511	PROFIX		-		-		-		-		-		-
512 MAINTENANCE OF BOILER PLANT	OM512	Energy				_		_						
513 MAINTENANCE OF ELECTRIC PLANT	OM512	Energy		_						_		_		_
514 MAINTENANCE OF MISC STEAM PLANT	OM514	Energy		-		-		-		-		-		-
Total Steam Power Generation Maintenance Expense			\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total Steam Power Generation Expense			\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Hydraulic Power Generation Operation Expenses														
535 OPERATION SUPERVISION & ENGINEERING	OM535	LBSUB3		-		-		-		-		-		-
536 WATER FOR POWER	OM536	PROFIX		-		-		-		-		-		-
537 HYDRAULIC EXPENSES	OM537	PROFIX		-		-		-		-		-		-
538 ELECTRIC EXPENSES	OM538	PROFIX		-		-		-		-		-		-
539 MISC. HYDRAULIC POWER EXPENSES	OM539	PROFIX		-		-		-		-		-		-
540 RENTS		PROFIX		-		-		-		-		-		-
Total Hydraulic Power Operation Expenses			\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Hydraulic Power Generation Maintenance Expenses														
541 MAINTENANCE SUPERVISION & ENGINEERING	OM541	LBSUB4		-		-		-		-		-		-
542 MAINTENANCE OF STRUCTURES	OM542	PROFIX		-		-		-		-		-		-
543 MAINT. OF RESERVES, DAMS, AND WATERWAYS	OM543	PROFIX		-		-		-		-		-		-
544 MAINTENANCE OF ELECTRIC PLANT	OM544	Energy		-		-		-		-		-		-
545 MAINTENANCE OF MISC HYDRAULIC PLANT	OM545	Energy		-		-		-		-		-		-
Total Hydraulic Power Generation Maint. Expense			\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total Hydraulic Power Generation Expense			\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Other Power Generation Operation Expense														
546 OPERATION SUPERVISION & ENGINEERING	OM546	LBSUB5		-		-		-		-		-		-
547 FUEL	OM547	Energy		-		-		-		-		-		-
548 GENERATION EXPENSE	OM548	PROFIX		-		-		-		-		-		-
549 MISC OTHER POWER GENERATION	OM549	PROFIX		-		-		-		-		-		-
550 RENTS	OM550	PROFIX		-		-		-		-		-		-
Total Other Power Generation Expenses			\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

## BIP METHODOLOGY

		Functional	D	Distribution				Distribution Services	Distribution Meters	n Distribution St. 8 s Cust. Lighting	Acco	comer ounts oense	Customer Service & Info.	Sales Expense
Description	Name	Vector		Demand	ł	Customer	-	Customer		-	_		_	
Operation and Maintenance Expenses														
Steam Power Generation Operation Expenses														
500 OPERATION SUPERVISION & ENGINEERING	OM500	LBSUB1		-		-		-	-	-		-	-	-
501 FUEL	OM501	Energy		-		-		-	-	-		-	-	-
502 STEAM EXPENSES	OM502	PROFIX		-		-		-	-	-		-	-	-
504 STEAM TRANSFER EXPENSES	OM504	PROFIX		-		-		-	-	-		-	-	-
505 ELECTRIC EXPENSES	OM505	PROFIX		-		-		-	-	-		-	-	-
506 MISC. STEAM POWER EXPENSES	OM506	PROFIX		-		-		-	-	-		-	-	-
507 RENTS	OM507	PROFIX		-		-		-	-	-		-	-	-
509 ALLOWANCES	OM509	PROFIX		-		-		-	-	-		-	-	-
Total Steam Power Operation Expenses			\$	-	\$	-	\$	-	\$-	\$-	\$	-	\$-	\$-
Steam Power Generation Maintenance Expenses														
510 MAINTENANCE SUPERVISION & ENGINEERING	OM510	LBSUB2		-		-		-	-	-		-	-	-
511 MAINTENANCE OF STRUCTURES	OM511	PROFIX		-		-		-	-	-		-	-	-
512 MAINTENANCE OF BOILER PLANT	OM512	Energy		-		-		-	-	-		-	-	-
513 MAINTENANCE OF ELECTRIC PLANT	OM513	Energy		-		-		-	-	-		-	-	-
514 MAINTENANCE OF MISC STEAM PLANT	OM514	Energy		-		-		-	-	-		-	-	-
Total Steam Power Generation Maintenance Expense			\$	-	\$	-	\$	-	\$-	\$-	\$	-	\$-	\$-
Total Steam Power Generation Expense			\$	-	\$	-	\$	-	\$-	\$-	\$	-	\$-	\$-
Hydraulic Power Generation Operation Expenses														
535 OPERATION SUPERVISION & ENGINEERING	OM535	LBSUB3		_					_	_		_	_	_
536 WATER FOR POWER	OM536	PROFIX		-					_			-		
537 HYDRAULIC EXPENSES	OM537	PROFIX		-		-		-	-	-		-	-	-
538 ELECTRIC EXPENSES	OM538	PROFIX		-		-		-	-	-		-	-	-
539 MISC. HYDRAULIC POWER EXPENSES	OM539	PROFIX		-		-		-	-	-		-	-	-
540 RENTS		PROFIX		-		-		-	-	-		-	-	-
Total Hydraulic Power Operation Expenses			\$	-	\$	-	\$	-	\$-	\$-	\$	-	\$-	\$-
Hydraulia Dowar Constation Maintenance Expenses														
Hydraulic Power Generation Maintenance Expenses 541 MAINTENANCE SUPERVISION & ENGINEERING	OM541	LBSUB4												
542 MAINTENANCE OF STRUCTURES	OM542	PROFIX										-		
543 MAINT. OF RESERVES, DAMS, AND WATERWAYS	OM543	PROFIX		-		-		-	-	-		-	-	-
544 MAINTENANCE OF ELECTRIC PLANT	OM544	Energy		-		-		-	-	-		-	-	-
545 MAINTENANCE OF MISC HYDRAULIC PLANT	OM545	Energy		-		-		-	-	-		-	-	-
Total Hydraulic Power Generation Maint. Expense			\$	-	\$	-	\$	-	\$-	\$-	\$	-	\$-	\$-
Total Hydraulic Power Generation Expense			\$	-	\$	-	\$	-	\$-	\$-	\$	-	\$-	\$-
Other Power Generation Operation Expense														
546 OPERATION SUPERVISION & ENGINEERING	OM546	LBSUB5				-		-	-	-		-	_	-
540 OF ERATION SOF ERVISION & ENGINEERING	OM547	Energy		-		-		-	-	-		-	-	-
548 GENERATION EXPENSE	OM548	PROFIX		-		-		-	-	-		-	-	-
549 MISC OTHER POWER GENERATION	OM549	PROFIX		-		-		-	-	-		-	-	-
550 RENTS	OM550	PROFIX		-		-		-	-	-		-	-	-
Total Other Power Generation Expenses			\$	-	\$	-	\$	-	\$-	\$-	\$	-	\$-	\$-

## BIP METHODOLOGY

										r	1	1		
			<b>.</b>		_						Production		Transmission	
Description	Name	Functional Vector	Total System	Production Demand Base Winter Peak Summer Peak							Energy		Demand Demand	
Description	Name	vector	System		Dase		winter Peak		Summer Peak				Demand	
Operation and Maintenance Expenses (Continued)														
Other Power Generation Maintenance Expense														
551 MAINTENANCE SUPERVISION & ENGINEERING	OM551	PROFIX	\$ 256,698		88,253		92,451		75,994		-		-	
552 MAINTENANCE OF STRUCTURES	OM552	PROFIX	560,673		192,760		201,928		165,984		-		-	
553 MAINTENANCE OF GENERATING & ELEC PLANT	OM553	PROFIX	2,652,503		911,934		955,309		785,260		-		-	
554 MAINTENANCE OF MISC OTHER POWER GEN PLT	OM554	PROFIX	1,112,788		382,578		400,775		329,435		-		-	
Total Other Power Generation Maintenance Expense			\$ 4,582,662	\$	1,575,525	\$	1,650,462	\$	1,356,674	\$	-	\$	-	
Total Other Power Generation Expense			\$ 63,896,490	\$	2,261,809	\$	2,369,388	\$	1,947,629	\$	57,317,664	\$	-	
Total Station Expense			\$ 455,155,390	\$	16,376,100	\$	17,155,001	\$	14,101,353	\$	407,522,935	\$	-	
Other Power Supply Expenses														
555 PURCHASED POWER	OM555	OMPP	\$ 53,937,678		5,575,353		5,840,535		4,800,900		37,720,890		-	
555 PURCHASED POWER OPTIONS	OMO555	OMPP	-		-		-		-		-		-	
555 BROKERAGE FEES	OMB555	OMPP	-		-		-		-		-		-	
555 MISO TRANSMISSION EXPENSES	OMM555	OMPP	-		-		-		-		-		-	
556 SYSTEM CONTROL AND LOAD DISPATCH	OM556	PROFIX	1,248,388		429,197		449,611		369,579		-		-	
557 OTHER EXPENSES	OM557	PROFIX	3,807		1,309		1,371		1,127		-		-	
558 DUPLICATE CHARGES	OM558	Energy	-		-		-		-		-		-	
Total Other Power Supply Expenses	TPP		\$ 55,189,873	\$	6,005,859	\$	6,291,518	\$	5,171,606	\$	37,720,890	\$	-	
Total Electric Power Generation Expenses			\$ 510,345,263	\$	22,381,959	\$	23,446,519	\$	19,272,960	\$	445,243,825	\$	-	
Transmission Expenses														
560 OPERATION SUPERVISION AND ENG	OM560	LBTRAN	\$ 1,013,327		-		-		-		-		1,013,327	
561 LOAD DISPATCHING	OM561	LBTRAN	2,208,583		-		-		-		-		2,208,583	
562 STATION EXPENSES	OM562	LBTRAN	928,949		-		-		-		-		928,949	
563 OVERHEAD LINE EXPENSES	OM563	LBTRAN	244,298		-		-		-		-		244,298	
565 TRANSMISSION OF ELECTRICITY BY OTHERS	OM565	LBTRAN	36,638		-		-		-		-		36,638	
566 MISC. TRANSMISSION EXPENSES	OM566	PTRAN	6,948,940		-		-		-		-		6,948,940	
567 RENTS	OM567 OM568	PTRAN LBTRAN	67,500		-		-		-		-		67,500	
568 MAINTENACE SUPERVISION AND ENG 569 STRUCTURES	OM569	LBTRAN			-		-		-		-		-	
509 STRUCTURES 570 MAINT OF STATION EQUIPMENT	OM569 OM570	LBTRAN	- 1,490,332		-		-		-		-		- 1,490,332	
571 MAINT OF OVERHEAD LINES	OM570 OM571	LBTRAN	3,342,881		-		-		-		-		3,342,881	
572 UNDERGROUND LINES	OM572	LBTRAN	-		-		-		-		-		-	
573 MISC PLANT	OM573	PTRAN	228,063		-		-		-		-		228,063	
575 MARKET FACILITATION, MONITORING AND COMPLIANCE		LBTRAN	-		-		-		-		-		-	
Total Transmission Expenses			\$ 16,509,511	\$	-	\$	-	\$	-	\$	-	\$	16,509,511	

## BIP METHODOLOGY

				T				Г		
			Distributior	1						
		Functional	Substation		Dist	ributi	on Primary Lines	;	Distribution S	Sec. Lines
Description	Name	Vector	Genera	ſ	Specific		Demand	Customer	Demand	Customer
Operation and Maintenance Expenses (Continued)										
Other Power Generation Maintenance Expense										
551 MAINTENANCE SUPERVISION & ENGINEERING	OM551	PROFIX	-		-		-	-	-	-
552 MAINTENANCE OF STRUCTURES	OM552	PROFIX	-		-		-	-	-	-
553 MAINTENANCE OF GENERATING & ELEC PLANT 554 MAINTENANCE OF MISC OTHER POWER GEN PLT	OM553 OM554	PROFIX PROFIX	-		-		-	-	-	-
334 MAINTENANCE OF MISC OTHER FOWER GEN FLT	0101004	FROFIX	-		-		-	-	-	-
Total Other Power Generation Maintenance Expense			\$ -	\$	-	\$	- \$	- :	\$-\$	-
Total Other Power Generation Expense			\$ -	\$	-	\$	- \$	- :	\$-\$	-
Total Station Expense			\$ -	\$	-	\$	- \$	- :	\$-\$	- 3
Other Power Supply Expenses										
555 PURCHASED POWER	OM555	OMPP	-		-		-	-	-	-
555 PURCHASED POWER OPTIONS	OMO555	OMPP	-		-		-	-	-	-
555 BROKERAGE FEES	OMB555	OMPP	-		-		-	-	-	-
555 MISO TRANSMISSION EXPENSES	OMM555	OMPP	-		-		-	-	-	-
556 SYSTEM CONTROL AND LOAD DISPATCH 557 OTHER EXPENSES	OM556 OM557	PROFIX PROFIX	-		-		-	-	-	-
558 DUPLICATE CHARGES	OM558	Energy	-		-		-	-	-	-
	010000	Ellergy	_		_		-	-	-	_
Total Other Power Supply Expenses	TPP		\$ -	\$	-	\$	- \$		\$-\$	-
Total Electric Power Generation Expenses			\$ -	\$	-	\$	- \$	- :	\$-\$	-
Transmission Expenses										
560 OPERATION SUPERVISION AND ENG	OM560	LBTRAN	-		-		-	-	-	-
561 LOAD DISPATCHING	OM561	LBTRAN	-		-		-	-	-	-
	OM562	LBTRAN	-		-		-	-	-	-
563 OVERHEAD LINE EXPENSES 565 TRANSMISSION OF ELECTRICITY BY OTHERS	OM563 OM565	LBTRAN LBTRAN	-		-		-	-	-	-
566 MISC. TRANSMISSION EXPENSES	OM566	PTRAN			_					
567 RENTS	OM567	PTRAN	-		-		-	-	_	-
568 MAINTENACE SUPERVISION AND ENG	OM568	LBTRAN	-		-		-	-	-	-
569 STRUCTURES	OM569	LBTRAN	-		-		-	-	-	-
570 MAINT OF STATION EQUIPMENT	OM570	LBTRAN	-		-		-	-	-	-
571 MAINT OF OVERHEAD LINES	OM571	LBTRAN	-		-		-	-	-	-
572 UNDERGROUND LINES	OM572	LBTRAN	-		-		-	-	-	-
573 MISC PLANT	OM573	PTRAN LBTRAN	-		-		-	-	-	-
575 MARKET FACILITATION, MONITORING AND COMPLIANCE	UND/5	LBIKAN	-		-		-	-	-	-
Total Transmission Expenses			\$ -	\$	-	\$	- \$	- :	\$-\$	- 3

## BIP METHODOLOGY

Description	Name	Functional Vector	Di	stribution Demand	Trans. Customer	Distribution Services Customer	Distribution Meters	Distribution St. & Cust. Lighting			Sales Expense
Description	Name	Vector		Demana	oustonie	oustonier					
<b>Operation and Maintenance Expenses (Continued)</b>											
Other Power Generation Maintenance Expense 551 MAINTENANCE SUPERVISION & ENGINEERING 552 MAINTENANCE OF STRUCTURES 553 MAINTENANCE OF GENERATING & ELEC PLANT 554 MAINTENANCE OF MISC OTHER POWER GEN PLT	OM551 OM552 OM553 OM554	PROFIX PROFIX PROFIX PROFIX		- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
Total Other Power Generation Maintenance Expense			\$	-	\$ -	\$ -	\$ -	\$-	\$-	\$-	\$ -
Total Other Power Generation Expense			\$	-	\$ -	\$ -	\$-	\$-	\$-	\$-	\$-
Total Station Expense			\$	-	\$ -	\$ -	\$-	\$-	\$ -	\$-	\$ -
Other Power Supply Expenses											
555 PURCHASED POWER 555 PURCHASED POWER OPTIONS 555 BROKERAGE FEES 555 MISO TRANSMISSION EXPENSES 556 SYSTEM CONTROL AND LOAD DISPATCH 557 OTHER EXPENSES 558 DUPLICATE CHARGES Total Other Power Supply Expenses	OM555 OM0555 OM8555 OM555 OM556 OM557 OM558 TPP	OMPP OMPP OMPP PROFIX PROFIX Energy	\$		\$ 	\$ 	- - - - - - - - -	- - - - - - - - - - - -	- - - - - - - - - - - - 	- - - - - - - - - - - -	- - - - - - - - -
Total Electric Power Generation Expenses			\$	-	\$ -	\$	\$ -	\$-	· \$ -	\$ -	\$ -
`											
Transmission Expenses 560 OPERATION SUPERVISION AND ENG 561 LOAD DISPATCHING 562 STATION EXPENSES 563 OVERHEAD LINE EXPENSES 565 TRANSMISSION OF ELECTRICITY BY OTHERS 566 MISC. TRANSMISSION EXPENSES 567 RENTS 568 MAINTENACE SUPERVISION AND ENG 569 STRUCTURES 570 MAINT OF STATION EQUIPMENT 571 MAINT OF OVERHEAD LINES 572 UNDERGROUND LINES 573 MISC PLANT 575 MARKET FACILITATION, MONITORING AND COMPLIANCE	OM560 OM561 OM562 OM565 OM566 OM567 OM568 OM569 OM570 OM571 OM572 OM573 OM575	LBTRAN LBTRAN LBTRAN PTRAN PTRAN PTRAN LBTRAN LBTRAN LBTRAN LBTRAN LBTRAN LBTRAN		-		- - - - - - - - - - - - - - - - - - -					
Total Transmission Expenses			\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$-	\$ -

## BIP METHODOLOGY

		Functional	Total		ction Demand		Production Energy	Transmission Demand
Description	Name	Vector	System	Base	Winter Peak	Summer Peak		Demand
Operation and Maintenance Expenses (Continued)								
Distribution Operation Expense 580 OPERATION SUPERVISION AND ENGI 581 LOAD DISPATCHING 582 STATION EXPENSES 583 OVERHEAD LINE EXPENSES 584 UNDERGROUND LINE EXPENSES 585 STREET LIGHTING EXPENSE 586 METER EXPENSES 586 METER EXPENSES - LOAD MANAGEMENT 587 CUSTOMER INSTALLATIONS EXPENSE 588 MISCELLANEOUS DISTRIBUTION EXP 588 MISC DISTR EXP MAPPIN 589 RENTS	OM580 OM581 OM582 OM583 OM584 OM586 OM586 OM586 OM586 OM587 OM588 OM588 OM588x OM589	LBDO P362 P365 P367 P373 P370 F012 PDIST PDIST PDIST PDIST	\$ 1,814,624 741,674 1,941,657 5380,672 535,725 - 8,277,541 - (79,200) 5,593,730 8,165					
Total Distribution Operation Expense	OMDO		\$ 24,714,588	\$ - \$	- \$	- :	\$	-
Distribution Maintenance Expense 590 MAINTENANCE SUPERVISION AND EN 591 STRUCTURES 592 MAINTENANCE OF STATION EQUIPME 593 MAINTENANCE OF OVERHEAD LINES 594 MAINTENANCE OF UNDERGROUND LIN 595 MAINTENANCE OF LINE TRANSFORME 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS 597 MAINTENANCE OF METERS 598 MISCELLANEOUS DISTRIBUTION EXPENSES	OM590 OM591 OM592 OM593 OM594 OM595 OM596 OM596 OM597 OM598	LBDM P362 P365 P365 P367 P368 P373 P370 PDIST	\$ 77,850 1,167,866 23,665,349 1,604,057 334,735 355,341 1,427,898 671,832	- - - - - - - -		- - - - - - - -		
Total Distribution Maintenance Expense	OMDM		\$ 29,304,928	\$ - \$	- \$	- :	\$5	6 -
Total Distribution Operation and Maintenance Expenses			\$ 54,019,516	-	-	-	-	-
Transmission and Distribution Expenses			\$ 70,529,027	-	-	-	-	16,509,511
Production, Transmission and Distribution Expenses	OMSUB		\$ 580,874,290	\$ 22,381,959 \$	23,446,519 \$	19,272,960	\$ 445,243,825 \$	16,509,511

## BIP METHODOLOGY

			_							1		
		Functional		Distribution Substation	Diet	tribut	ion Primary Lines		Distribution Sec. Lines			
Description	Name	Vector		General	Specific		Demand	Customer	Demand	Customer		
Operation and Maintenance Expenses (Continued)												
Distribution Operation Expense												
580 OPERATION SUPERVISION AND ENGI	OM580	LBDO		336.695	_		182.918	278,035	58,766	86,953		
581 LOAD DISPATCHING	OM581	P362		741.674	-		-	-	-	-		
582 STATION EXPENSES	OM582	P362		1,941,657	-		-	-	-	-		
583 OVERHEAD LINE EXPENSES	OM583	P365		-	-		1,756,248	2,547,227	643,654	933,542		
584 UNDERGROUND LINE EXPENSES	OM584	P367		-	-		168,164	303,809	22,715	41,037		
585 STREET LIGHTING EXPENSE	OM585	P373		-	-		-	-	-	-		
586 METER EXPENSES	OM586	P370		-	-		-	-	-	-		
586 METER EXPENSES - LOAD MANAGEMENT	OM586x	F012		-	-		-	-	-	-		
587 CUSTOMER INSTALLATIONS EXPENSE	OM587	PDIST		(8,874)	-		(15,175)	(24,149)	(4,172)	(6,340)		
588 MISCELLANEOUS DISTRIBUTION EXP	OM588	PDIST		626,735	-		1,071,781	1,705,602	294,637	447,746		
588 MISC DISTR EXP MAPPIN	OM588x	PDIST		-	-		-	-	-	-		
589 RENTS	OM589	PDIST		915	-		1,564	2,490	430	654		
Total Distribution Operation Expense	OMDO		\$	3,638,802 \$	-	\$	3,165,501 \$	4,813,014 \$	1,016,029 \$	1,503,593		
Distribution Maintenance Expense												
590 MAINTENANCE SUPERVISION AND EN	OM590	LBDM		4,736			21.381	32.085	7.138	10,498		
591 STRUCTURES	OM590 OM591	P362		4,730	-		21,301	32,005	-	10,490		
592 MAINTENANCE OF STATION EQUIPME	OM591 OM592	P362		1.167.866	-		-	-	-	-		
593 MAINTENANCE OF OVERHEAD LINES	OM593	P365		1,107,000			7.067.599	10.250.703	2,590,230	3,756,817		
594 MAINTENANCE OF UNDERGROUND LIN	OM594	P367		-	_		503,514	909,660	68,012	122,871		
595 MAINTENANCE OF LINE TRANSFORME	OM595	P368		-	-		-	-	-	-		
596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS	OM596	P373		-	-		-	-	-	-		
597 MAINTENANCE OF METERS	OM597	P370		-	-		-	-	-	-		
598 MISCELLANEOUS DISTRIBUTION EXPENSES	OM598	PDIST		75,274	-		128,726	204,850	35,387	53,776		
Total Distribution Maintenance Expense	OMDM		\$	1,247,876 \$	-	\$	7,721,220 \$	11,397,299 \$	2,700,767 \$	3,943,963		
Total Distribution Operation and Maintenance Expenses				4,886,677	-		10,886,721	16,210,312	3,716,796	5,447,555		
Transmission and Distribution Expenses				4,886,677	-		10,886,721	16,210,312	3,716,796	5,447,555		
Production, Transmission and Distribution Expenses	OMSUB		\$	4,886,677 \$	-	\$	10,886,721 \$	16,210,312 \$	3,716,796 \$	5,447,555		

## BIP METHODOLOGY

		Functional	Distribution Line	Trans.	Distribution Services		ution [ eters	Distribution St. & Cust. Lighting	Customer Accounts Expense	Customer Service & Info.	Sales Expense
Description	Name	Vector	Demand	Customer	Customer				•	• •	
Operation and Maintenance Expenses (Continued)											
Distribution Operation Expense											
580 OPERATION SUPERVISION AND ENGI	OM580	LBDO	23,619	16,518	8,203	796	,842	26,073	-	-	-
581 LOAD DISPATCHING	OM581	P362	-	-	-		-	-	-	-	-
582 STATION EXPENSES	OM582	P362	-	-	-		-	-	-	-	-
583 OVERHEAD LINE EXPENSES	OM583	P365	-	-	-		-	-	-	-	-
584 UNDERGROUND LINE EXPENSES	OM584	P367	-	-	-		-	-	-	-	-
585 STREET LIGHTING EXPENSE	OM585	P373	-	-	-		-	-	-	-	-
586 METER EXPENSES	OM586	P370	-	-	-	8,277	,541	-	-	-	-
586 METER EXPENSES - LOAD MANAGEMENT	OM586x	F012	-	-	-	(0	-	-	-	-	-
587 CUSTOMER INSTALLATIONS EXPENSE	OM587	PDIST	(5,767)	(4,033)	(2,003)		,323)	(6,366)	-	-	-
588 MISCELLANEOUS DISTRIBUTION EXP	OM588	PDIST	407,277	284,830	141,452	164	,080,	449,592	-	-	-
588 MISC DISTR EXP MAPPIN	OM588x	PDIST	-	-	-		-	-	-	-	-
589 RENTS	OM589	PDIST	594	416	206		240	656	-	-	-
Total Distribution Operation Expense	OMDO		\$ 425,724 \$	297,731	\$ 147,859	\$ 9,236	,380	\$ 469,956 \$	-	\$	\$-
Distribution Maintenance Expense											
590 MAINTENANCE SUPERVISION AND EN	OM590	LBDM	1,088	761			_	162	_	_	_
591 STRUCTURES	OM591	P362	1,000	-	-		-	102	-	-	-
592 MAINTENANCE OF STATION EQUIPME	OM592	P362	-	_	_		-	_	-	_	_
593 MAINTENANCE OF OVERHEAD LINES	OM593	P365	-	-	-		-	_	-	-	-
594 MAINTENANCE OF UNDERGROUND LIN	OM594	P367	-	-			-		-	-	
595 MAINTENANCE OF LINE TRANSFORME	OM595	P368	196,978	137,757			-		-	-	
596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS	OM596	P373	-	-	-		-	355,341	-	-	-
597 MAINTENANCE OF METERS	OM597	P370	-	-	-	1.427	.898	-	-	-	-
598 MISCELLANEOUS DISTRIBUTION EXPENSES	OM598	PDIST	48,916	34,209	16,989		,707	53,998	-	-	-
Total Distribution Maintenance Expense	OMDM		\$ 246,982 \$	172,728	\$ 16,989	\$ 1,447	,605	\$ 409,501 \$	-	\$ -	\$-
Total Distribution Operation and Maintenance Expenses			672,706	470,459	164,848	10,683	,985	879,457	-	-	-
Transmission and Distribution Expenses			672,706	470,459	164,848	10,683	,985	879,457	-	-	-
Production, Transmission and Distribution Expenses	OMSUB		\$ 672,706 \$	470,459	\$ 164,848	\$ 10,683	,985	\$ 879,457 \$	-	\$ -	\$-

#### BIP METHODOLOGY

Description	Name	Functional Vector	Total System	Produ Base	uction Demand Winter Peak	Summer Peak	Production Energy	Transmission Demand Demand
<b>Operation and Maintenance Expenses (Continued)</b>								
Customer Accounts Expense								
901 SUPERVISION/CUSTOMER ACCTS	OM901	F025	\$ 1,267,537	-	-	-	-	-
902 METER READING EXPENSES	OM902	F025	2,546,374	-	-	-	-	-
903 RECORDS AND COLLECTION	OM903	F025	7,699,624	-	-	-	-	-
904 UNCOLLECTIBLE ACCOUNTS	OM904	F025	2,477,177	-	-	-	-	-
905 MISC CUST ACCOUNTS	OM903	F025	1,288	-	-	-	-	-
Total Customer Accounts Expense	OMCA		\$ 13,992,000	\$ - \$	- \$	-	\$-\$	-
Customer Service Expense								
907 SUPERVISION	OM907	F026	\$ 364,585	-	-	-	-	-
908 CUSTOMER ASSISTANCE EXPENSES	OM908	F026	289,821	-	-	-	-	-
908 CUSTOMER ASSISTANCE EXP-INCENTIVES	OM908x	F026		-	-	-	-	-
909 INFORMATIONAL AND INSTRUCTIONA	OM909	F026	257,472	-	-	-	-	-
909 INFORM AND INSTRUC -LOAD MGMT	OM909x	F026		-	-	-	-	-
910 MISCELLANEOUS CUSTOMER SERVICE	OM910	F026	823,663	-	-	-	-	-
911 DEMONSTRATION AND SELLING EXP	OM911	F026		-	-	-	-	-
912 DEMONSTRATION AND SELLING EXP	OM912	F026		-	-	-	-	-
913 ADVERTISING EXPENSES	OM913	F026	950,847	-	-	-	-	-
915 MDSE-JOBBING-CONTRACT	OM915	F026		-	-	-	-	-
916 MISC SALES EXPENSE	OM916	F026		-	-	-	-	-
Total Customer Service Expense	OMCS		\$ 2,686,388	\$ - \$	- \$	-	\$-\$	-
Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service	OMSUB2		597,552,678	22,381,959	23,446,519	19,272,960	445,243,825	16,509,511

#### BIP METHODOLOGY

December	News	Functional	-	tributior	n			ion Primary L	Question		Distribution	
Description	Name	Vector		Genera		Specific	;	Demand	Custome	r	Demand	Customer
Operation and Maintenance Expenses (Continued)												
Customer Accounts Expense												
901 SUPERVISION/CUSTOMER ACCTS	OM901	F025		-		-		-	-		-	-
902 METER READING EXPENSES	OM902	F025		-		-		-	-		-	-
903 RECORDS AND COLLECTION	OM903	F025		-		-		-	-		-	-
904 UNCOLLECTIBLE ACCOUNTS	OM904	F025		-		-		-	-		-	-
905 MISC CUST ACCOUNTS	OM903	F025		-		-		-	-		-	-
Total Customer Accounts Expense	OMCA		\$	-	\$	-	\$	-	\$ -	\$	-	\$-
Customer Service Expense												
907 SUPERVISION	OM907	F026		-		-		-	-		-	-
908 CUSTOMER ASSISTANCE EXPENSES	OM908	F026		-		-		-	-		-	-
908 CUSTOMER ASSISTANCE EXP-INCENTIVES	OM908x	F026		-		-		-	-		-	-
909 INFORMATIONAL AND INSTRUCTIONA	OM909	F026		-		-		-	-		-	-
909 INFORM AND INSTRUC -LOAD MGMT	OM909x	F026		-		-		-	-		-	-
910 MISCELLANEOUS CUSTOMER SERVICE	OM910	F026		-		-		-	-		-	-
911 DEMONSTRATION AND SELLING EXP	OM911	F026		-		-		-	-		-	-
912 DEMONSTRATION AND SELLING EXP	OM912	F026		-		-		-	-		-	-
913 ADVERTISING EXPENSES	OM913	F026		-		-		-	-		-	-
915 MDSE-JOBBING-CONTRACT	OM915	F026		-		-		-	-		-	-
916 MISC SALES EXPENSE	OM916	F026		-		-		-	-		-	-
Total Customer Service Expense	OMCS		\$	-	\$	-	\$	-	\$ -	\$	-	\$-
Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service	OMSUB2		4	,886,677		-		10,886,721	16,210,312		3,716,796	5,447,555

#### BIP METHODOLOGY

									Customer		
						Distribution		Distribution St. &	Accounts		
		Functional	 Distribution L			Services	Meters	Cust. Lighting	Expense	Service & Info.	Sales Expense
Description	Name	Vector	Demand	Custon	ner	Customer					
Operation and Maintenance Expenses (Continued)											
Customer Accounts Expense											
901 SUPERVISION/CUSTOMER ACCTS	OM901	F025	-	-		-	-	-	1,267,537	-	-
902 METER READING EXPENSES	OM902	F025	-	-		-	-	-	2,546,374	-	-
903 RECORDS AND COLLECTION	OM903	F025	-	-		-	-	-	7,699,624	-	-
904 UNCOLLECTIBLE ACCOUNTS	OM904	F025	-	-		-	-	-	2,477,177	-	-
905 MISC CUST ACCOUNTS	OM903	F025	-	-		-	-	-	1,288	-	-
Total Customer Accounts Expense	OMCA		\$ - 9	s -	\$	-	\$-	\$-	\$ 13,992,000	\$ -	\$-
Customer Service Expense											
907 SUPERVISION	OM907	F026	-	-		-	-	-	-	364,585	-
908 CUSTOMER ASSISTANCE EXPENSES	OM908	F026	-	-		-	-	-	-	289,821	-
908 CUSTOMER ASSISTANCE EXP-INCENTIVES	OM908x	F026	-	-		-	-	-	-	-	-
909 INFORMATIONAL AND INSTRUCTIONA	OM909	F026	-	-		-	-	-	-	257,472	-
909 INFORM AND INSTRUC -LOAD MGMT	OM909x	F026	-	-		-	-	-	-	-	-
910 MISCELLANEOUS CUSTOMER SERVICE	OM910	F026	-	-		-	-	-	-	823,663	-
911 DEMONSTRATION AND SELLING EXP	OM911	F026	-	-		-	-	-	-	-	-
912 DEMONSTRATION AND SELLING EXP	OM912	F026	-	-		-	-	-	-	-	-
913 ADVERTISING EXPENSES	OM913	F026	-	-		-	-	-	-	950,847	-
915 MDSE-JOBBING-CONTRACT	OM915	F026	-	-		-	-	-	-	-	-
916 MISC SALES EXPENSE	OM916	F026	-	-		-	-	-	-	-	-
Total Customer Service Expense	OMCS		\$ - \$	s -	\$	-	\$-	\$-	\$-	\$ 2,686,388	\$-
Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service	OMSUB2		672,706	470,4	59	164,848	10,683,985	879,457	13,992,000	2,686,388	-

#### BIP METHODOLOGY

Description	Name	Functional Vector	Total System	Produ Base	ction Demand Winter Peak	Summer Peak	Production Energy	Transmission Demand Demand
Operation and Maintenance Expenses (Continued)								
Administrative and General Expense 920 ADMIN. & GEN. SALARIES- 921 OFFICE SUPPLIES AND EXPENSES 922 ADMINISTRATIVE EXPENSES TRANSFERRED 923 OUTSIDE SERVICES EMPLOYED 924 PROPERTY INSURANCE 925 INJURIES AND DAMAGES 926 EMPLOYEE BENEFITS 927 FRANCHISE REQUIREMENTS 928 REGULATORY COMMISEION FEES 929 DUPLICATE CHARGES-CR 930 MISCELLANEOUS GENERAL EXPENSES 931 RENTS AND LEASES 935 MAINTENANCE OF GENERAL PLANT	OM920 OM921 OM922 OM923 OM924 OM925 OM926 OM927 OM928 OM929 OM930 OM931 OM935	LBSUB7 LBSUB7 LBSUB7 TUP LBSUB7 TUP TUP TUP LBSUB7 LBSUB7 LBSUB7 PGP	\$ 27,330,835 5,910,353 (4,320,827) 15,873,533 4,610,558 2,835,056 29,197,096 - - 1,404,080 (229,428) 3,716,685 1,123,825 617,459	3,179,339 687,539 (502,633) 1,846,535 891,486 329,796 3,396,437 - 271,489 (26,689) 432,354 216,717 119,070	3,330,558 720,241 (526,540) 1,934,362 933,888 345,482 3,557,983 - 284,402 (27,958) 452,918 227,025 124,734	2,737,708 592,035 (432,814) 1,590,039 767,653 283,985 2,924,650 - 233,778 (22,982) 372,297 186,614 102,531	6,907,180 1,493,693 (1,091,980) 4,011,635 - - 716,489 7,378,830 - - (57,982) 939,298 - -	1,638,279 354,281 (259,001) 951,499 491,106 169,940 1,750,147 - - 149,559 (13,752) 222,787 120,907 66,430
Total Administrative and General Expense	OMAG		\$ 88,069,225	\$ 10,841,440 \$	11,357,095 \$	9,335,494 \$	20,297,163 \$	5,642,184
Total Operation and Maintenance Expenses	ТОМ		\$ 685,621,903	\$ 33,223,400 \$	34,803,614 \$	28,608,453 \$	465,540,988 \$	22,151,695
Operation and Maintenance Expenses Less Purchase Power	OMLPP		\$ 631,684,225	\$ 27,648,047 \$	28,963,079 \$	23,807,553 \$	427,820,099 \$	22,151,695

#### BIP METHODOLOGY

							1		
			Distribution						
		Functional	Substation	D	istribu	tion Primary Line	s	Distribution Se	ec. Lines
Description	Name	Vector	General	Speci	ic	Demand	Customer	Demand	Customer
Operation and Maintenance Expenses (Continued)									
Administrative and General Expense									
920 ADMIN. & GEN. SALARIES-	OM920	LBSUB7	1,025,946	-		970,304	1,465,760	317,639	468,593
921 OFFICE SUPPLIES AND EXPENSES	OM921	LBSUB7	221,863	-		209,830	316,974	68,690	101,334
922 ADMINISTRATIVE EXPENSES TRANSFERRED	OM922	LBSUB7	(162,195)	-		(153,399)	(231,727)	(50,217)	(74,082)
923 OUTSIDE SERVICES EMPLOYED	OM923	LBSUB7	595,861	-		563,545	851,302	184,482	272,155
924 PROPERTY INSURANCE	OM924	TUP	171,024	-		292,469	465,427	80,401	122,182
925 INJURIES AND DAMAGES	OM925	LBSUB7	106,422	-		100,651	152,045	32,949	48,608
926 EMPLOYEE BENEFITS	OM926	LBSUB7	1,096,001	-		1,036,560	1,565,849	339,329	500,590
927 FRANCHISE REQUIREMENTS	OM927	TUP	-	-		-	-	-	-
928 REGULATORY COMMISSION FEES	OM928	TUP	52,083	-		89,067	141,739	24,485	37,209
929 DUPLICATE CHARGES-CR	OM929	LBSUB7	(8,612)	-		(8,145)	(12,304)	(2,666)	(3,934)
930 MISCELLANEOUS GENERAL EXPENSES	OM930	LBSUB7	139,517	-		131,950	199,327	43,195	63,723
931 RENTS AND LEASES	OM931	PGP	41,743	-		71,384	113,599	19,624	29,821
935 MAINTENANCE OF GENERAL PLANT	OM935	PGP	22,934	-		39,220	62,414	10,782	16,385
Total Administrative and General Expense	OMAG		\$ 3,302,587	\$-	\$	3,343,437 \$	5,090,404	\$ 1,068,694 \$	1,582,585
Total Operation and Maintenance Expenses	ТОМ		\$ 8,189,264	\$-	\$	14,230,158 \$	21,300,716	\$ 4,785,490 \$	7,030,141
Operation and Maintenance Expenses Less Purchase Power	OMLPP		\$ 8,189,264	\$-	\$	14,230,158 \$	21,300,716	\$ 4,785,490 \$	7,030,141

#### BIP METHODOLOGY

						Distribution	Distribution D	istribution St. &	Customer Accounts	Customer	
		Functional	Di	stribution Line	e Trans.	Services	Meters	Cust. Lighting		Service & Info.	Sales Expense
Description	Name	Vector		Demand	Customer	Customer	4	0 0		4	•
Operation and Maintenance Expenses (Continued)											
Administrative and General Expense											
920 ADMIN. & GEN. SALARIES-	OM920	LBSUB7		88,573	61,944	22,463	2,181,981	74,950	2,243,650	615,970	-
921 OFFICE SUPPLIES AND EXPENSES	OM921	LBSUB7		19,154	13,395	4,858	471,858	16,208	485,194	133,205	-
922 ADMINISTRATIVE EXPENSES TRANSFERRED	OM922	LBSUB7		(14,003)	(9,793)	(3,551)	(344,957)	(11,849)	(354,707)	(97,381)	-
923 OUTSIDE SERVICES EMPLOYED	OM923	LBSUB7		51,442	35,976	13,046	1,267,277	43,530	1,303,094	357,750	-
924 PROPERTY INSURANCE	OM924	TUP		111,138	77,725	38,600	44,774	122,685	-	-	-
925 INJURIES AND DAMAGES	OM925	LBSUB7		9,188	6,425	2,330	226,339	7,775	232,736	63,895	-
926 EMPLOYEE BENEFITS	OM926	LBSUB7		94,621	66,173	23,997	2,330,975	80,068	2,396,856	658,031	-
927 FRANCHISE REQUIREMENTS	OM927	TUP		-	-	-	-	-	-	-	-
928 REGULATORY COMMISSION FEES	OM928	TUP		33,846	23,670	11,755	13,635	37,362	-	-	-
929 DUPLICATE CHARGES-CR	OM929	LBSUB7		(744)	(520)	(189)	(18,317)	(629)	(18,834)	(5,171)	-
930 MISCELLANEOUS GENERAL EXPENSES	OM930	LBSUB7		12,045	8,424	3,055	296,725	10,192	305,111	83,765	-
931 RENTS AND LEASES	OM931	PGP		27,126	18,971	9,421	10,928	29,944	-	-	-
935 MAINTENANCE OF GENERAL PLANT	OM935	PGP		14,904	10,423	5,176	6,004	16,452	-	-	-
Total Administrative and General Expense	OMAG		\$	447,290 \$	312,813	\$ 130,961	\$ 6,487,224 \$	426,688	\$ 6,593,101	\$ 1,810,064 \$	5 -
Total Operation and Maintenance Expenses	ТОМ		\$	1,119,996 \$	783,272	\$ 295,809	\$ 17,171,209 \$	5 1,306,145	\$ 20,585,101	\$ 4,496,452 \$	ş -
Operation and Maintenance Expenses Less Purchase Power	OMLPP		\$	1,119,996 \$	783,272	\$ 295,809	\$ 17,171,209 \$	5 1,306,145	\$ 20,585,101	\$ 4,496,452 \$	ş -
							\$ 74,906,055				

#### BIP METHODOLOGY

				-					1
								Production	
		Functional	Total			duction Demand		Energy	
Description	Name	Vector	System		Base	Winter Peak	Summer Peak		Demand
Labor Expenses									
Steam Power Generation Operation Expenses									
500 OPERATION SUPERVISION & ENGINEERING	LB500	F019	\$ 3,138,068		912,472	955,872	785,724	484,001	-
501 FUEL	LB501	Energy	2,187,724		-	-	-	2,187,724	-
502 STEAM EXPENSES	LB502	PROFIX	8,374,877		2,879,294	3,016,242	2,479,341	-	-
504 STEAM TRANSFER EXPENSES	LB504	PROFIX	-		-	-	-	-	-
505 ELECTRIC EXPENSES	LB505	PROFIX	2,130,001		732,297	767,128	630,576	-	-
506 MISC. STEAM POWER EXPENSES	LB506	PROFIX	1,491,734		512,860	537,253	441,620	-	-
507 RENTS	LB507	PROFIX			-	-	-	-	-
Total Steam Power Operation Expenses	LBSUB1		\$ 17,322,404	\$	5,036,923 \$	5,276,495	\$ 4,337,261	\$ 2,671,725	\$-
Steam Power Generation Maintenance Expenses									
510 MAINTENANCE SUPERVISION & ENGINEERING	LB510	F020	\$ 3,390,539		-	-	-	3,390,539	-
511 MAINTENANCE OF STRUCTURES	LB511	PROFIX	-		-	-	-	-	-
512 MAINTENANCE OF BOILER PLANT	LB512	Energy	4,117,208		-	-	-	4,117,208	-
513 MAINTENANCE OF ELECTRIC PLANT	LB513	Energy	2,830,954		-	-	-	2,830,954	-
514 MAINTENANCE OF MISC STEAM PLANT	LB514	Energy	57,828		-	-	-	57,828	-
Total Steam Power Generation Maintenance Expense	LBSUB2		\$ 10,396,529	\$	- \$	-	\$ -	\$ 10,396,529	\$-
Total Steam Power Generation Expense			\$ 27,718,933	\$	5,036,923 \$	5,276,495	\$ 4,337,261	\$ 13,068,254	\$-
Hydraulic Power Generation Operation Expenses									
535 OPERATION SUPERVISION & ENGINEERING	LB535	F021	\$ 95,870		32,960	34,528	28,382	-	-
536 WATER FOR POWER	LB536	PROFIX	-		-	-	-	-	-
537 HYDRAULIC EXPENSES	LB537	PROFIX			-	-	-	-	-
538 ELECTRIC EXPENSES	LB538	PROFIX	180,161		61,940	64,886	53,336	-	-
539 MISC. HYDRAULIC POWER EXPENSES	LB539	PROFIX	60,427		20,775	21,763	17,889	-	-
540 RENTS		PROFIX	-		-	-	-	-	-
Total Hydraulic Power Operation Expenses	LBSUB3		\$ 336,458	\$	115,675 \$	121,177	\$ 99,607	\$ -	\$-
Hydraulic Power Generation Maintenance Expenses									
541 MAINTENANCE SUPERVISION & ENGINEERING	LB541	F022	\$ -		-	-	-	-	-
542 MAINTENANCE OF STRUCTURES	LB542	PROFIX	46,873		16,115	16,881	13,877	-	-
543 MAINT. OF RESERVES, DAMS, AND WATERWAYS	LB543	PROFIX	46,873		16,115	16,881	13,877	-	-
544 MAINTENANCE OF ELECTRIC PLANT	LB544	Energy	151,040		-	-	-	151,040	-
545 MAINTENANCE OF MISC HYDRAULIC PLANT	LB545	Energy	-		-	-	-	-	-
Total Hydraulic Power Generation Maint. Expense	LBSUB4		\$ 244,786	\$	32,230 \$	33,763	\$ 27,753	\$ 151,040	\$-
Total Hydraulic Power Generation Expense			\$ 581,244	\$	147,905 \$	154,940	\$ 127,360	\$ 151,040	\$ -

#### BIP METHODOLOGY

				stribution		 			
Description	Name	Functional Vector	3	Substation Genera	Specific	on Primary Line Demand	s Customer	Distribution S Demand	ec. Lines Customer
Labor Expenses	Nullio	Vector		Genera	opcome	Domana	oustonier	Demana	Guotomor
Steam Power Generation Operation Expenses		5040							
500 OPERATION SUPERVISION & ENGINEERING 501 FUEL	LB500 LB501	F019 Energy		-	-	-	-	-	-
501 FOEL 502 STEAM EXPENSES	LB501	PROFIX		-	-	-	-	-	-
502 STEAM EXPENSES 504 STEAM TRANSFER EXPENSES	LB502 LB504	PROFIX		-	-	-	-	-	-
505 ELECTRIC EXPENSES	LB504 LB505	PROFIX		-	-	-	-	-	-
505 ELECTRIC EXPENSES 506 MISC. STEAM POWER EXPENSES	LB505 LB506	PROFIX		-	-	-	-	-	-
507 RENTS	LB500	PROFIX		-	-	-	-	-	-
507 RENTS	LB507	PROFIX		-	-	-	-	-	-
Total Steam Power Operation Expenses	LBSUB1		\$	-	\$ -	\$ - \$	- 9	6 - \$	-
Steam Power Generation Maintenance Expenses									
510 MAINTENANCE SUPERVISION & ENGINEERING	LB510	F020		-	-	-	-	-	-
511 MAINTENANCE OF STRUCTURES	LB511	PROFIX		-	-	-	-	-	-
512 MAINTENANCE OF BOILER PLANT	LB512	Energy		-	-	-	-	-	-
513 MAINTENANCE OF ELECTRIC PLANT	LB513	Energy		-	-	-	-	-	-
514 MAINTENANCE OF MISC STEAM PLANT	LB514	Energy		-	-	-	-	-	-
Total Steam Power Generation Maintenance Expense	LBSUB2		\$	-	\$ -	\$ - \$	- 9	s - \$	-
Total Steam Power Generation Expense			\$	-	\$ -	\$ - \$	- 9	5 - \$	-
Hydraulic Power Generation Operation Expenses									
535 OPERATION SUPERVISION & ENGINEERING	LB535	F021		-	-	-	-	-	-
536 WATER FOR POWER	LB536	PROFIX		-	-	-	-	-	-
537 HYDRAULIC EXPENSES	LB537	PROFIX		-	-	-	-	-	-
538 ELECTRIC EXPENSES	LB538	PROFIX		-	-	-	-	-	-
539 MISC. HYDRAULIC POWER EXPENSES	LB539	PROFIX		-	-	-	-	-	-
540 RENTS		PROFIX		-	-	-	-	-	-
Total Hydraulic Power Operation Expenses	LBSUB3		\$	-	\$ -	\$ - \$	- 9	5 - \$	-
Hydraulic Power Generation Maintenance Expenses									
541 MAINTENANCE SUPERVISION & ENGINEERING	LB541	F022		-	-	-	-	-	-
542 MAINTENANCE OF STRUCTURES	LB542	PROFIX		-	-	-	-	-	-
543 MAINT. OF RESERVES, DAMS, AND WATERWAYS	LB543	PROFIX		-	-	-	-	-	-
544 MAINTENANCE OF ELECTRIC PLANT	LB544	Energy		-	-	-	-	-	-
545 MAINTENANCE OF MISC HYDRAULIC PLANT	LB545	Energy		-	-	-	-	-	-
Total Hydraulic Power Generation Maint. Expense	LBSUB4		\$	-	\$ -	\$ - \$	- 9	5 - \$	-
Total Hydraulic Power Generation Expense			\$	-	\$ -	\$ - \$	- 9	s - \$	-
-									

#### BIP METHODOLOGY

											Customer		
							Distributi	ion	Distribution	Distribution St. &		Customer	
		Functional		Distribution	Line Tr	ans.	Servio	ces	Meters	Cust. Lighting	Expense	Service & Info.	Sales Expense
Description	Name	Vector		Demand	(	Customer	Custor	ner		-	-		-
Labor Expenses													
Steam Power Generation Operation Expenses													
500 OPERATION SUPERVISION & ENGINEERING	LB500	F019											
500 OPERATION SOPERVISION & ENGINEERING	LB500	Energy		-		-	-		-	-	-	-	-
502 STEAM EXPENSES	LB501	PROFIX		-		-	-		-	-	-	-	-
502 STEAM EXPENSES	LB502 LB504	PROFIX		-		-	-		-	-	-	-	-
505 ELECTRIC EXPENSES	LB504 LB505	PROFIX		-		-	-		-	-	-	-	-
506 MISC. STEAM POWER EXPENSES	LB505 LB506	PROFIX		-		-	-		-	-	-	-	-
				-		-	-		-	-	-	-	-
507 RENTS	LB507	PROFIX		-		-	-		-	-	-	-	-
Total Steam Power Operation Expenses	LBSUB1		\$	-	\$	-	\$-	\$	-	\$-	\$-	\$-	\$-
Steam Power Generation Maintenance Expenses													
510 MAINTENANCE SUPERVISION & ENGINEERING	LB510	F020		-		-	-		-			-	
511 MAINTENANCE OF STRUCTURES	LB511	PROFIX		-		-	-		-			-	-
512 MAINTENANCE OF BOILER PLANT	LB512	Energy		_		-	_		-	-	-	_	_
513 MAINTENANCE OF ELECTRIC PLANT	LB513	Energy		_		-	_		-	-	-	_	_
514 MAINTENANCE OF MISC STEAM PLANT	LB514	Energy		_		_	_		_	_	_	_	_
	LDUIT	Energy		-		-	-		-	-	-	-	-
Total Steam Power Generation Maintenance Expense	LBSUB2		\$	-	\$	-	\$ -	\$	-	\$ -	\$-	\$-	\$ -
Total Steam Power Generation Expense			\$	-	\$		\$ -	\$	-	\$-	\$-	\$-	\$ -
Hydraulic Power Generation Operation Expenses													
535 OPERATION SUPERVISION & ENGINEERING	LB535	F021		-		-	-		-	-	-	-	-
536 WATER FOR POWER	LB536	PROFIX		-		-	-		-	-		-	-
537 HYDRAULIC EXPENSES	LB537	PROFIX		-		-	-		-			-	-
538 ELECTRIC EXPENSES	LB538	PROFIX		_		-	_		-	-	-	_	_
539 MISC. HYDRAULIC POWER EXPENSES	LB539	PROFIX		_		-	_		-	-	-	_	-
540 RENTS	LD000	PROFIX		_		-	_		-	_	-	-	_
Total Hydraulic Power Operation Expenses	LBSUB3		\$	-	\$	-	\$ -	\$	-	\$ -	\$-	\$-	\$ -
Hydraulic Power Generation Maintenance Expenses													
541 MAINTENANCE SUPERVISION & ENGINEERING	LB541	F022		-		-	-		-	-	-	-	-
542 MAINTENANCE OF STRUCTURES	LB542	PROFIX		-		-	-		-	-	-	-	-
543 MAINT. OF RESERVES, DAMS, AND WATERWAYS	LB543	PROFIX		-		-	-		-	-	-	-	-
544 MAINTENANCE OF ELECTRIC PLANT	LB544	Energy		-		-	-		-	-	-	-	-
545 MAINTENANCE OF MISC HYDRAULIC PLANT	LB545	Energy		-		-	-		-	-	-	-	-
Total Hydraulic Power Generation Maint. Expense	LBSUB4		\$	-	\$	-	\$-	\$	-	\$-	\$-	\$-	\$-
Total Hydraulic Power Generation Expense			\$	_	\$	-	\$ -	\$	_	\$ -	\$ -	\$-	\$ -
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#### BIP METHODOLOGY

					_						
Description	Name	Functional Vector		Total System		Pro Base	oduction Demand Winter Peak	Summer Peak	Produ E	ction tergy	Transmission Demand Demand
Labor Expenses (Continued)											
Other Power Generation Operation Expense											
546 OPERATION SUPERVISION & ENGINEERING	LB546	PROFIX	\$	468,874		161,199	168,867	138,808		-	-
547 FUEL	LB547	Energy		-		-	-	-		-	-
548 GENERATION EXPENSE	LB548	PROFIX		161,301		55,455	58,093	47,752		-	-
549 MISC OTHER POWER GENERATION	LB549	PROFIX		354,300		121,809	127,602	104,889		-	-
550 RENTS	LB550	PROFIX		-		-	-	-		-	-
Total Other Power Generation Expenses	LBSUB5		\$	984,475	\$	338,464	\$ 354,562	\$ 291,449	\$	-	\$ -
Other Power Generation Maintenance Expense											
551 MAINTENANCE SUPERVISION & ENGINEERING	LB551	PROFIX	\$	230.613		79.285	83.056	68.272		-	-
552 MAINTENANCE OF STRUCTURES	LB552	PROFIX	Ψ	200,010		13,200	-			_	
553 MAINTENANCE OF GENERATING & ELEC PLANT	LB553	PROFIX		606.788		208.615	218,537	179.637		_	
554 MAINTENANCE OF MISC OTHER POWER GEN PLT	LB554	PROFIX		(160,951)		(55,335)	(57,967)	(47,649)		-	-
334 MAINTENANCE OF WISC OTHER FOWER GEN FET	LDJJ4	FROM		(100,951)		(55,555)	(37,307)	(47,049)		-	-
Total Other Power Generation Maintenance Expense	LBSUB6		\$	676,450	\$	232,564	\$ 243,626	\$ 200,260	\$	-	\$ -
Total Other Power Generation Expense			\$	1,660,925	\$	571,028	\$ 598,188	\$ 491,709	\$	-	\$ -
Total Production Expense	LPREX		\$	29,961,102	\$	5,755,856	\$ 6,029,623	\$ 4,956,330	\$ 13,219	9,294	\$ -
Purchased Power											
555 PURCHASED POWER	LB555	OMPP	\$					_			
556 SYSTEM CONTROL AND LOAD DISPATCH	LB556	PROFIX	Ψ	- 956,703		328,916	344,560	283.227		-	-
557 OTHER EXPENSES	LB550 LB557	PROFIX		530,703		320,910	344,300	203,227		-	-
337 OTHER EXPENSES	LD337	FNOFIA		-		-	-	-		-	-
Total Purchased Power Labor	LBPP		\$	956,703	\$	328,916	\$ 344,560	\$ 283,227	\$	-	\$ -

#### BIP METHODOLOGY

		Functional	Distribution Substation General					on Primary L			Distributio		
Description	Name	Vector		Genera		Specific	C	Demand	Custome	r	Demand	(	Customer
Labor Expenses (Continued)													
Other Power Generation Operation Expense	1.55.40												
546 OPERATION SUPERVISION & ENGINEERING 547 FUEL	LB546 LB547	PROFIX		-		-		-	-		-		-
547 FOEL 548 GENERATION EXPENSE	LB547 LB548	Energy PROFIX		-		-		-	-		-		-
549 MISC OTHER POWER GENERATION	LB549	PROFIX											-
550 RENTS	LB550	PROFIX		-				-	-		-		-
Total Other Power Generation Expenses	LBSUB5		\$	-	\$	-	\$	-	\$ -	\$	-	\$	-
Other Power Generation Maintenance Expense													
551 MAINTENANCE SUPERVISION & ENGINEERING	LB551	PROFIX		-		-		-	-		-		-
552 MAINTENANCE OF STRUCTURES	LB552	PROFIX		-		-		-	-		-		-
553 MAINTENANCE OF GENERATING & ELEC PLANT	LB553	PROFIX		-		-		-	-		-		-
554 MAINTENANCE OF MISC OTHER POWER GEN PLT	LB554	PROFIX		-		-		-	-		-		-
Total Other Power Generation Maintenance Expense	LBSUB6		\$	-	\$	-	\$	-	\$ -	\$	-	\$	-
Total Other Power Generation Expense			\$	-	\$	-	\$	-	\$ -	\$	-	\$	-
Total Production Expense	LPREX		\$	-	\$	-	\$	-	\$ -	\$	-	\$	-
Dursh as ad Damas													
Purchased Power 555 PURCHASED POWER	LB555	OMPP											
556 SYSTEM CONTROL AND LOAD DISPATCH	LB556	PROFIX		_		_		_	_				_
557 OTHER EXPENSES	LB557	PROFIX		-		-		-	-		-		-
Total Purchased Power Labor	LBPP		\$	-	\$	-	\$	-	\$ -	\$	-	\$	-

#### BIP METHODOLOGY

		Functional		Distribution	Line T	rans.		Distribution Services	Distribution Meters	Distribution St. & Cust. Lighting			Sales Expense
Description	Name	Vector		Demand		Customer		Customer			-	• •	
Labor Expenses (Continued)													
Other Power Generation Operation Expense													
546 OPERATION SUPERVISION & ENGINEERING	LB546	PROFIX		-		-		-	-	-	-	-	-
547 FUEL	LB547	Energy		-		-		-	-	-	-	-	-
548 GENERATION EXPENSE	LB548	PROFIX		-		-		-	-	-	-	-	-
549 MISC OTHER POWER GENERATION	LB549	PROFIX		-		-		-	-	-	-	-	-
550 RENTS	LB550	PROFIX		-		-		-	-	-	-	-	-
Total Other Power Generation Expenses	LBSUB5		\$	-	\$	-	\$	- 9	\$-	\$-	\$-	\$-	\$-
Other Power Generation Maintenance Expense 551 MAINTENANCE SUPERVISION & ENGINEERING	LB551	PROFIX		-		-		-	-	-	-	_	_
552 MAINTENANCE OF STRUCTURES	LB552	PROFIX		-		-		-	-	-	-	-	-
553 MAINTENANCE OF GENERATING & ELEC PLANT	LB553	PROFIX		-		-		-	-	-	-	-	-
554 MAINTENANCE OF MISC OTHER POWER GEN PLT	LB554	PROFIX		-		-		-	-	-	-	-	-
	LBSUB6		•		•		•		<b>^</b>	<u>^</u>	•	<u>^</u>	
Total Other Power Generation Maintenance Expense	LBSUB0		\$	-	\$	-	\$	- 5	\$-	\$ -	\$ -	\$ -	\$-
Total Other Power Generation Expense			\$	-	\$	-	\$	- 9	\$-	\$-	\$-	\$-	\$-
Total Production Expense	LPREX		\$	-	\$	-	\$	- 9	\$-	\$-	\$-	\$ -	\$-
Purchased Power													
555 PURCHASED POWER	LB555	OMPP		-		-		-	-	-	-	-	-
556 SYSTEM CONTROL AND LOAD DISPATCH	LB556	PROFIX		-		-		-	-	-	-	-	-
557 OTHER EXPENSES	LB557	PROFIX		-		-		-	-	-	-	-	-
Total Purchased Power Labor	LBPP		\$	-	\$	-	\$	- 5	\$-	\$-	\$-	\$-	\$-

#### BIP METHODOLOGY

Description	Name	Functional Vector	Total System	Pro Base	duction Demand Winter Peak	Summer Peak	Production Energy	Transmission Demand Demand
Labor Expenses (Continued)								
Transmission Labor Expenses								
560 OPERATION SUPERVISION AND ENG	LB560	PTRAN	\$ 642,049	-	-	-	-	642,049
561 LOAD DISPATCHING	LB561	PTRAN	1,454,366	-	-	-	-	1,454,366
562 STATION EXPENSES	LB562	PTRAN	433,996	-	-	-	-	433,996
563 OVERHEAD LINE EXPENSES	LB563	PTRAN	-	-	-	-	-	-
566 MISC. TRANSMISSION EXPENSES	LB566	PTRAN	105,592	-	-	-	-	105,592
569 MAINTENACE OF STRUCTURES	LB569	PTRAN	-	-	-	-	-	-
570 MAINT OF STATION EQUIPMENT	LB570	PTRAN	416,335	-	-	-	-	416,335
571 MAINT OF OVERHEAD LINES	LB571	PTRAN	83,079	-	-	-	-	83,079
573 MAINT OF MISC. TRANSMISSION PLANT	LB573	PTRAN	-	-	-	-	-	-
Total Transmission Labor Expenses	LBTRAN		\$ 3,135,417	\$ - \$	-	\$-	\$	\$ 3,135,417
Distribution Operation Labor Expense								
580 OPERATION SUPERVISION AND ENGI	LB580	F023	\$ 898,041	-	-	-	-	-
581 LOAD DISPATCHING	LB581	P362	574,384	-	-	-	-	-
582 STATION EXPENSES	LB582	P362	851,000	-	-	-	-	-
583 OVERHEAD LINE EXPENSES	LB583	P365	1,741,898	-	-	-	-	-
584 UNDERGROUND LINE EXPENSES	LB584	P367	168,503	-	-	-	-	-
585 STREET LIGHTING EXPENSE	LB585	P373	-	-	-	-	-	-
586 METER EXPENSES	LB586	P370	3,736,471	-	-	-	-	-
586 METER EXPENSES - LOAD MANAGEMENT	LB586x	F012		-	-	-	-	-
587 CUSTOMER INSTALLATIONS EXPENSE	LB587	P371	-	-	-	-	-	-
588 MISCELLANEOUS DISTRIBUTION EXP	LB588	PDIST	1,539,532	-	-	-	-	-
589 RENTS	LB589	PDIST	-	-	-	-	-	-
Total Distribution Operation Labor Expense	LBDO		\$ 9,509,829	\$ - \$	-	\$-	\$ -	\$-

#### BIP METHODOLOGY

		Functional	Distribution Substation Distribution Primary Lines					Distribution Sec	Lines
Description	Name	Vector	General		cific	Demand	Customer	Demand	Customer
Labor Expenses (Continued)									
Transmission Labor Expenses									
560 OPERATION SUPERVISION AND ENG	LB560	PTRAN	-		-	-	-	-	-
561 LOAD DISPATCHING	LB561	PTRAN	-		-	-	-	-	-
562 STATION EXPENSES	LB562	PTRAN	-		-	-	-	-	-
563 OVERHEAD LINE EXPENSES	LB563	PTRAN	-		-	-	-	-	-
566 MISC. TRANSMISSION EXPENSES	LB566	PTRAN	-		-	-	-	-	-
569 MAINTENACE OF STRUCTURES	LB569	PTRAN	-		-	-	-	-	-
570 MAINT OF STATION EQUIPMENT	LB570	PTRAN	-		-	-	-	-	-
571 MAINT OF OVERHEAD LINES	LB571	PTRAN	-		-	-	-	-	-
573 MAINT OF MISC. TRANSMISSION PLANT	LB573	PTRAN	-		-	-	-	-	-
Total Transmission Labor Expenses	LBTRAN		\$-	\$	- \$	- \$	- 9	\$-\$	-
Distribution Operation Labor Expense									
580 OPERATION SUPERVISION AND ENGI	LB580	F023	166,627		-	90,525	137,597	29,083	43,032
581 LOAD DISPATCHING	LB581	P362	574,384		-	-	-	-	-
582 STATION EXPENSES	LB582	P362	851,000		-	-	-	-	-
583 OVERHEAD LINE EXPENSES	LB583	P365	-		-	520,214	754,507	190,655	276,522
584 UNDERGROUND LINE EXPENSES	LB584	P367	-		-	52,893	95,558	7,144	12,907
585 STREET LIGHTING EXPENSE	LB585	P373	-		-	-	-	-	-
586 METER EXPENSES	LB586	P370	-		-	-	-	-	-
586 METER EXPENSES - LOAD MANAGEMENT	LB586x	F012	-		-	-	-	-	-
587 CUSTOMER INSTALLATIONS EXPENSE	LB587	P371	-		-	-	-	-	-
588 MISCELLANEOUS DISTRIBUTION EXP	LB588	PDIST	172,493		-	294,980	469,423	81,091	123,231
589 RENTS	LB589	PDIST	-		-	-	-	-	-
Total Distribution Operation Labor Expense	LBDO		\$ 1,764,504	\$	- \$	958,612 \$	1,457,086	\$ 307,973 \$	455,693

#### BIP METHODOLOGY

					Distribution	Distribution	Distribution St. &	Customer Accounts	Customer	
		Functional	 istribution Line	Trans	Services	Meters			Service & Info.	Sales Expense
Description	Name	Vector	 Demand	Customer	Customer			_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Labor Expenses (Continued)										
Transmission Labor Expenses										
560 OPERATION SUPERVISION AND ENG	LB560	PTRAN	-	-	-	-	-	-	-	-
561 LOAD DISPATCHING	LB561	PTRAN	-	-	-	-	-	-	-	-
562 STATION EXPENSES	LB562	PTRAN	-	-	-	-	-	-	-	-
563 OVERHEAD LINE EXPENSES	LB563	PTRAN	-	-	-	-	-	-	-	-
566 MISC. TRANSMISSION EXPENSES	LB566	PTRAN	-	-	-	-	-	-	-	-
569 MAINTENACE OF STRUCTURES	LB569	PTRAN	-	-	-	-	-	-	-	-
570 MAINT OF STATION EQUIPMENT	LB570	PTRAN	-	-	-	-	-	-	-	-
571 MAINT OF OVERHEAD LINES	LB571	PTRAN	-	-	-	-	-	-	-	-
573 MAINT OF MISC. TRANSMISSION PLANT	LB573	PTRAN	-	-	-	-	-	-	-	-
Total Transmission Labor Expenses	LBTRAN		\$ - \$	- 9	5 - \$	-	\$-	\$ -	\$ -	\$ -
Distribution Operation Labor Expense										
580 OPERATION SUPERVISION AND ENGI	LB580	F023	11,689	8,175	4,060	394,350	12,904	-	-	-
581 LOAD DISPATCHING	LB581	P362	-	-	-	-	-	-	-	-
582 STATION EXPENSES	LB582	P362	-	-	-	-	-	-	-	-
583 OVERHEAD LINE EXPENSES	LB583	P365	-	-	-	-	-	-	-	-
584 UNDERGROUND LINE EXPENSES	LB584	P367	-	-	-	-	-	-	-	-
585 STREET LIGHTING EXPENSE	LB585	P373	-	-	-	-	-	-	-	-
586 METER EXPENSES	LB586	P370	-	-	-	3,736,471	-	-	-	-
586 METER EXPENSES - LOAD MANAGEMENT	LB586x	F012	-	-	-	-	-	-	-	-
587 CUSTOMER INSTALLATIONS EXPENSE	LB587	P371	-	-	-	-	-	-	-	-
588 MISCELLANEOUS DISTRIBUTION EXP	LB588	PDIST	112,093	78,392	38,931	45,159	123,739	-	-	-
589 RENTS	LB589	PDIST	-	-	-	-	-	-	-	-
Total Distribution Operation Labor Expense	LBDO		\$ 123,782 \$	86,567 \$	6 42,991 \$	4,175,980	\$ 136,642	\$ -	\$	\$-

#### BIP METHODOLOGY

		Functional		Total	Produ	uction Demand		Production Energy	Transmission Demand
Description	Name	Vector		System	Base	Winter Peak	Summer Peak		Demand
Labor Expenses (Continued)									
Distribution Maintenance Labor Expense 590 MAINTENANCE SUPERVISION AND EN 591 MAINTENANCE OF STRUCTURES 592 MAINTENANCE OF STATION EQUIPME 593 MAINTENANCE OF OVERHEAD LINES 594 MAINTENANCE OF UNDERGROUND LIN 595 MAINTENANCE OF LINE TRANSFORME	LB590 LB591 LB592 LB593 LB594 LB595	F024 P362 P362 P365 P367 P368	\$	- 199,000 2,584,023 403,600 77,717	- - - - -		- - - -		
596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS 597 MAINTENANCE OF METERS 598 MAINTENANCE OF MISC DISTR PLANT	LB596 LB597 LB598	P373 P370 PDIST		6,800 - -	-	-	-	- -	- - -
Total Distribution Maintenance Labor Expense Total Distribution Operation and Maintenance Labor Expenses	LBDM	PDIST	\$ \$	3,271,140 12,780,969	\$ - \$ -	- \$	- \$	- \$	-
Transmission and Distribution Labor Expenses			\$	15,916,386	-	-	-	-	3,135,417
Production, Transmission and Distribution Labor Expenses	LBSUB		\$	46,834,191	\$ 6,084,771 \$	6,374,183 \$	5,239,557 \$	13,219,294 \$	3,135,417
Customer Accounts Expense 901 SUPERVISION/CUSTOMER ACCTS 902 METER READING EXPENSES 903 RECORDS AND COLLECTION 904 UNCOLLECTIBLE ACCOUNTS 905 MISC CUST ACCOUNTS	LB901 LB902 LB903 LB904 LB903	F025 F025 F025 F025 F025	\$	869,231 340,095 3,084,679 - -	- - - -	- - - -		-	- - - -
Total Customer Accounts Labor Expense	LBCA		\$	4,294,006	\$ - \$	- \$	- \$	- \$	-
Customer Service Expense 907 SUPERVISION 908 CUSTOMER ASSISTANCE EXPENSES 908 CUSTOMER ASSISTANCE EXP-LOAD MGMT 909 INFORMATIONAL AND INSTRUCTIONA 909 INFORM AND INSTRUC -LOAD MGMT 910 MISCELLANEOUS CUSTOMER SERVICE 911 DEMONSTRATION AND SELLING EXP 912 DEMONSTRATION AND SELLING EXP 913 WATER HEATER - HEAT PUMP PROGRAM 915 MDSE-JOBBING-CONTRACT 916 MISC SALES EXPENSE	LB907 LB908 LB908x LB909 LB910 LB911 LB912 LB913 LB915 LB916	F026 F026 F026 F026 F026 F026 F026 F026	\$	262,521 916,352	- - - - - - - - - - -	- - - - - - - - - - - - - - -		- - - - - - - - - - - - - - - - - - -	- - - - - - - - - -
Total Customer Service Labor Expense	LBCS		\$	1,178,872	\$ - \$	- \$	- \$	- \$	-
Sub-Total Labor Exp	LBSUB7		\$	52,307,069	6,084,771	6,374,183	5,239,557	13,219,294	3,135,417

#### BIP METHODOLOGY

			Distribution					
B. s. L. C. s.		Functional	Substation		bution Primary L		Distribution S	
Description	Name	Vector	General	Specific	Demand	Customer	Demand	Customer
Labor Expenses (Continued)								
Distribution Maintenance Labor Expense								
590 MAINTENANCE SUPERVISION AND EN	LB590	F024	-	-	-	-	-	-
591 MAINTENANCE OF STRUCTURES	LB591	P362	-	-	-	-	-	-
592 MAINTENANCE OF STATION EQUIPME	LB592	P362	199,000	-	-	-	-	-
593 MAINTENANCE OF OVERHEAD LINES	LB593	P365	-	-	771,712	1,119,276	282,828	410,207
594 MAINTENANCE OF UNDERGROUND LIN	LB594	P367	-	-	126,690	228,881	17,113	30,916
595 MAINTENANCE OF LINE TRANSFORME	LB595	P368	-	-	-	-	-	-
596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS	LB596	P373	-	-	-	-	-	-
597 MAINTENANCE OF METERS	LB597	P370	-	-	-	-	-	-
598 MAINTENANCE OF MISC DISTR PLANT	LB598	PDIST	-	-	-	-	-	-
Total Distribution Maintenance Labor Expense	LBDM		\$ 199,000	\$ - 9	898,402	\$ 1,348,157	\$ 299,940 \$	6 441,123
Total Distribution Operation and Maintenance Labor Expenses		PDIST	1,963,504	-	1,857,014	2,805,243	607,914	896,816
Transmission and Distribution Labor Expenses			1,963,504	-	1,857,014	2,805,243	607,914	896,816
Production, Transmission and Distribution Labor Expenses	LBSUB		\$ 1,963,504	\$ - 9	1,857,014	\$ 2,805,243	\$ 607,914 \$	896,816
Customer Accounts Expense								
901 SUPERVISION/CUSTOMER ACCTS	LB901	F025	-	-	-	-	-	-
902 METER READING EXPENSES	LB902	F025	-	-	-	-	-	-
903 RECORDS AND COLLECTION	LB903	F025	-	-	-	-	-	-
904 UNCOLLECTIBLE ACCOUNTS	LB904	F025	-	-	-	-	-	-
905 MISC CUST ACCOUNTS	LB903	F025	-	-	-	-	-	-
Total Customer Accounts Labor Expense	LBCA		\$ -	\$ - 9	· -	\$ -	\$ - 9	· -
Customer Service Expense								
907 SUPERVISION	LB907	F026	-	-	-	-	-	-
908 CUSTOMER ASSISTANCE EXPENSES	LB908	F026	-	-	-	-	-	-
908 CUSTOMER ASSISTANCE EXP-LOAD MGMT	LB908x	F026	-	_	-	-	-	_
909 INFORMATIONAL AND INSTRUCTIONA	LB909	F026	-	_	-	-	-	_
909 INFORM AND INSTRUC -LOAD MGMT	LB909x	F026	_	_	-	_	_	_
910 MISCELLANEOUS CUSTOMER SERVICE	LB910	F026						
911 DEMONSTRATION AND SELLING EXP	LB910	F026	-	-	-	-	-	-
912 DEMONSTRATION AND SELLING EXP	LB912	F026	-	-	-	-	-	-
	LB912 LB913	F026	-	-	-	-	-	-
913 WATER HEATER - HEAT PUMP PROGRAM			-	-	-	-	-	-
915 MDSE-JOBBING-CONTRACT 916 MISC SALES EXPENSE	LB915 LB916	F026 F026	-	-	-	-	-	-
		FUZU	-	-	-	-	-	-
Total Customer Service Labor Expense	LBCS		\$ -	\$ - 9	-	\$ -	\$ - 9	-
Sub-Total Labor Exp	LBSUB7		1,963,504	-	1,857,014	2,805,243	607,914	896,816

#### BIP METHODOLOGY

Description	Name	Functional Vector	Distribution Li	ne Trans. Customer		oution rvices tomer	Distribution Meters	Distribution St. & Cust. Lighting	Customer Accounts Expense	Customer Service & Info.	Sales Expense
Description	Name	vector	Demand	Customer	Cus	lomer					
Labor Expenses (Continued)											
Distribution Maintenance Labor Expense											
590 MAINTENANCE SUPERVISION AND EN	LB590	F024	-	-		-	-	-	-	-	-
591 MAINTENANCE OF STRUCTURES	LB591	P362	-	-		-	-	-	-	-	-
592 MAINTENANCE OF STATION EQUIPME	LB592	P362	-	-		-	-	-	-	-	-
593 MAINTENANCE OF OVERHEAD LINES	LB593	P365	-	-		-	-	-	-	-	-
594 MAINTENANCE OF UNDERGROUND LIN	LB594	P367	-	-		-	-	-	-	-	-
595 MAINTENANCE OF LINE TRANSFORME	LB595	P368	45,733	31,984		-	-	-	-	-	-
596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS	LB596	P373	-	-		-	-	6,800	-	-	-
597 MAINTENANCE OF METERS	LB597	P370	-	-		-	-	-	-	-	-
598 MAINTENANCE OF MISC DISTR PLANT	LB598	PDIST	-	-		-	-	-	-	-	-
Total Distribution Maintenance Labor Expense	LBDM		\$ 45,733 \$	31,984	\$	- \$	-	\$ 6,800	\$ -	\$ -	\$-
Total Distribution Operation and Maintenance Labor Expenses		PDIST	169,515	118,551	4	2,991	4,175,980	143,442	-	-	-
Transmission and Distribution Labor Expenses			169,515	118,551	4	2,991	4,175,980	143,442	-	-	-
Production, Transmission and Distribution Labor Expenses	LBSUB		\$ 169,515 \$	118,551	\$ 4	2,991 \$	4,175,980	\$ 143,442	\$-	\$ -	\$-
Customer Accounts Expense											
901 SUPERVISION/CUSTOMER ACCTS	LB901	F025	-	-		-	-	-	869.231	-	-
902 METER READING EXPENSES	LB902	F025	-	-		-	-		340,095	-	-
903 RECORDS AND COLLECTION	LB903	F025	-	-		-	-	-	3,084,679	-	-
904 UNCOLLECTIBLE ACCOUNTS	LB904	F025	-	-		-	-	-	-	-	-
905 MISC CUST ACCOUNTS	LB903	F025	-	-		-	-	-	-	-	-
Total Customer Accounts Labor Expense	LBCA		\$ - \$	-	\$	- \$	-	\$-	\$ 4,294,006	\$ -	\$-
Customer Service Expense											
907 SUPERVISION	LB907	F026	-	-		-	-	-	-	262,521	-
908 CUSTOMER ASSISTANCE EXPENSES	LB908	F026	-	-		-	-	-	-	916,352	-
908 CUSTOMER ASSISTANCE EXP-LOAD MGMT	LB908x	F026	-	-		-	-	-	-	-	-
909 INFORMATIONAL AND INSTRUCTIONA	LB909	F026	-	-		-	-	-	-	-	-
909 INFORM AND INSTRUC -LOAD MGMT	LB909x	F026	-	-		-	-	-	-	-	-
910 MISCELLANEOUS CUSTOMER SERVICE	LB910	F026	-	-		-	-	-	-	-	-
911 DEMONSTRATION AND SELLING EXP	LB911	F026	-	-		-	-	-	-	-	-
912 DEMONSTRATION AND SELLING EXP	LB912	F026	-	-		-	-	-	-	-	-
913 WATER HEATER - HEAT PUMP PROGRAM	LB913	F026	-	-		-	-	-	-	-	-
915 MDSE-JOBBING-CONTRACT 916 MISC SALES EXPENSE	LB915 LB916	F026 F026	-	-		-	-	-	-	-	-
Total Customer Service Labor Expense	LBCS		\$ - \$	-	\$	- \$	-	\$-	\$-	\$ 1,178,872	\$-
Sub-Total Labor Exp	LBSUB7		169,515	118,551	Л	2,991	4,175,980	143,442	4,294,006	1,178,872	_
	LDSUDI		103,313	110,331	4	2,001	4,175,900	140,442	4,204,000	1,170,072	-

#### BIP METHODOLOGY

		Functional	Total		ction Demand		Production Energy	Transmission Demand
Description	Name	Vector	System	Base	Winter Peak	Summer Peak	-	Demand
Labor Expenses (Continued)								
Administrative and General Expense								
920 ADMIN. & GEN. SALARIES-	LB920	LBSUB7	\$ 21,224,500	2,469,001	2,586,435	2,126,041	5,363,958	1,272,250
921 OFFICE SUPPLIES AND EXPENSES	LB920	LBSUB7		-	-	-	-	-
922 ADMIN. EXPENSES TRANSFERRED - CREDIT	LB922	LBSUB7	(2,423,558)	(281,927)	(295,337)	(242,766)	(612,493)	(145,274)
923 OUTSIDE SERVICES EMPLOYED	LB923	LBSUB7		-	-	-	-	-
924 PROPERTY INSURANCE	LB924	TUP		-	-	-	-	-
925 INJURIES AND DAMAGES	LB925	LBSUB7		-	-	-	-	-
926 EMPLOYEE BENEFITS	LB926	LBSUB7 TUP		-	-	-	-	-
928 REGULATORY COMMISSION FEES	LB928	LBSUB7		-	-	-	-	-
929 DUPLICATE CHARGES-CR 930 MISCELLANEOUS GENERAL EXPENSES	LB929 LB930	LBSUB7		-	-	-	-	-
930 MISCELLANEOUS GENERAL EXPENSES 931 RENTS AND LEASES	LB930	PGP		-	-	-	-	-
935 MAINTENANCE OF GENERAL PLANT	LB931	PGP	430,713	83,058	87,009	- 71,521	-	46,339
Total Administrative and General Expense	LBAG		\$ 19,231,655	\$ 2,270,132 \$	2,378,107 \$	1,954,796	\$ 4,751,464 \$	1,173,314
Total Operation and Maintenance Expenses	TLB		\$ 71,538,724	\$ 8,354,904 \$	8,752,290 \$	7,194,353	\$ 17,970,758 \$	4,308,731
Operation and Maintenance Expenses Less Purchase Power	LBLPP		\$ 71,538,724	\$ 8,354,904 \$	8,752,290 \$	7,194,353	\$ 17,970,758 \$	4,308,731

#### BIP METHODOLOGY

			Di	stribution									
		Functional		ubstation	Dist	tributi	on Primary Li	nes		Dist	ribution	Sec. Li	ines
Description	Name	Vector		General	Specific		Demand	(	Customer	D	emand		Customer
Labor Expenses (Continued)													
Administrative and General Expense													
920 ADMIN. & GEN. SALARIES-	LB920	LBSUB7		796,726	-		753,516	1	1,138,276	2	46,671		363,899
921 OFFICE SUPPLIES AND EXPENSES	LB920	LBSUB7		-	-		-		-		-		-
922 ADMIN. EXPENSES TRANSFERRED - CREDIT	LB922	LBSUB7		(90,976)	-		(86,042)		(129,976)	(	28,167)		(41,552)
923 OUTSIDE SERVICES EMPLOYED	LB923	LBSUB7		-	-		-		-		-		-
924 PROPERTY INSURANCE	LB924	TUP		-	-		-		-		-		-
925 INJURIES AND DAMAGES	LB925	LBSUB7		-	-		-		-		-		-
926 EMPLOYEE BENEFITS	LB926	LBSUB7		-	-		-		-		-		-
928 REGULATORY COMMISSION FEES	LB928	TUP		-	-		-		-		-		-
929 DUPLICATE CHARGES-CR	LB929	LBSUB7		-	-		-		-		-		-
930 MISCELLANEOUS GENERAL EXPENSES	LB930	LBSUB7		-	-		-		-		-		-
931 RENTS AND LEASES	LB931	PGP		-	-		-		-		-		-
935 MAINTENANCE OF GENERAL PLANT	LB932	PGP		15,998	-		27,358		43,537		7,521		11,429
Total Administrative and General Expense	LBAG		\$	721,748	\$ -	\$	694,833	<b>\$</b> 1	1,051,837	\$2	26,026	\$	333,775
Total Operation and Maintenance Expenses	TLB		\$	2,685,252	\$ -	\$	2,551,847	\$ 3	3,857,080	\$8	33,939	\$	1,230,591
Operation and Maintenance Expenses Less Purchase Power	LBLPP		\$	2,685,252	\$ -	\$	2,551,847	\$ 3	3,857,080	\$8	33,939	\$	1,230,591

#### BIP METHODOLOGY

Description	Name	Functional Vector	Di	istribution Line Demand	Trans.	Distribution Services Customer	Distribution Meters	Distribution St. & Cust. Lighting	Customer Accounts Expense S	Customer ervice & Info.	Sales Expense
Labor Expenses (Continued)											
Administrative and General Expense											
920 ADMIN. & GEN. SALARIES-	LB920	LBSUB7		68,784	48,104	17,444	1,694,476	58,204	1,742,367	478,348	-
921 OFFICE SUPPLIES AND EXPENSES	LB920	LBSUB7		-	-	-	-	-	-	-	-
922 ADMIN. EXPENSES TRANSFERRED - CREDIT	LB922	LBSUB7		(7,854)	(5,493)	(1,992)	(193,487)	(6,646)	(198,955)	(54,621)	-
923 OUTSIDE SERVICES EMPLOYED	LB923	LBSUB7		-	-	-	-	-	-	-	-
924 PROPERTY INSURANCE	LB924	TUP		-	-	-	-	-	-	-	-
925 INJURIES AND DAMAGES	LB925	LBSUB7		-	-	-	-	-	-	-	-
926 EMPLOYEE BENEFITS	LB926	LBSUB7		-	-	-	-	-	-	-	-
928 REGULATORY COMMISSION FEES	LB928	TUP		-	-	-	-	-	-	-	-
929 DUPLICATE CHARGES-CR	LB929	LBSUB7		-	-	-	-	-	-	-	-
930 MISCELLANEOUS GENERAL EXPENSES	LB930	LBSUB7		-	-	-	-	-	-	-	-
931 RENTS AND LEASES	LB931	PGP		-	-	-	-	-	-	-	-
935 MAINTENANCE OF GENERAL PLANT	LB932	PGP		10,396	7,271	3,611	4,188	11,476	-	-	-
Total Administrative and General Expense	LBAG		\$	71,326 \$	49,882	\$ 19,063 \$	1,505,178	\$ 63,034	\$ 1,543,412 \$	423,727	ş -
Total Operation and Maintenance Expenses	TLB		\$	240,841 \$	168,432	62,054 \$	5,681,158	\$ 206,477	\$ 5,837,418 \$	1,602,599	ş -
Operation and Maintenance Expenses Less Purchase Power	LBLPP		\$	240,841 \$	168,432 \$	62,054 \$	5,681,158	\$ 206,477	\$ 5,837,418 \$	1,602,599	5 -

#### BIP METHODOLOGY

								Draduction	Transmission
		Functional		Total	Produ	ction Demand		Production Energy	Demand
Description	Name	Vector		System	Base	Winter Peak	Summer Peak	Energy	Demand
Other Expenses									
Depreciation Expenses									
Steam Production	DEPRTP	PPRTL	\$	51,173,949	17,593,670	18,430,483	15,149,795	-	-
Hydraulic Production	DEPRDP1	PPRTL		4,023,933	1,383,433	1,449,234	1,191,265	-	-
Other Production	DEPRDP2	PPRTL		16,258,222	5,589,598	5,855,458	4,813,166	-	-
Transmission - Kentucky System Property	DEPRDP3	PTRAN		9,613,105	-	-	-	-	9,613,105
Transmission - Virginia Property	DEPRDP4	PTRAN			-	-	-	-	-
Distribution	DEPRDP5	PDIST		37,717,920	-	-	-	-	-
General & Common Plant	DEPRDP6	PGP		20,055,398	3,867,464	4,051,414	3,330,248	-	2,157,674
Intangible Plant	DEPRAADJ	PINT			-	-	-	-	-
Total Depreciation Expense	TDEPR		\$	138,842,527	28,434,166	29,786,588	24,484,475	-	11,770,778
Regulatory Credits									
Production	RCTNP	F017	\$	-	_	_	_	_	-
Transmission	RCTNT	PTRAN	Ψ	-	-	-	-	-	-
Distribution	RDTND	PDIST		-	_	_	-	_	_
Common	RCTNC	PGP		-	-	-	-	-	-
Total Regulatory Credits	TRCTN		\$	-	\$ - \$	- \$	-	\$ -	\$ -
Accretion Expense									
Production	ACRTNP	F017	\$	-	-	-	-	-	-
Transmission	ACRTNT	PTRAN		-	-	-	-	-	-
Distribution	ACRTND	PDIST		-	-	-	-	-	-
Common	ACRTNC	PGP		-	-	-	-	-	-
Total Accretion Expense	TACRTN		\$	-	\$ - \$	- \$	-	\$ -	\$ -
Property Taxes & Other	PTAX	TUP	\$	32,529,209	6,289,767	6,588,929	5,416,077	-	3,464,937
Amortization of Investment Tax Credit	ΟΤΑΧ	TUP	\$	(1,002,535)	(193,848)	(203,068)	(166,921)	-	(106,788)
Gain on Disposition of Allowances	ОТ	TUP	\$	-	-	-	-	-	-
		TUD	•	00 405 554	40.004.044	10 505 017	10.050.000		0.000.000
Interest	INTLTD	TUP	\$	62,185,554	12,024,044	12,595,947	10,353,826	-	6,623,863
Other Deductions	DEDUCT	TUP	\$	-	-	-	-	-	-
Total Other Expenses	TOE		\$	232,554,755	\$ 46,554,129 \$	48,768,397 \$	40,087,458	\$ -	\$ 21,752,790
Total Cost of Service (O&M + Other Expenses)			\$	918,176,657	\$ 79,777,529 \$	83,572,011 \$	68,695,911	\$ 465,540,988	\$ 43,904,484

#### BIP METHODOLOGY

		<b>F</b>	Distribution	Distrik		Duine and Line	_		Distribution Os	
Description	Name	Functional Vector	Substation General	Specific	bution	Primary Line Demand	s Customer	_	Distribution Se Demand	C. Lines Customer
20001121011	Humo	100101	Contra	opcomo		Domana	Guotomoi		Domana	Guotomer
Other Expenses										
Depreciation Expenses										
Steam Production	DEPRTP	PPRTL	-	-		-	-		-	-
Hydraulic Production	DEPRDP1	PPRTL	-	-		-	-		-	-
Other Production	DEPRDP2	PPRTL	-	-		-	-		-	-
Transmission - Kentucky System Property	DEPRDP3	PTRAN	-	-		-	-		-	-
Transmission - Virginia Property	DEPRDP4	PTRAN	-	-		-	-		-	-
Distribution	DEPRDP5	PDIST	4,226,005	-		7,226,902	11,500,688		1,986,703	3,019,105
General & Common Plant	DEPRDP6	PGP	744,925	-		1,273,898	2,027,245		350,199	532,182
Intangible Plant	DEPRAADJ	PINT	-	-		-	-		-	-
Total Depreciation Expense	TDEPR		4,970,929	-		8,500,800	13,527,932		2,336,902	3,551,287
Regulatory Credits										
Production	RCTNP	F017	-	-		-	-		-	-
Transmission	RCTNT	PTRAN	-	-		-	-		-	-
Distribution	RDTND	PDIST	-	-		-	-		-	-
Common	RCTNC	PGP	-	-		-	-		-	-
Total Regulatory Credits	TRCTN		\$ -	\$ - \$	6	- \$	-	\$	- \$	-
Accretion Expense										
Production	ACRTNP	F017	-	-		-	-		-	-
Transmission	ACRTNT	PTRAN	-	-		-	-		-	-
Distribution	ACRTND	PDIST	-	-		-	-		-	-
Common	ACRTNC	PGP	-	-		-	-		-	-
Total Accretion Expense	TACRTN		\$ -	\$ - \$	6	- \$	-	\$	- \$	-
Property Taxes & Other	PTAX	TUP	1,206,640	-		2,063,479	3,283,761		567,258	862,037
Amortization of Investment Tax Credit	OTAX	TUP	(37,188)	-		(63,595)	(101,204)	)	(17,483)	(26,568)
Gain on Disposition of Allowances	ОТ	TUP	-	-		-	-		-	-
Interest	INTLTD	TUP	2,306,714	-		3,944,718	6,277,512		1,084,418	1,647,942
Other Deductions	DEDUCT	TUP	-	-		-	-		-	-
Total Other Expenses	TOE		\$ 8,447,095	\$ - \$	s .	14,445,401 \$	22,988,002	\$	3,971,095 \$	6,034,699
Total Cost of Service (O&M + Other Expenses)			\$ 16,636,359	\$ - \$	6	28,675,559 \$	44,288,719	\$	8,756,585 \$	13,064,839

#### BIP METHODOLOGY

Description	Name	Functional	Distribution Line Trans. Demand Customer		Distribution Services er Customer		Distribution Meters	Distribution St. & Cust. Lighting	Customer Accounts Expense	Customer Service & Info.	Sales Expense	
Description	Name	Vector		Demand	Customer	Cus	tomer					
Other Expenses												
Depreciation Expenses	050075											
Steam Production	DEPRTP	PPRTL		-	-		-	-	-	-	-	-
Hydraulic Production Other Production	DEPRDP1 DEPRDP2	PPRTL PPRTL		-	-		-	-	-	-	-	-
Transmission - Kentucky System Property	DEPRDP2 DEPRDP3	PTRAN		-	-		-	-	-	-	-	-
Transmission - Virginia Property	DEPRDP4	PTRAN		-	-		-	-	-	-	-	-
Distribution	DEPRDP5	PDIST		2,746,222	1,920,577	94	3,795	1,106,375	3,031,549	_		_
General & Common Plant	DEPRDP6	PGP		484,081	338,543		6,127	195,022	534,376			-
Intangible Plant	DEPRAADJ	PINT		-	-		-	-	-	-	-	-
5												
Total Depreciation Expense	TDEPR			3,230,303	2,259,120	1,12	21,921	1,301,397	3,565,925	-	-	-
Regulatory Credits												
Production	RCTNP	F017		-	-		-	-	-	-	-	-
Transmission	RCTNT	PTRAN		-	-		-	-	-	-	-	-
Distribution	RDTND	PDIST		-	-		-	-	-	-	-	-
Common	RCTNC	PGP		-	-		-	-	-	-	-	-
Total Regulatory Credits	TRCTN		\$	- \$	-	\$	- \$	-	\$-	\$-	\$ -	\$ -
Total Negulatory Credits	incin		φ	- ψ	-	ψ	- ψ	-	φ -	φ -	φ -	φ -
Accretion Expense												
Production	ACRTNP	F017		-	-		-	-	-	-	-	-
Transmission	ACRTNT	PTRAN		-	-		-	-	-	-	-	-
Distribution	ACRTND	PDIST		-	-		-	-	-	-	-	-
Common	ACRTNC	PGP		-	-		-	-	-	-	-	-
Total Accretion Expense	TACRTN		\$	- \$	-	\$	- \$	-	\$-	\$-	\$-	\$ -
Property Taxes & Other	PTAX	TUP		784,122	548,377	27	2,334	315,900	865,590	-	-	-
Amortization of Investment Tax Credit	ΟΤΑΧ	TUP		(24,166)	(16,901)		(8,393)	(9,736)	(26,677)	-	-	-
Gain on Disposition of Allowances	ОТ	TUP		-	-		-	-	-	-	-	-
Interest	INTLTD	TUP		1,498,993	1,048,324	52	0,617	603,902	1,654,735	-	-	-
Other Deductions	DEDUCT	TUP		-	-		-	-	-	-	-	-
Total Other Expenses	TOE		\$	5,489,251 \$	3,838,921	\$ 1.90	6,480 \$	2,211,463	\$ 6,059,573	\$-	\$-	\$ -
Total Cost of Service (O&M + Other Expenses)			\$	6,609,248 \$	4,622,193		2,289 \$					
Total Cost of Service (Oaw + Other Expenses)			Φ	0,009,240 \$	4,022,193	φ 2,20	12,209 Þ	19,302,072	φ 1,305,118	φ 20,000,101	φ 4,490,452	φ -

#### BIP METHODOLOGY

			г					
							Production	Transmission
		Functional	Total	Prod	uction Demand		Energy	Demand
Description	Name	Vector	System	Base	Winter Peak	Summer Peak	-	Demand
External Functional Vectors								
	=							
Station Equipment	F001		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Poles, Towers and Fixtures	F002		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Overhead Conductors and Devices	F003		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Underground Conductors and Devices	F004		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Line Transformers	F005		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Services	F006		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Meters	F007		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Street Lighting	F008		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Meter Reading	F009		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Billing	F010		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Transmission	F011		1.000000	0.000000	0.000000	0.000000	0.000000	1.000000
Load Management	F012		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Production Plant	F017		1.000000	0.343801	0.360154	0.296045	0.000000	0.000000
Provar	PROVAR		1.000000	0.000000	0.000000	0.000000	1.000000	0.000000
Fuel	F018		1.000000	0.000000	0.000000	0.000000	1.000000	0.000000
Steam Generation Operation Labor	F019		14,184,336	4,124,451	4,320,623	3,551,538	2,187,724	-
PROFIX	PROFIX		1.000000	0.343801	0.360154	0.296045	0.000000	0.000000
Steam Generation Maintenance Labor	F020		7,005,990	-	-	-	7,005,990	-
Hydraulic Generation Operation Labor	F021		240,588	82.714	86.649	71,225	-	-
Hydraulic Generation Maintenance Labor	F022		244,786	32,230	33,763	27,753	151,040	_
Distribution Operation Labor	F023		8,611,788	02,200	-	21,100		_
Distribution Maintenance Labor	F024		3.271.140	-	-	-	-	-
Customer Accounts Expense	F025		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Customer Service Expense	F026		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Customer Advances	F020		857,428,693	0.000000	0.000000	0.000000	0.000000	0.000000
Purchase Power Demand	FUZI	F017	20,765,366	7,139,160	- 7,478,722		-	-
		F018				6,147,484	-	-
Purchase Power Energy	01100	F018	48,301,062	-	-	-	48,301,062	-
Purchased Power Expenses	OMPP		69,066,428	7,139,160	7,478,722	6,147,484	48,301,062	-
Intallations on Customer Premises - Plant in Service	F013		1.00000	-	-	-	-	-
Intallations on Customer Premises - Accum Depr	F014		1.00000	-	-	-	-	-
Generators -Energy	F015		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Generators - Demand	F016		1.000000	1.000000	0.000000	0.000000	0.000000	0.000000
	Energy		1.000000	0.000000	0.000000	0.000000	1.000000	0.000000

#### BIP METHODOLOGY

			r					
			Distribution					
		Functional	Substation	Distrib	ution Primary Lin	es	Distribution S	ec. Lines
Description	Name	Vector	General	Specific	Demand	Customer	Demand	Customer
· · ·								
External Functional Vectors								
Station Equipment	F001		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Poles, Towers and Fixtures	F002		0.000000	0.000000	0.298648	0.433152	0.109452	0.158748
Overhead Conductors and Devices	F003		0.000000	0.000000	0.298648	0.433152	0.109452	0.158748
Underground Conductors and Devices	F004		0.000000	0.000000	0.313900	0.567100	0.042400	0.076600
Line Transformers	F005		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Services	F006		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Meters	F007		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Street Lighting	F008		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Meter Reading	F009		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Billing	F010		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Transmission	F011		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Load Management	F012		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Production	F017		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Provar	PROVAR		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Fuel	F018		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Steam Generation Operation Labor	F019		-	-	-	-	-	-
PROFIX	PROFIX		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Steam Generation Maintenance Labor	F020		-	-	-	-	-	-
Hydraulic Generation Operation Labor	F021		-	-	-	-	-	-
Hydraulic Generation Maintenance Labor	F022		-	-	-	-	-	-
Distribution Operation Labor	F023		1,597,876.79	-	868,087.17	1,319,488.80	278,890.65	412,660.24
Distribution Maintenance Labor	F024		199.000.00	-	898.402.38	1.348.157.25	299,940.09	441.123.28
Customer Accounts Expense	F025		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Customer Service Expense	F026		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Customer Advances	F027		-	-	261,090,031	415,491,278	71,774,631	109,072,753
Purchase Power Demand		F017	-	-	-	-	-	-
Purchase Power Energy		F018	-	-		-	-	-
Purchased Power Expenses	OMPP		-	-	-	-	-	-
Intallations on Customer Premises - Plant in Service	F013		-	-	-	-	-	-
Intallations on Customer Premises - Accum Depr	F010		-	-	-	-	-	-
Generators -Energy	F015		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Generators - Demand	F016		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Constants Domana	Energy		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	E10.37		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

#### BIP METHODOLOGY

					Distribution	Distribution	Distribution St. &	Customer Accounts	Customer	
		Functional	Distribution Lir	o Trans	Services	Meters	Cust. Lighting		Service & Info.	Sales Expense
Description	Name	Vector	Demand	Customer	Customer	Motoro	oust. Eighting	Expense		
External Functional Vectors										
Station Equipment	F001		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Poles, Towers and Fixtures	F002		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Overhead Conductors and Devices	F003		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Underground Conductors and Devices	F004		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Line Transformers	F005		0.588459	0.411541	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Services	F006		0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Meters	F007		0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000
Street Lighting	F008		0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000
Meter Reading	F009		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000
Billing	F010		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000
Transmission	F011		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Load Management	F012		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000
Production Plant	F017		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Provar	PROVAR		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Fuel	F018		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Steam Generation Operation Labor	F019		-	-	-	-	-	-	-	-
PROFIX	PROFIX		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Steam Generation Maintenance Labor	F020		-	-	-	-	-	-	-	-
Hydraulic Generation Operation Labor	F021		-	-	-	-	-	-	-	-
Hydraulic Generation Maintenance Labor	F022		-	-	-	-	-	-	-	-
Distribution Operation Labor	F023		112,092.54	78,392.18	38,931.02	3,781,629.90	123,738.72	-	-	-
Distribution Maintenance Labor	F024		45,733.31	31,983.69	-	-	6,800.00	-	-	-
Customer Accounts Expense	F025		0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000
Customer Service Expense	F026		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000
Customer Advances	F027		-	-	-	-	-	-	-	-
Purchase Power Demand		F017	-	-	-	-	-	-	-	-
Purchase Power Energy		F018	-	-	-	-	-	-	-	-
Purchased Power Expenses	OMPP		-	-	-	-	-	-	-	-
Intallations on Customer Premises - Plant in Service	F013		-	-	-	-	-	1.00000	-	-
Intallations on Customer Premises - Accum Depr	F014		-	-	-	-	-	1.00000	-	-
Generators -Energy	F015		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Generators - Demand	F016		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	Energy		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

#### BIP METHODOLOGY

		Functional	Total		duction Demand		Production Energy	Transmission Demand
Description	Name	Vector	System	Base	Winter Peak	Summer Peak		Demand
Internally Generated Functional Vectors								
Total Prod, Trans, and Dist Plant		PT&D	1.000000	0.192839	0.202011	0.166052	-	0.107586
Total Distribution Plant		PDIST	1.000000	-	-	-	-	-
Total Transmission Plant		PTRAN	1.000000	-	-	-	-	1.000000
Operation and Maintenance Expenses Less Purchase Power		OMLPP	1.000000	0.043769	0.045851	0.037689	0.677269	0.035068
Total Plant in Service		TPIS	1.000000	0.192717	0.201883	0.165947	-	0.107508
Total Operation and Maintenance Expenses (Labor)		TLB	1.000000	0.116789	0.122343	0.100566	0.251203	0.060229
Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service		OMSUB2	1.000000	0.037456	0.039238	0.032253	0.745112	0.027629
Total Steam Power Operation Expenses (Labor)		LBSUB1	1.000000	0.290775	0.304605	0.250384	0.154235	-
Total Steam Power Generation Maintenance Expense (Labor)		LBSUB2	1.000000	-	-	-	1.000000	-
Total Hydraulic Power Operation Expenses (Labor)		LBSUB3	1.000000	0.343801	0.360154	0.296045	-	-
Total Hydraulic Power Generation Maint. Expense (Labor)		LBSUB4	1.000000	0.131666	0.137928	0.113377	0.617029	-
Total Other Power Generation Expenses (Labor)		LBSUB5	1.000000	0.343801	0.360154	0.296045	-	-
Total Transmission Labor Expenses		LBTRAN	1.000000	-	-	-	-	1.0000000
Total Distribution Operation Labor Expense		LBDO	1.000000	-	-	-	-	-
Total Distribution Maintenance Labor Expense		LBDM	1.000000	-	-	-	-	-
Sub-Total Labor Exp		LBSUB7	1.000000	0.116328	0.121861	0.100169	0.252725	0.059943
Total General Plant		PGP	1.000000	0.192839	0.202011	0.166052	-	0.107586
Total Production Plant		PPRTL	1.000000	0.343801	0.360154	0.296045	-	-
Total Intangible Plant		PINT	1.000000	0.192839	0.202011	0.166052	-	0.107586

#### BIP METHODOLOGY

			· · · · · · · · · · · · · · · · · · ·					
			Distribution					
		Functional	Substation	Distribu	tion Primary Line	s	Distribution Se	ec. Lines
Description	Name	Vector	General	Specific	Demand	Customer	Demand	Customer
Internally Generated Functional Vectors								
Total Prod, Trans, and Dist Plant		PT&D	0.037143	-	0.063519	0.101082	0.017462	0.026536
Total Distribution Plant		PDIST	0.112042	-	0.191604	0.304913	0.052673	0.080044
Total Transmission Plant		PTRAN	-	-	-	-	-	-
Operation and Maintenance Expenses Less Purchase Power		OMLPP	0.012964	-	0.022527	0.033721	0.007576	0.011129
Total Plant in Service		TPIS	0.037192	-	0.063602	0.101214	0.017484	0.026570
Total Operation and Maintenance Expenses (Labor)		TLB	0.037536	-	0.035671	0.053916	0.011657	0.017202
Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service		OMSUB2	0.008178	-	0.018219	0.027128	0.006220	0.009116
Total Steam Power Operation Expenses (Labor)		LBSUB1	-	-	-	-	-	-
Total Steam Power Generation Maintenance Expense (Labor)		LBSUB2	-	-	-	-	-	-
Total Hydraulic Power Operation Expenses (Labor)		LBSUB3	-	-	-	-	-	-
Total Hydraulic Power Generation Maint. Expense (Labor)		LBSUB4	-	-	-	-	-	-
Total Other Power Generation Expenses (Labor)		LBSUB5	-	-	-	-	-	-
Total Transmission Labor Expenses		LBTRAN	-	-	-	-	-	-
Total Distribution Operation Labor Expense		LBDO	0.185545	-	0.100802	0.153219	0.032385	0.047918
Total Distribution Maintenance Labor Expense		LBDM	0.060835	-	0.274645	0.412137	0.091693	0.134853
Sub-Total Labor Exp		LBSUB7	0.037538	-	0.035502	0.053630	0.011622	0.017145
Total General Plant		PGP	0.037143	-	0.063519	0.101082	0.017462	0.026536
Total Production Plant		PPRTL	-	-	-	-	-	-
Total Intangible Plant		PINT	0.037143	-	0.063519	0.101082	0.017462	0.026536

#### BIP METHODOLOGY

	Functio	onal Distribution I	Line Trans.	Distribution Services	Distribution Meters	Distribution St. & Cust. Lighting	Customer Accounts Expense	Customer Service & Info.	Sales Expense
Description	Name Vector	Demand	Customer	Customer			-	-	
Internally Generated Functional Vectors									
Total Prod, Trans, and Dist Plant	PT&D	0.024137	0.016880	0.008383	0.009724	0.026645	-	_	-
Total Distribution Plant	PDIST	0.072809	0.050919	0.025288	0.029333	0.080374	-	_	
Total Transmission Plant	PTRAN		0.000010	0.020200	0.020000	-	_	-	-
Operation and Maintenance Expenses Less Purchase Power	OMLPP		0.001240	0.000468	0.027183	0.002068	0.032588	0.007118	-
Total Plant in Service	TPIS	0.024169	0.016902	0.008394	0.009737	0.026680	-	-	
Total Operation and Maintenance Expenses (Labor)	TLB	0.003367	0.002354	0.000867	0.079414	0.002886	0.081598	0.022402	
Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service	OMSUE		0.000787	0.000276	0.017880	0.001472	0.023416	0.004496	
Total Steam Power Operation Expenses (Labor)	LBSUB		-	-	-	-	-	-	
Total Steam Power Generation Maintenance Expense (Labor)	LBSUB		-	-	-	-	-	-	-
Total Hydraulic Power Operation Expenses (Labor)	LBSUB		-	-	-	-	-	-	-
Total Hydraulic Power Generation Maint. Expense (Labor)	LBSUB		-	-	-	-	-	-	-
Total Other Power Generation Expenses (Labor)	LBSUB		-	-	-	-	-	-	-
Total Transmission Labor Expenses	LBTRA		-	-	-	-	-	-	-
Total Distribution Operation Labor Expense	LBDO	0.013016	0.009103	0.004521	0.439123	0.014369	-	-	-
Total Distribution Maintenance Labor Expense	LBDM	0.013981	0.009778	-	-	0.002079	-	-	-
Sub-Total Labor Exp	LBSUB		0.002266	0.000822	0.079836	0.002742	0.082092	0.022538	-
Total General Plant	PGP	0.024137	0.016880	0.008383	0.009724	0.026645	-	-	-
Total Production Plant	PPRTL	-	-	-	-	-	-	-	-
Total Intangible Plant	PINT	0.024137	0.016880	0.008383	0.009724	0.026645	-	-	-

# Exhibit WSS-22

# Electric Cost of Service Study Functional Assignment and Classification LOLP Methodology

#### LOLP METHODOLOGY

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										Dreduction	Tronomionion
		Functional	Total		Pro	duction Demand				Production Energy	Transmission Demand
Description	Name	Vector	System	I	Base	Winter Peak	(	Summer Peak		Energy	Demand
Plant in Service											
Intangible Plant											
301.00 ORGANIZATION	P301	PT&D	\$ 2,240		432	453		372		-	241
302.00 FRANCHISE AND CONSENTS	P301	PT&D PT&D			-	-		-		-	-
303.00 SOFTWARE - COMMON 301.00 ORGANIZATION - COMMON	P302 P301	PT&D PT&D			-	-		-		-	-
302.00 FRANCHISE AND CONSENTS - COMMON	P301	PT&D			-	-		-		-	-
Total Intangible Plant	PINT		\$ 2,240	\$	432 \$	5 453	\$	372	\$	- :	\$ 241
Steam Production Plant											
Total Steam Production Plant	PSTPR	F017	\$ 1,762,102,621		605,813,181	634,627,651		521,661,789		-	-
Hydraulic Production Plant											
Total Hydraulic Production Plant	PHDPR	F017	\$ 146,463,608		50,354,379	52,749,400		43,359,829		-	-
Other Production Plant											
Total Other Production Plant	POTPR	F017	\$ 396,983,699		136,483,514	142,975,119		117,525,066		-	-
Total Production Plant	PPRTL		\$ 2,305,549,928	\$	792,651,074 \$	830,352,170	\$	682,546,684	\$	-	\$-
Transmission											
Total Transmission Plant	PTRAN	F011	\$ 442,223,222		-	-		-		-	442,223,222
Total Transmission Plant	PTRTL		\$ 442,223,222	\$	- \$	-	\$	-	\$	-	\$ 442,223,222
Distribution											
TOTAL ACCTS 360-362	P362	F001	\$ 152,675,045		-	-		-		-	-
364 & 365-OVERHEAD LINES	P365	F003	528,239,740		-	-		-		-	-
366 & 367-UNDERGROUND LINES	P367	F004	329,188,953		-	-		-		-	-
368-TRANSFORMERS	P368	F005	168,599,875		-	-		-		-	-
369-SERVICES	P369	F006	34,458,226		-	-		-		-	-
370-METERS	P370	F007	39,970,580		-	-		-		-	-
371-CUSTOMER INSTALLATION	P371	F008	400 500 0 10		-	-		-		-	-
373-STREET LIGHTING 374-ASSET RETIRE OBLIGATIONS DIST PLANT	P373 P374	F008 F003	109,522,342		-	-		-		-	-
Total Distribution Plant	PDIST		\$ 1,362,654,761	\$	- \$	s -	\$	_	\$	_	\$ -
								000 540 65 5			
Total Prod, Trans, and Dist Plant	PT&D		\$ 4,110,427,912	\$	792,651,074 \$	830,352,170	\$	682,546,684	\$	-	\$ 442,223,222

#### LOLP METHODOLOGY

			_		1								1
				Distributio	n								
		Functional		Substation	n			tion Primary Li	nes		Distribution	Sec.	Lines
Description	Name	Vector		Genera		Specifi	C	Demand		Customer	Demand		Customer
Plant in Service													
<u>Flant in Service</u>													
Intangible Plant													
301.00 ORGANIZATION	P301	PT&D		83		-		142		226	39		59
302.00 FRANCHISE AND CONSENTS	P301	PT&D		-		-		-		-	-		-
303.00 SOFTWARE - COMMON	P302	PT&D		-		-		-		-	-		-
301.00 ORGANIZATION - COMMON	P301	PT&D		-		-		-		-	-		-
302.00 FRANCHISE AND CONSENTS - COMMON	P301	PT&D		-		-		-		-	-		-
Total Intangible Plant	PINT		\$	83	\$	-	\$	142	\$	226	\$ 39	\$	59
Steam Production Plant													
Total Steam Production Plant	PSTPR	F017		-		-		-		-	-		-
Hydraulic Production Plant													
Total Hydraulic Production Plant	PHDPR	F017		-		-		-		-	-		-
Other Production Plant													
Total Other Production Plant	POTPR	F017		-		-		-		-	-		-
Total Production Plant	PPRTL				\$	-	\$	-					
Transmission													
Total Transmission Plant	PTRAN	F011		-		-		-		-	-		-
Total Transmission Plant	PTRTL		\$	-	\$	-	\$	-	\$	-	\$ -	\$	-
Distribution													
TOTAL ACCTS 360-362	P362	F001		152,675,045		-		-		-	-		-
364 & 365-OVERHEAD LINES	P365	F003		-		-		157,757,520		228,808,322	57,817,118		83,856,780
366 & 367-UNDERGROUND LINES	P367	F004		-		-		103,332,511		186,682,956	13,957,513		25,215,973
368-TRANSFORMERS	P368	F005		-		-		-		-	-		-
369-SERVICES	P369	F006		-		-		-		-	-		-
370-METERS	P370	F007		-		-		-		-	-		-
371-CUSTOMER INSTALLATION	P371	F008		-		-		-		-	-		-
373-STREET LIGHTING	P373	F008		-		-		-		-	-		-
374-ASSET RETIRE OBLIGATIONS DIST PLANT	P374	F003		-		-		-		-	-		-
Total Distribution Plant	PDIST		\$	152,675,045	\$	-	\$	261,090,031	\$	415,491,278	\$ 71,774,631	\$	109,072,753
Total Prod, Trans, and Dist Plant	PT&D		\$	152,675,045	\$	-	\$	261,090,031	\$	415,491,278	\$ 71,774,631	\$	109,072,753

#### LOLP METHODOLOGY

		Functional		Distribution Lin		Distribut Servi	ces	Distribution Di Meters	istribution St. & Cust. Lighting	Customer Accounts Expense	Customer Service & Info.	Sales Expense
Description	Name	Vector		Demand	Customer	Custor	ner					
Plant in Service												
Intangible Plant 301.00 ORGANIZATION 302.00 FRANCHISE AND CONSENTS 303.00 SOFTWARE - COMMON 301.00 ORGANIZATION - COMMON 302.00 FRANCHISE AND CONSENTS - COMMON Total Intangible Plant	P301 P301 P302 P301 P301 PINT	PT&D PT&D PT&D PT&D PT&D	\$	54 - - - - 54 \$	38 - - - - 38	-		22 - - - - 22 \$	60 - - - - 60	- - - - - -	- - - - \$	- - - - \$
			Ψ	Ŭ, Ŷ	00	Ŷ	τοφ	22 ψ		Ŷ	Ŷ	Ŷ
Steam Production Plant												
Total Steam Production Plant	PSTPR	F017		-	-	-		-	-	-	-	-
Hydraulic Production Plant												
Total Hydraulic Production Plant	PHDPR	F017		-	-	-		-	-	-	-	-
Other Production Plant												
Total Other Production Plant	POTPR	F017		-	-	-		-	-	-	-	-
Total Production Plant	PPRTL		\$	- \$	-			\$	-	\$-	\$-	\$-
Transmission												
Total Transmission Plant	PTRAN	F011		-	-	-		-	-	-	-	-
Total Transmission Plant	PTRTL		\$	- \$	-	\$ -	\$	- \$	-	\$-	\$-	\$-
Distribution TOTAL ACCTS 360-362 364 & 365-OVERHEAD LINES 366 & 367-UNDERGROUND LINES 369-SERVICES 370-METERS 371-CUSTOMER INSTALLATION 373-STREET LIGHTING 374-ASSET RETIRE OBLIGATIONS DIST PLANT	P362 P365 P367 P368 P369 P370 P371 P373 P374	F001 F003 F004 F005 F006 F007 F008 F008 F008 F003		- - - - - - - - - - - - - -	- - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -		- - - 39,970,580 - - - -	- - - 109,522,342	- - - - - - -	- - - - - - - -	- - - - - - - -
Total Distribution Plant	PDIST		\$	99,214,195 \$	69,385,680	\$ 34,458,2	26 \$	39,970,580 \$	109,522,342	\$ -	\$-	\$ -
Total Prod, Trans, and Dist Plant	PT&D		\$	99,214,195 \$	69,385,680	\$ 34,458,2	26 \$	39,970,580 \$	109,522,342	\$ -	\$ -	\$-

#### LOLP METHODOLOGY

		Functional	Total	Produ	ction Demand		Production Energy	Transmission Demand
Description	Name	Vector	System	Base	Winter Peak	Summer Peak		Demand
Plant in Service (Continued)								
General Plant								
Total General Plant	PGP	PT&D	\$ 15,832,612	3,053,146	3,198,364	2,629,044	-	1,703,362
TOTAL COMMON PLANT 106.00 COMPLETED CONSTR NOT CLASSIFIED 105.00 PLANT HELD FOR FUTURE USE - DIST	PCOM P106 P105	PT&D PT&D PDIST	\$ 202,237,020 - 2,915,340	38,999,198 - -	40,854,128 - -	33,581,956 - -	- - -	21,757,809 - -
105.00 PLANT HELD FOR FUTURE USE - PROD PROPERTY HELD UNDER CAPITAL LEASE OTHER	P105	F017 F017 PDIST	\$ 211,410 - -	72,683 0 -	76,140 0 -	62,587 0 -	- 0 -	- 0 -
Total Plant in Service	TPIS		\$ 4,331,626,534	\$ 834,776,533 \$	874,481,255 \$	718,820,643	\$ - \$	465,684,635
Construction Work in Progress (CWIP)								
CWIP Production CWIP Transmission CWIP Distribution CWIP General & Common	CWIP1 CWIP2 CWIP3 CWIP4	F017 F011 PDIST PT&D	\$ 67,084,848 6,861,294 30,927,921 18,667,667	23,063,858 - - 3,599,855	24,160,851 - - 3,771,076	19,860,138 - - 3,099,812	- - -	6,861,294 - 2,008,374
Total Construction Work in Progress	TCWIP		\$ 123,541,729	\$ 26,663,714 \$	27,931,928 \$	22,959,950	\$-\$	8,869,668
Total Utility Plant			\$ 4,455,168,263	\$ 861,440,246 \$	902,413,182 \$	741,780,593	\$ - \$	474,554,303

#### LOLP METHODOLOGY

Description	Name	Functional Vector	Distribution Substation General	Distrib Specific	ution Primary Line Demand	es Customer	Distribution S	ec. Lines Customer
Beechpiton	Humo	100101	General	opcomo	Domana	ouotoinioi	Domana	Guotomor
Plant in Service (Continued)								
General Plant								
Total General Plant	PGP	PT&D	588,076	-	1,005,671	1,600,396	276,463	420,128
TOTAL COMMON PLANT	PCOM	PT&D	7,511,760	-	12,845,881	20,442,572	3,531,381	5,366,485
106.00 COMPLETED CONSTR NOT CLASSIFIED	P106	PT&D	-	-	-	-	-	-
105.00 PLANT HELD FOR FUTURE USE - DIST	P105	PDIST	326,642	-	558,591	888,925	153,559	233,356
105.00 PLANT HELD FOR FUTURE USE - PROD	P105	F017	-	-	-	-	-	-
PROPERTY HELD UNDER CAPITAL LEASE		F017	0	0	0	0	0	0
OTHER		PDIST	-	-	-	-	-	-
Total Plant in Service	TPIS		\$ 161,101,605	\$ - \$	275,500,316 \$	438,423,398 \$	75,736,072 \$	115,092,782
Construction Work in Progress (CWIP)								
CWIP Production	CWIP1	F017	-	-	-	-	-	-
CWIP Transmission	CWIP2	F011	-	-	-	-	-	-
CWIP Distribution	CWIP3	PDIST	3,465,237	-	5,925,912	9,430,328	1,629,055	2,475,604
CWIP General & Common	CWIP4	PT&D	693,380	-	1,185,750	1,886,970	325,967	495,358
Total Construction Work in Progress	TCWIP		\$ 4,158,617	\$-\$	7,111,662 \$	11,317,298 \$	1,955,023 \$	2,970,962
Total Utility Plant			\$ 165,260,222	\$ - \$	282,611,978 \$	449,740,695 \$	77,691,095 \$	118,063,744

## LOLP METHODOLOGY

#### 12 Months Ended June 30, 2016

		Functional	Distribution Li		Distribution Services	Distribution I Meters	Distribution St. & Cust. Lighting	Customer Accounts Expense	Customer Service & Info.	Sales Expense
Description	Name	Vector	Demand	Customer	Customer					
Plant in Service (Continued)										
General Plant										
Total General Plant	PGP	PT&D	382,155	267,261	132,727	153,959	421,860	-	-	-
TOTAL COMMON PLANT 106.00 COMPLETED CONSTR NOT CLASSIFIED	PCOM P106	PT&D PT&D	4,881,434	3,413,842	1,695,378	1,966,591	5,388,605	-	-	-
105.00 COMPLETED CONSTRINCT CLASSIFIED	P106 P105	PDIST	- 212,264	- 148.448	- 73,722	- 85,515	- 234,318	-	-	-
105.00 PLANT HELD FOR FUTURE USE - PROD	P105	F017	-	-	-	-	-	-	-	-
PROPERTY HELD UNDER CAPITAL LEASE		F017	0	0	0	0	0	0	0	0
OTHER		PDIST	-	-	-	-	-	-	-	-
Total Plant in Service	TPIS		\$ 104,690,102 \$	73,215,269 \$	36,360,072 \$	42,176,668	\$ 115,567,185 \$	\$ -	\$ - 9	5 -
Construction Work in Progress (CWIP)										
CWIP Production	CWIP1	F017	-	-	-	-	-	-	-	-
CWIP Transmission	CWIP2	F011	-	-	-	-	-	-	-	-
CWIP Distribution	CWIP3	PDIST	2,251,846	1,574,834	782,092	907,205	2,485,808	-	-	-
CWIP General & Common	CWIP4	PT&D	450,585	315,118	156,493	181,528	497,400	-	-	-
Total Construction Work in Progress	TCWIP		\$ 2,702,431 \$	1,889,952 \$	938,585 \$	1,088,733	\$ 2,983,208 \$	ş -	\$ - 5	6 -
Total Utility Plant			\$ 107,392,533 \$	75,105,221 \$	37,298,657 \$	43,265,400	\$ 118,550,393	\$-	\$ - 5	s -

\$ 1,356,429,546

#### LOLP METHODOLOGY

											Production		Transmission
Description	Name	Functional Vector		Total System		P Base		uction Demand Winter Peak	Summer Peak		Energy		Demand Demand
· ·				•7••••									
Rate Base													
Utility Plant													
Plant in Service Construction Work in Progress (CWIP)			\$	4,331,626,534 123,541,729	\$	834,776,533 26,663,713.60	\$	874,481,255 27,931,927.66	\$ 718,820,643 22,959,950.35	\$	-	\$	465,684,635 8,869,667.54
			•		•		•			•		•	
Total Utility Plant	TUP		\$	4,455,168,263	\$	861,440,246	\$	902,413,182	\$ 741,780,593	\$	-	\$	474,554,303
Less: Accumulated Provision for Depreciation and RWIP		F017	¢	002 042 429		210 776 497		225 559 040	067 607 611				
Production Transmission	ADEPREPA ADEPRTP	F017 PTRAN	\$	903,942,138 159,969,049		310,776,487		325,558,040	267,607,611 -		-		- 159,969,049
Distribution	ADEPRD11	PDIST		508,037,556		-		-	-		-		-
General & Common Plant	ADEPRD12	PT&D		71,121,012		13,714,909		14,367,236	11,809,819		-		7,651,603
Intangible Plant	ADEPRGP	PT&D		40,982,991		7,903,122		8,279,020	6,805,327		-		4,409,183
Total Accumulated Depreciation	TADEPR		\$	1,684,052,746	\$	332,394,518	\$	348,204,296	\$ 286,222,757	\$	-	\$	172,029,835
Net Utility Plant	NTPLANT		\$	2,771,115,517	\$	529,045,729	\$	554,208,886	\$ 455,557,836	\$	-	\$	302,524,467
Working Capital													
Cash Working Capital - Operation and Maintenance Expenses	CWC	OMLPP	\$	75,842,724		3,319,543		3,477,432	2,858,437		51,365,920		2,659,628
Materials and Supplies	M&S PREPAY	TPIS TPIS		36,896,266		7,110,525		7,448,725 2,820,741	6,122,826		-		3,966,645
Prepayments Fuel Stock	PREPAT	F017		13,972,166 36,289,311		2,692,669 12,476,312		13,069,727	2,318,640 10,743,272		-		1,502,120
Total Working Capital	TWC	1017	\$	163,000,467	\$	25,599,049	\$	26,816,625	\$ 22,043,175	\$	51,365,920	\$	- 8,128,393
Deferred Debits													
Service Pension Cost	PENSCOST	TLB	\$	-		-		-	-		-		-
Other Deferred Debits	DDEBPP	OMSUB2		-		-		-	-		-		-
Total Deferred Debits			\$	-	\$	-	\$	-	\$ -	\$	-	\$	-
Less: Customer Advances Accumulated Deferred Income Taxes	CSTDEP	F027	\$	6,724,404		-		-	-		-		-
Accumulated Deferred Income Taxes	DIT	TPIS	\$	546,457,652		105,311,485		110,320,447	90,683,035		-		58,748,586
FAS 109 Deferred Income Taxes	DIT	TPIS	\$	-		-		-	-		-		-
Asset Retirement Obligation-Net Assets	DIT	TPIS	\$	-		-		-	-		-		-
Asset Retirement Obligation-Regulatory Liabilities	DIT	TPIS	\$	-		-		-	-		-		-
Total Accumulated Deferred Income Tax			\$	546,457,652	\$	105,311,485	\$	110,320,447	\$ 90,683,035	\$	-	\$	58,748,586
Investment Tax Credits													
Total Production Plant	DIT	F017	\$	-		-		-	-		-		-
Total Transmission Plant Total Distribution Plant	DIT DIT	PTRAN PDIST		-		-		-	-		-		-
Total Distribution Plant Total General Plant	DIT	PDIST PT&D		-		-		-	-		-		-
		1100		-		-		-			-		-
Total Investment Tax Credit			\$	-	\$	-	\$	-	\$ -	\$	-	\$	-
Net Rate Base	RB		\$	2,380,933,927	\$	449,333,293	\$	470,705,064	\$ 386,917,976	\$	51,365,920	\$	251,904,274

## LOLP METHODOLOGY

			_								
				Distribution							
		Functional		Substation	Distrib	ution Primary L	ine		Distribution	1 Se	Lines
Description	Name	Vector	I	General	 Specific	Demand		Customer	Demand		Customer
2000.19.00				Contra	opeenie	20114114		0401011101	201114114		0401011101
Rate Base											
Utility Plant											
Plant in Service			\$	161,101,605	\$ - \$	275,500,316	\$	438,423,398	\$ 75,736,072	\$	115,092,782
Construction Work in Progress (CWIP)				4,158,616.59	-	7,111,662.12		11,317,297.60	1,955,022.64		2,970,962.02
Total Utility Plant	TUP		\$	165,260,222	\$ - \$	282,611,978	\$	449,740,695	\$ 77,691,095	\$	118,063,744
Less: Accumulated Provision for Depreciation and RWIP											
Production	ADEPREPA	F017		-	-	-		-	-		-
Transmission	ADEPRTP	PTRAN		-	-	-		-	-		-
Distribution	ADEPRD11	PDIST		56,921,723	-	97,342,001		154,907,303	26,759,682		40,665,513
General & Common Plant	ADEPRD12	PT&D		2,641,672	-	4,517,531		7,189,072	1,241,886		1,887,240
Intangible Plant	ADEPRGP	PT&D		1,522,245	-	2,603,196		4,142,653	715,628		1,087,509
Total Accumulated Depreciation	TADEPR		\$	61,085,641	\$ - \$	104,462,729	\$	166,239,027	\$ 28,717,197	\$	43,640,262
Net Utility Plant	NTPLANT		\$	104,174,581	\$ - \$	178,149,250	\$	283,501,669	\$ 48,973,898	\$	74,423,481
Working Capital	014/0	014 00		000 000		4 700 504		0 5 5 7 4 5 0	574 507		044.000
Cash Working Capital - Operation and Maintenance Expenses	CWC	OMLPP		983,238	-	1,708,534		2,557,456	574,567		844,069
Materials and Supplies	M&S	TPIS		1,372,244	-	2,346,678		3,734,437	645,111		980,346
Prepayments	PREPAY	TPIS		519,652	-	888,658		1,414,186	244,296		371,245
Fuel Stock		F017		-	-	-		-	-		-
Total Working Capital	TWC		\$	2,875,134	\$ - \$	4,943,870	\$	7,706,078	\$ 1,463,973	\$	2,195,660
Deferred Debits											
Service Pension Cost	PENSCOST	TLB		-	-	-		-	-		-
Other Deferred Debits	DDEBPP	OMSUB2		-	-	-		-	-		-
Total Deferred Debits			\$	-	\$ - \$		\$		\$ 	\$	
Less: Customer Advances	CSTDEP	F027		-	-	2,047,604		3,258,500	562,894		855,406
Accumulated Deferred Income Taxes				~~ ~~ ~~~							
Accumulated Deferred Income Taxes	DIT	TPIS		20,323,822	-	34,755,826		55,309,436	9,554,507		14,519,565
FAS 109 Deferred Income Taxes	DIT	TPIS		-	-	-		-	-		-
Asset Retirement Obligation-Net Assets	DIT	TPIS		-	-	-		-	-		-
Asset Retirement Obligation-Regulatory Liabilities	DIT	TPIS		-	-	-		-	-		-
Total Accumulated Deferred Income Tax			\$	20,323,822	\$ - \$	34,755,826	\$	55,309,436	\$ 9,554,507	\$	14,519,565
Investment Tax Credits											
Total Production Plant	DIT	F017		-	-	-		-	-		-
Total Transmission Plant	DIT	PTRAN		-	-	-		-	-		-
Total Distribution Plant	DIT	PDIST		-	-	_		_	-		_
Total General Plant	DIT	PT&D		-	-	-		-	-		-
	2										
Total Investment Tax Credit			\$	-	\$ - \$	-	\$	-	\$ -	\$	-
Net Rate Base	RB		\$	86,725,894	\$ - \$	146,289,690	\$	232,639,811	\$ 40,320,470	\$	61,244,172

## LOLP METHODOLOGY

			Γ					Distribution				tribution St. &		Customer Accounts		Customer		
		Functional		Distribution	Line			Services		Meters	(	Cust. Lighting		Expense	Ser	vice & Info.		Sales Expense
Description	Name	Vector		Demand		Customer		Customer										
Rate Base																		
Utility Plant																		
Plant in Service			\$	- ,, -	\$	73,215,269	\$	36,360,072	\$	42,176,668	\$	115,567,185	\$	-	\$	-	\$	-
Construction Work in Progress (CWIP)				2,702,431.13		1,889,951.57		938,585.29		1,088,732.72		2,983,208.08		-		-		-
Total Utility Plant	TUP		\$	107,392,533	\$	75,105,221	\$	37,298,657	\$	43,265,400	\$	118,550,393	\$	-	\$	-	\$	-
Less: Accumulated Provision for Depreciation and RWIP																		
Production Transmission	ADEPREPA ADEPRTP	F017 PTRAN		-		-		-		-		-		-		-		-
Distribution	ADEPRD11	PDIST		36,989,954		25,869,011		- 12,847,035		- 14,902,201		40.833.133		-		-		-
General & Common Plant	ADEPRD12	PT&D		1,716,662		1,200,551		596,216		691,594		1,895,019		-		-		-
Intangible Plant	ADEPRGP	PT&D		989,214		691,809		343,565		398,526		1,091,992		-		-		-
Total Accumulated Depreciation	TADEPR		\$	39,695,830	\$	27,761,372	\$	13,786,816	\$	15,992,322	\$	43,820,144	\$	-	\$	-	\$	-
Net Utility Plant	NTPLANT		\$	67,696,703	\$	47,343,849	\$	23,511,840	\$	27,273,078	\$	74,730,249	\$	-	\$	-	\$	-
Working Capital																		
Cash Working Capital - Operation and Maintenance Expenses	CWC	OMLPP		134,472		94,043		35,516		2,061,649		156,821		2,471,536		539,863		-
Materials and Supplies Prepayments	M&S PREPAY	TPIS TPIS		891,738 337,690		623,639 236,164		309,711 117,284		359,256 136,046		984,387 372,775		-		-		-
Fuel Stock	FILEFAT	F017		337		-		-		-		- 572,775		-		-		-
Total Working Capital	TWC		\$	1,363,899	\$	953,846	\$	462,510	\$	2,556,951	\$	1,513,984	\$	2,471,536	\$	539,863	\$	-
Deferred Debits																		
Service Pension Cost	PENSCOST	TLB		-		-		-		-		-		-		-		-
Other Deferred Debits	DDEBPP	OMSUB2		-		-		-		-		-		-		-		-
Total Deferred Debits			\$	_	\$	-	\$	-	\$	-	\$	_	\$	_	\$	-	\$	-
Less: Customer Advances	CSTDEP	F027	Ψ	-	Ψ	-	Ψ	-	Ψ	-	Ψ	-	Ψ	-	Ψ	-	Ψ	-
Accumulated Deferred Income Taxes																		
Accumulated Deferred Income Taxes FAS 109 Deferred Income Taxes	DIT DIT	TPIS TPIS		13,207,211		9,236,494		4,587,016 -		5,320,810		14,579,413		-		-		-
Asset Retirement Obligation-Net Assets	DIT	TPIS		-		-		-		-		-		-		-		-
Asset Retirement Obligation-Regulatory Liabilities	DIT	TPIS		-		-		-		-		-		-		-		-
Total Accumulated Deferred Income Tax			\$	13,207,211	\$	9,236,494	\$	4,587,016	\$	5,320,810	\$	14,579,413	\$	-	\$	-	\$	-
Investment Tax Credits																		
Total Production Plant	DIT	F017		-		-		-		-		-		-		-		-
Total Transmission Plant	DIT	PTRAN		-		-		-		-		-		-		-		-
Total Distribution Plant	DIT	PDIST		-		-		-		-		-		-		-		-
Total General Plant	DIT	PT&D		-		-		-		-		-		-		-		-
Total Investment Tax Credit			\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Net Rate Base	RB		\$	55,853,391	\$	39,061,200	\$	19,387,335	\$	24,509,219	\$	61,664,820	\$	2,471,536	\$	539,863	\$	-

## LOLP METHODOLOGY

									Production	Transmission
		Functional		Total		Produ	uction Demand		Energy	Demand
Description	Name	Vector		System		Base	Winter Peak	Summer Peak		Demand
Operation and Maintenance Expenses										
Steam Power Generation Operation Expenses										
500 OPERATION SUPERVISION & ENGINEERING 501 FUEL	OM500 OM501	LBSUB1 Energy	\$	4,922,985 293,912,722		1,431,481	1,499,567	1,232,639	759,298 293,912,722	-
502 STEAM EXPENSES	OM502	PROFIX		18,526,106		6,369,300	6,672,244	5,484,562	-	_
504 STEAM TRANSFER EXPENSES	OM504	PROFIX		-		-	-	-	-	-
505 ELECTRIC EXPENSES	OM505	PROFIX		2,617,219		899,803	942,601	774,815	-	-
506 MISC. STEAM POWER EXPENSES	OM506	PROFIX		9,946,165		3,419,505	3,582,147	2,944,513	-	-
507 RENTS 509 ALLOWANCES	OM507 OM509	PROFIX PROFIX		-		-	-	-	-	-
Total Steam Power Operation Expenses			\$	329,925,198	\$	12,120,089 \$	12,696,560	10,436,529	\$ 294,672,020	\$ -
			Ψ	525,525,150	Ψ	12, 120,003 φ	12,000,000	10,400,020	φ 234,072,020	φ -
Steam Power Generation Maintenance Expenses	014540		•	4 054 045					4 954 945	
510 MAINTENANCE SUPERVISION & ENGINEERING 511 MAINTENANCE OF STRUCTURES	OM510 OM511	LBSUB2 PROFIX	\$	4,351,845 4,128,301		- 1,419,315	- 1,486,823	- 1,222,163	4,351,845	-
512 MAINTENANCE OF BOILER PLANT	OM512	Energy		34,257,481		-	-	1,222,105 -	- 34,257,481	-
513 MAINTENANCE OF ELECTRIC PLANT	OM513	Energy		15,421,014		-	-	-	15,421,014	-
514 MAINTENANCE OF MISC STEAM PLANT	OM514	Energy		1,072,820		-	-	-	1,072,820	-
Total Steam Power Generation Maintenance Expense			\$	59,231,461	\$	1,419,315 \$	1,486,823	1,222,163	\$ 55,103,160	\$-
Total Steam Power Generation Expense			\$	389,156,659	\$	13,539,404 \$	14,183,382	11,658,693	\$ 349,775,180	\$-
Hydraulic Power Generation Operation Expenses										
535 OPERATION SUPERVISION & ENGINEERING	OM535	LBSUB3	\$	121,406		41,740	43,725	35,942	-	-
536 WATER FOR POWER	OM536	PROFIX		40,614		13,963	14,627	12,024	-	-
537 HYDRAULIC EXPENSES	OM537	PROFIX		-		-	-	-	-	-
538 ELECTRIC EXPENSES	OM538 OM539	PROFIX PROFIX		180,161		61,940	64,886	53,336	-	-
539 MISC. HYDRAULIC POWER EXPENSES 540 RENTS	0101539	PROFIX		348,792 545,400		119,915 187,509	125,619 196,428	103,258 161,463	-	-
		FROM A							-	-
Total Hydraulic Power Operation Expenses			\$	1,236,373	\$	425,067 \$	445,284	366,022	\$ -	\$ -
Hydraulic Power Generation Maintenance Expenses										
541 MAINTENANCE SUPERVISION & ENGINEERING	OM541	LBSUB4	\$	-		-	-	-	-	-
542 MAINTENANCE OF STRUCTURES 543 MAINT. OF RESERVES, DAMS, AND WATERWAYS	OM542 OM543	PROFIX PROFIX		244,992 190,785		84,229 65,592	88,235 68,712	72,529 56,481	-	-
544 MAINTENANCE OF ELECTRIC PLANT	OM543 OM544	Energy		371,119		05,592	00,712	50,461	371.119	-
545 MAINTENANCE OF MISC HYDRAULIC PLANT	OM545	Energy		58,972		-	-	-	58,972	-
Total Hydraulic Power Generation Maint. Expense			\$	865,868	\$	149,821 \$	156,947	129,010	\$ 430,091	\$-
Total Hydraulic Power Generation Expense			\$	2,102,241	\$	574,887 \$	602,231	495,032	\$ 430,091	\$-
Other Power Generation Operation Expense										
546 OPERATION SUPERVISION & ENGINEERING	OM546	LBSUB5	\$	604,185		207,720	217,599	178,866	-	-
547 FUEL	OM547	Energy	Ψ	57,317,664		-		-	57,317,664	-
548 GENERATION EXPENSE	OM548	PROFIX		280,735		96,517	101,108	83,110	-	-
549 MISC OTHER POWER GENERATION	OM549	PROFIX		1,105,538		380,085	398,164	327,289	-	-
550 RENTS	OM550	PROFIX		5,706		1,962	2,055	1,689	-	-
Total Other Power Generation Expenses			\$	59,313,828	\$	686,284 \$	718,926	590,955	\$ 57,317,664	\$ -

## LOLP METHODOLOGY

			Distribution					
		Functional	 Substation		on Primary Lines		Distribution	Sec. Lines
Description	Name	Vector	General	Specific	Demand	Customer	Demand	Custome
Operation and Maintenance Expenses								
Steam Power Generation Operation Expenses								
500 OPERATION SUPERVISION & ENGINEERING	OM500	LBSUB1	-	-	-	-	-	-
501 FUEL	OM501	Energy	-	-	-	-	-	-
502 STEAM EXPENSES	OM502	PROFIX	-	-	-	-	-	-
504 STEAM TRANSFER EXPENSES	OM504	PROFIX	-	-	-	-	-	-
505 ELECTRIC EXPENSES	OM505	PROFIX	-	-	-	-	-	-
506 MISC. STEAM POWER EXPENSES 507 RENTS	OM506 OM507	PROFIX PROFIX	-	-	-	-	-	-
509 ALLOWANCES	OM509	PROFIX	-		-	-	-	-
	Childeo	T ROT D						
Total Steam Power Operation Expenses			\$ - 9	\$ -	\$ - \$	-	\$ -	\$-
Steam Power Generation Maintenance Expenses								
510 MAINTENANCE SUPERVISION & ENGINEERING	OM510	LBSUB2	-	-	-	-	-	-
511 MAINTENANCE OF STRUCTURES	OM511	PROFIX	-	-	-	-	-	-
512 MAINTENANCE OF BOILER PLANT	OM512	Energy	-	-	-	-	-	-
513 MAINTENANCE OF ELECTRIC PLANT 514 MAINTENANCE OF MISC STEAM PLANT	OM513 OM514	Energy	-	-	-	-	-	-
514 MAINTENANCE OF MISC STEAM PLANT	0101514	Energy	-	-	-	-	-	-
Total Steam Power Generation Maintenance Expense			\$ - 9	\$ -	\$ - \$	-	\$ -	\$-
Total Steam Power Generation Expense			\$ - 9	\$ -	\$ - \$	-	\$ -	\$-
Hydraulic Power Generation Operation Expenses								
535 OPERATION SUPERVISION & ENGINEERING	OM535	LBSUB3	-	-	-	-	-	-
536 WATER FOR POWER	OM536	PROFIX	-	-	-	-	-	-
537 HYDRAULIC EXPENSES	OM537	PROFIX	-	-	-	-	-	-
538 ELECTRIC EXPENSES	OM538	PROFIX	-	-	-	-	-	-
539 MISC. HYDRAULIC POWER EXPENSES	OM539	PROFIX	-	-	-	-	-	-
540 RENTS		PROFIX	-	-	-	-	-	-
Total Hydraulic Power Operation Expenses			\$ - 9	\$ -	\$ - \$	-	\$ -	\$-
Hydraulic Power Generation Maintenance Expenses								
541 MAINTENANCE SUPERVISION & ENGINEERING	OM541	LBSUB4	-	-	-	-	-	-
542 MAINTENANCE OF STRUCTURES	OM542	PROFIX	-	-	-	-	-	-
543 MAINT. OF RESERVES, DAMS, AND WATERWAYS	OM543	PROFIX	-	-	-	-	-	-
544 MAINTENANCE OF ELECTRIC PLANT 545 MAINTENANCE OF MISC HYDRAULIC PLANT	OM544 OM545	Energy Energy	-	-	-	-	-	-
	0101545	Ellergy	-	-	-	-	-	-
Total Hydraulic Power Generation Maint. Expense			\$ - 9	\$ -	\$ - \$	-	\$ -	\$-
Total Hydraulic Power Generation Expense			\$ - 9	\$ -	\$ - \$	-	\$ -	\$-
Other Power Generation Operation Expense								
546 OPERATION SUPERVISION & ENGINEERING	OM546	LBSUB5	-	-	-	-	-	-
547 FUEL	OM547	Energy	-	-	-	-	-	-
548 GENERATION EXPENSE	OM548	PROFIX	-	-	-	-	-	-
549 MISC OTHER POWER GENERATION	OM549	PROFIX	-	-	-	-	-	-
550 RENTS	OM550	PROFIX	-	-	-	-	-	-
Total Other Power Generation Expenses			\$ - 5	\$ -	\$ - \$	-	\$ -	\$-

## LOLP METHODOLOGY

		Functional	D	Distributio			istribution Services	Distributior Meters	Distribution St. & Cust. Lighting	Ac	stomer counts kpense	Customer Service & Info.	Sales Expense
Description	Name	Vector		Demand	1	Customer	Customer						
Operation and Maintenance Expenses													
Steam Power Generation Operation Expenses													
500 OPERATION SUPERVISION & ENGINEERING	OM500	LBSUB1		-		-	-	-	-		-	-	-
501 FUEL	OM501	Energy		-		-	-	-	-		-	-	-
502 STEAM EXPENSES	OM502	PROFIX		-		-	-	-	-		-	-	-
504 STEAM TRANSFER EXPENSES	OM504	PROFIX		-		-	-	-	-		-	-	-
505 ELECTRIC EXPENSES	OM505	PROFIX		-		-	-	-	-		-	-	-
506 MISC. STEAM POWER EXPENSES	OM506	PROFIX		-		-	-	-	-		-	-	-
507 RENTS	OM507	PROFIX		-		-	-	-	-		-	-	-
509 ALLOWANCES	OM509	PROFIX		-		-	-	-	-		-	-	-
Total Steam Power Operation Expenses			\$	-	\$	-	\$ -	\$-	\$-	\$	-	\$-	\$-
Steam Power Generation Maintenance Expenses													
510 MAINTENANCE SUPERVISION & ENGINEERING	OM510	LBSUB2		-		-	-	-	-		-	-	-
511 MAINTENANCE OF STRUCTURES	OM511	PROFIX		-		-	-	-	-		-	-	-
512 MAINTENANCE OF BOILER PLANT	OM512	Energy		-		-	-	-	-		-	-	-
513 MAINTENANCE OF ELECTRIC PLANT	OM513	Energy		-		-	-	-	-		-	-	-
514 MAINTENANCE OF MISC STEAM PLANT	OM514	Energy		-		-	-	-	-		-	-	-
Total Steam Power Generation Maintenance Expense			\$	-	\$	-	\$ -	\$ -	\$-	\$	-	\$ -	\$-
Total Steam Power Generation Expense			\$	-	\$	-	\$ -	\$-	\$-	\$	-	\$-	\$-
Hydraulic Power Generation Operation Expenses													
535 OPERATION SUPERVISION & ENGINEERING	OM535	LBSUB3				-	-	-	_			-	_
536 WATER FOR POWER	OM536	PROFIX				-	-	_	_			-	-
537 HYDRAULIC EXPENSES	OM537	PROFIX		-		-	-	-	-		-	-	-
538 ELECTRIC EXPENSES	OM538	PROFIX		-		-	-	-	-		-	-	-
539 MISC. HYDRAULIC POWER EXPENSES	OM539	PROFIX		-		-	-	-	-		-	-	-
540 RENTS		PROFIX		-		-	-	-	-		-	-	-
Total Hydraulic Power Operation Expenses			\$	-	\$	-	\$ -	\$ -	\$-	\$	-	\$ -	\$-
Hydraulic Power Generation Maintenance Expenses													
541 MAINTENANCE SUPERVISION & ENGINEERING	OM541	LBSUB4		_		_	_	_	_		_	_	_
542 MAINTENANCE OF STRUCTURES	OM542	PROFIX		-		-	-	-	-		-	-	-
543 MAINT. OF RESERVES, DAMS, AND WATERWAYS	OM543	PROFIX		-		-	-	-	-		-	-	-
544 MAINTENANCE OF ELECTRIC PLANT	OM544	Energy		-		-	-	-	-		-	-	-
545 MAINTENANCE OF MISC HYDRAULIC PLANT	OM545	Energy		-		-	-	-	-		-	-	-
Total Hydraulic Power Generation Maint. Expense			\$	-	\$	-	\$ -	\$-	\$-	\$	-	\$-	\$-
Total Hydraulic Power Generation Expense			\$	-	\$	-	\$ -	\$-	\$-	\$	-	\$-	\$-
Other Power Generation Operation Expense													
546 OPERATION SUPERVISION & ENGINEERING	OM546	LBSUB5		-		-	-	-	-		-	-	-
547 FUEL	OM547	Energy		-		-	-	-	-		-	-	-
548 GENERATION EXPENSE	OM548	PROFIX		-		-		-	-		-	-	-
549 MISC OTHER POWER GENERATION	OM549	PROFIX		-		-	-	-	-		-	-	-
550 RENTS	OM550	PROFIX		-		-	-	-	-		-	-	-
Total Other Power Generation Expenses			\$	-	\$	-	\$ -	\$-	\$-	\$	-	\$-	\$-

## LOLP METHODOLOGY

								r –		
				_					Production	Transmission
Description	Name	Functional Vector	Total System	P Base	rodu	ction Demand Winter Peak	Summer Peak		Energy	Demand Demand
Description	Name	vector	System	Dase		winter Peak	Summer Peak			Demand
Operation and Maintenance Expenses (Continued)										
Other Power Generation Maintenance Expense										
551 MAINTENANCE SUPERVISION & ENGINEERING	OM551	PROFIX	\$ 256,698	88,253		92,451	75,994		-	-
552 MAINTENANCE OF STRUCTURES	OM552	PROFIX	560,673	192,760		201,928	165,984		-	-
553 MAINTENANCE OF GENERATING & ELEC PLANT	OM553	PROFIX	2,652,503	911,934		955,309	785,260		-	-
554 MAINTENANCE OF MISC OTHER POWER GEN PLT	OM554	PROFIX	1,112,788	382,578		400,775	329,435		-	-
Total Other Power Generation Maintenance Expense			\$ 4,582,662	\$ 1,575,525	\$	1,650,462	\$ 1,356,674	\$	-	\$ -
Total Other Power Generation Expense			\$ 63,896,490	\$ 2,261,809	\$	2,369,388	\$ 1,947,629	\$	57,317,664	\$ -
Total Station Expense			\$ 455,155,390	\$ 16,376,100	\$	17,155,001	\$ 14,101,353	\$	407,522,935	\$ -
Other Power Supply Expenses										
555 PURCHASED POWER	OM555	OMPP	\$ 53,937,678	5,575,353		5,840,535	4,800,900		37,720,890	-
555 PURCHASED POWER OPTIONS	OMO555	OMPP	-	-		-	-		-	-
555 BROKERAGE FEES	OMB555	OMPP	-	-		-	-		-	-
555 MISO TRANSMISSION EXPENSES	OMM555	OMPP	-	-		-	-		-	-
556 SYSTEM CONTROL AND LOAD DISPATCH	OM556	PROFIX	1,248,388	429,197		449,611	369,579		-	-
557 OTHER EXPENSES	OM557	PROFIX	3,807	1,309		1,371	1,127		-	-
558 DUPLICATE CHARGES	OM558	Energy	-	-		-	-		-	-
Total Other Power Supply Expenses	TPP		\$ 55,189,873	\$ 6,005,859	\$	6,291,518	\$ 5,171,606	\$	37,720,890	\$ -
Total Electric Power Generation Expenses			\$ 510,345,263	\$ 22,381,959	\$	23,446,519	\$ 19,272,960	\$	445,243,825	\$ -
Transmission Expenses										
560 OPERATION SUPERVISION AND ENG	OM560	LBTRAN	\$ 1,013,327	-		-	-		-	1,013,327
561 LOAD DISPATCHING	OM561	LBTRAN	2,208,583	-		-	-		-	2,208,583
562 STATION EXPENSES	OM562	LBTRAN	928,949	-		-	-		-	928,949
563 OVERHEAD LINE EXPENSES	OM563	LBTRAN	244,298	-		-	-		-	244,298
565 TRANSMISSION OF ELECTRICITY BY OTHERS	OM565	LBTRAN	36,638	-		-	-		-	36,638
566 MISC. TRANSMISSION EXPENSES	OM566	PTRAN	6,948,940	-		-	-		-	6,948,940
567 RENTS	OM567	PTRAN	67,500	-		-	-		-	67,500
568 MAINTENACE SUPERVISION AND ENG 569 STRUCTURES	OM568 OM569	LBTRAN LBTRAN		-		-	-		-	-
509 STRUCTURES 570 MAINT OF STATION EQUIPMENT	OM569 OM570	LBTRAN	- 1,490,332	-		-	-		-	- 1,490,332
570 MAINT OF STATION EQUIPMENT 571 MAINT OF OVERHEAD LINES	OM570 OM571	LBTRAN	3,342,881	-		-	-		-	3,342,881
572 UNDERGROUND LINES	OM571 OM572	LBTRAN	J,J42,001	-		-	-		-	5,542,001
573 MISC PLANT	OM573	PTRAN	228,063	-		_	_		_	228,063
575 MARKET FACILITATION, MONITORING AND COMPLIANCE		LBTRAN	-	-		-	-		-	-
Total Transmission Expenses			\$ 16,509,511	\$ -	\$	-	\$ -	\$	-	\$ 16,509,511

## LOLP METHODOLOGY

			_		1					
				Distribution			 <b>_</b>			<b>.</b>
Description	Namo	Functional Vector		Substation Genera		Specific	on Primary Lines Demand	s Customer	Distribution Demand	
Description	Name	Vector		Genera	1	opecini	Demand	Customer	Demanu	Customer
Operation and Maintenance Expenses (Continued)										
Other Power Generation Maintenance Expense										
551 MAINTENANCE SUPERVISION & ENGINEERING	OM551	PROFIX		-		-	-	-	-	-
552 MAINTENANCE OF STRUCTURES 553 MAINTENANCE OF GENERATING & ELEC PLANT	OM552 OM553	PROFIX PROFIX		-		-	-	-	-	-
555 MAINTENANCE OF GENERATING & ELEC PLANT 554 MAINTENANCE OF MISC OTHER POWER GEN PLT	OM553	PROFIX		-		-	-	-	-	-
554 MAINTENANCE OF MISC OTHER FOWER GEN FET	0101004	FROFIX		-		-	-	-	-	-
Total Other Power Generation Maintenance Expense			\$	-	\$	-	\$ - \$	-	\$-	\$-
Total Other Power Generation Expense			\$	-	\$	-	\$ - \$	-	\$-	\$-
Total Station Expense			\$	-	\$	-	\$ - \$		\$	\$-
Other Power Supply Expenses										
555 PURCHASED POWER	OM555	OMPP		-		-	-	-	-	-
555 PURCHASED POWER OPTIONS	OMO555	OMPP		-		-	-	-	-	-
555 BROKERAGE FEES	OMB555	OMPP		-		-	-	-	-	-
555 MISO TRANSMISSION EXPENSES	OMM555	OMPP		-		-	-	-	-	-
556 SYSTEM CONTROL AND LOAD DISPATCH	OM556	PROFIX		-		-	-	-	-	-
557 OTHER EXPENSES	OM557	PROFIX		-		-	-	-	-	-
558 DUPLICATE CHARGES	OM558	Energy		-		-	-	-	-	-
Total Other Power Supply Expenses	TPP		\$	-	\$	-	\$ - \$	- :	\$	\$-
Total Electric Power Generation Expenses			\$	-	\$	-	\$ - \$		\$	\$-
Transmission Expenses										
560 OPERATION SUPERVISION AND ENG	OM560	LBTRAN		-		-	-	-	-	-
561 LOAD DISPATCHING	OM561	LBTRAN		-		-	-	-	-	-
562 STATION EXPENSES	OM562	LBTRAN		-		-	-	-	-	-
563 OVERHEAD LINE EXPENSES	OM563	LBTRAN		-		-	-	-	-	-
565 TRANSMISSION OF ELECTRICITY BY OTHERS	OM565	LBTRAN		-		-	-	-	-	-
566 MISC. TRANSMISSION EXPENSES	OM566	PTRAN		-		-	-	-	-	-
567 RENTS	OM567	PTRAN		-		-	-	-	-	-
568 MAINTENACE SUPERVISION AND ENG	OM568	LBTRAN		-		-	-	-	-	-
569 STRUCTURES	OM569	LBTRAN		-		-	-	-	-	-
570 MAINT OF STATION EQUIPMENT	OM570	LBTRAN		-		-	-	-	-	-
571 MAINT OF OVERHEAD LINES	OM571	LBTRAN		-		-	-	-	-	-
572 UNDERGROUND LINES	OM572	LBTRAN		-		-	-	-	-	-
573 MISC PLANT 575 MARKET FACILITATION, MONITORING AND COMPLIANCE	OM573 OM575	PTRAN LBTRAN		-		-	-	-	-	-
	2									
Total Transmission Expenses			\$	-	\$	-	\$ - \$	-	\$	\$-

## LOLP METHODOLOGY

Description	Name	Functional Vector	Di	stribution		Trans. Customer		Distribution Services Customer	Distributior Meters	Distribution St. & Cust. Lighting			Sales Expense
Description	Name	Vector		Demana		oustonner		oustonier					
<b>Operation and Maintenance Expenses (Continued)</b>													
Other Power Generation Maintenance Expense 551 MAINTENANCE SUPERVISION & ENGINEERING 552 MAINTENANCE OF STRUCTURES 553 MAINTENANCE OF GENERATING & ELEC PLANT 554 MAINTENANCE OF MISC OTHER POWER GEN PLT	OM551 OM552 OM553 OM554	PROFIX PROFIX PROFIX PROFIX		- - -		- - -		- - -	- - -	- - - -	- - -	- - -	- - -
Total Other Power Generation Maintenance Expense			\$	-	\$	-	\$	-	\$-	\$-	\$-	\$ -	\$ -
Total Other Power Generation Expense			\$	-	\$	-	\$	-	\$-	\$-	\$-	\$-	\$-
Total Station Expense			\$	-	\$	-	\$	-	\$-	\$-	\$-	\$-	\$ -
Other Power Supply Expenses													
555 PURCHASED POWER 555 PURCHASED POWER 555 PURCHASED POWER OPTIONS 555 BROKERAGE FEES 556 MISO TRANSMISSION EXPENSES 556 SYSTEM CONTROL AND LOAD DISPATCH 557 OTHER EXPENSES 558 DUPLICATE CHARGES Total Other Power Supply Expenses	OM555 OM0555 OM8555 OM555 OM556 OM557 OM558 TPP	OMPP OMPP OMPP PROFIX PROFIX Energy	\$		\$		\$		- - - - - - - - -	- - - - - - - - -	- - - - - - - - - - - -	- - - - - - - - - - -	- - - - - - - - - - -
Total Electric Power Generation Expenses	IFF		Ψ \$	_	\$ \$	-	\$ \$		\$ -	\$ -	\$ - \$ -	\$ -	\$ -
Total Electric Power Generation Expenses			φ	-	φ	-	φ	-	<b>5</b> -	<b>ə</b> -	φ -	φ -	φ -
Transmission Expenses 560 OPERATION SUPERVISION AND ENG 561 LOAD DISPATCHING 562 STATION EXPENSES 563 OVERHEAD LINE EXPENSES 565 TRANSMISSION OF ELECTRICITY BY OTHERS 566 MISC. TRANSMISSION OF ELECTRICITY BY OTHERS 568 MAINTENACE SUPERVISION AND ENG 569 STRUCTURES 570 MAINT OF STATION EQUIPMENT 571 MAINT OF OVERHEAD LINES 572 UNDERGROUND LINES 573 MISC PLANT 575 MARKET FACILITATION, MONITORING AND COMPLIANCE	OM560 OM561 OM562 OM563 OM565 OM566 OM567 OM568 OM569 OM570 OM571 OM572 OM573 OM575	LBTRAN LBTRAN LBTRAN PTRAN PTRAN PTRAN LBTRAN LBTRAN LBTRAN LBTRAN LBTRAN LBTRAN LBTRAN		- - - - - - - - - -									
Total Transmission Expenses			\$	-	\$	-	\$	-	\$ -	\$-	\$-	\$-	\$-

## LOLP METHODOLOGY

		Functional	Total	Produ	ction Demand		Production Energy	Transmission Demand
Description	Name	Vector	System	Base	Winter Peak	Summer Peak		Demand
Operation and Maintenance Expenses (Continued)								
Distribution Operation Expense 580 OPERATION SUPERVISION AND ENGI 581 LOAD DISPATCHING 582 STATION EXPENSES 583 OVERHEAD LINE EXPENSES 584 UNDERGROUND LINE EXPENSES 585 STREET LIGHTING EXPENSE 586 METER EXPENSES - LOAD MANAGEMENT 587 CUSTOMER INSTALLATIONS EXPENSE 588 MISCELLANEOUS DISTRIBUTION EXP	OM580 OM581 OM582 OM583 OM584 OM585 OM586 OM586x OM587 OM588	LBDO P362 P365 P367 P373 P370 F012 PDIST PDIST PDIST	\$ 1,814,624 741,674 1,941,657 5,880,672 535,725 - 8,277,541 - (79,200) 5,593,730					
588 MISC DISTR EXP MAPPIN 589 RENTS	OM588x OM589	PDIST PDIST	8,165	-	-	-	-	-
Total Distribution Operation Expense	OMDO		\$ 24,714,588	\$ - \$	- \$	- :	\$-\$	ş -
Distribution Maintenance Expense 590 MAINTENANCE SUPERVISION AND EN 591 STRUCTURES 592 MAINTENANCE OF STATION EQUIPME 593 MAINTENANCE OF OVERHEAD LINES 594 MAINTENANCE OF UNDERGROUND LIN 595 MAINTENANCE OF LINE TRANSFORME 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS 597 MAINTENANCE OF METERS 598 MISCELLANEOUS DISTRIBUTION EXPENSES	OM590 OM591 OM592 OM593 OM594 OM595 OM596 OM597 OM598	LBDM P362 P365 P367 P368 P373 P370 PDIST	\$ 77,850 - 23,665,349 1,604,057 334,735 355,341 1,427,898 671,832	- - - - - - - - - -				- - - - - - -
Total Distribution Maintenance Expense	OMDM		\$ 29,304,928	\$ - \$	- \$	- :	\$-\$	
Total Distribution Operation and Maintenance Expenses			\$ 54,019,516	-	-	-	-	-
Transmission and Distribution Expenses			\$ 70,529,027	-	-	-	-	16,509,511
Production, Transmission and Distribution Expenses	OMSUB		\$ 580,874,290	\$ 22,381,959 \$	23,446,519 \$	19,272,960	\$ 445,243,825 \$	6 16,509,511

## LOLP METHODOLOGY

									1
			Distribution						
		Functional	Substation	Dist	ribut	ion Primary Lines		Distribution Se	e Lines
Description	Name	Vector	 General	Specific	indu	Demand	Customer	Demand	Customer
Operation and Maintenance Expenses (Continued)									
Distribution Operation Expense									
580 OPERATION SUPERVISION AND ENGI	OM580	LBDO	336,695	-		182,918	278,035	58,766	86,953
581 LOAD DISPATCHING	OM581	P362	741,674	-		-	-	-	-
582 STATION EXPENSES	OM582	P362	1,941,657	-		-	-	-	-
583 OVERHEAD LINE EXPENSES	OM583	P365	-	-		1,756,248	2,547,227	643,654	933,542
584 UNDERGROUND LINE EXPENSES	OM584	P367	-	-		168,164	303,809	22,715	41,037
585 STREET LIGHTING EXPENSE	OM585	P373	-	-		-	-	-	-
586 METER EXPENSES	OM586	P370	-	-		-	-	-	-
586 METER EXPENSES - LOAD MANAGEMENT	OM586x	F012	-	-		-	-	-	-
587 CUSTOMER INSTALLATIONS EXPENSE	OM587	PDIST	(8,874)	-		(15,175)	(24,149)	(4,172)	(6,340)
588 MISCELLANEOUS DISTRIBUTION EXP	OM588	PDIST	626,735	-		1.071.781	1.705.602	294,637	447,746
588 MISC DISTR EXP MAPPIN	OM588x	PDIST	-	-		-	-	-	_
589 RENTS	OM589	PDIST	915	-		1,564	2,490	430	654
Total Distribution Operation Expense	OMDO		\$ 3,638,802 \$	-	\$	3,165,501 \$	4,813,014 \$	5 1,016,029 \$	1,503,593
Distribution Maintenance Expense	014500		4 700			04 004	22.005	7 400	40.400
590 MAINTENANCE SUPERVISION AND EN	OM590	LBDM	4,736	-		21,381	32,085	7,138	10,498
591 STRUCTURES	OM591	P362	-	-		-	-	-	-
592 MAINTENANCE OF STATION EQUIPME	OM592	P362	1,167,866	-		-	-	-	-
593 MAINTENANCE OF OVERHEAD LINES	OM593	P365	-	-		7,067,599	10,250,703	2,590,230	3,756,817
594 MAINTENANCE OF UNDERGROUND LIN	OM594	P367	-	-		503,514	909,660	68,012	122,871
595 MAINTENANCE OF LINE TRANSFORME	OM595	P368	-	-		-	-	-	-
596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS	OM596	P373	-	-		-	-	-	-
597 MAINTENANCE OF METERS	OM597	P370	-	-		-	-	-	-
598 MISCELLANEOUS DISTRIBUTION EXPENSES	OM598	PDIST	75,274	-		128,726	204,850	35,387	53,776
Total Distribution Maintenance Expense	OMDM		\$ 1,247,876 \$	-	\$	7,721,220 \$	11,397,299 \$	2,700,767 \$	3,943,963
Total Distribution Operation and Maintenance Expenses			4,886,677	-		10,886,721	16,210,312	3,716,796	5,447,555
Transmission and Distribution Expenses			4,886,677	-		10,886,721	16,210,312	3,716,796	5,447,555
Production, Transmission and Distribution Expenses	OMSUB		\$ 4,886,677 \$	-	\$	10,886,721 \$	16,210,312 \$	3,716,796 \$	5,447,555

## LOLP METHODOLOGY

		Functional	Distribution Line	Trans.	Distribution Services	Distributi Mete	on Distribution St. & rs Cust. Lighting		Customer Service & Info.	Sales Expense
Description	Name	Vector	Demand	Customer	Customer					
Operation and Maintenance Expenses (Continued)										
Distribution Operation Expense										
580 OPERATION SUPERVISION AND ENGI	OM580	LBDO	23,619	16,518	8,203	796,84	2 26,073	-	-	-
581 LOAD DISPATCHING	OM581	P362	-	-	-	-	-	-	-	-
582 STATION EXPENSES	OM582	P362	-	-	-	-	-	-	-	-
583 OVERHEAD LINE EXPENSES	OM583	P365	-	-	-	-	-	-	-	-
584 UNDERGROUND LINE EXPENSES	OM584 OM585	P367 P373	-	-	-	-	-	-	-	-
585 STREET LIGHTING EXPENSE 586 METER EXPENSES	OM585 OM586	P373 P370	-	-	-	۔ 8,277,54	-	-	-	-
586 METER EXPENSES	OM586x	F012	-	-	-	0,277,54	-	-	-	-
587 CUSTOMER INSTALLATIONS EXPENSE	OM587	PDIST	(5,767)	(4,033)	(2,003)	(2,3		_		
588 MISCELLANEOUS DISTRIBUTION EXP	OM588	PDIST	407,277	284,830	141,452	164,08		-	_	-
588 MISC DISTR EXP MAPPIN	OM588x	PDIST	-		-	-	-	-	-	-
589 RENTS	OM589	PDIST	594	416	206	24	0 656	-	-	-
Total Distribution Operation Expense	OMDO		\$ 425,724 \$	297,731	\$ 147,859	\$ 9,236,38	60 \$ 469,956	\$ -	\$-	\$-
Distribution Maintenance Expense										
590 MAINTENANCE SUPERVISION AND EN	OM590	LBDM	1,088	761	-	-	162	-	-	-
591 STRUCTURES	OM591	P362	-	-	-	-	-	-	-	-
592 MAINTENANCE OF STATION EQUIPME	OM592	P362	-	-	-	-	-	-	-	-
593 MAINTENANCE OF OVERHEAD LINES	OM593	P365	-	-	-	-	-	-	-	-
594 MAINTENANCE OF UNDERGROUND LIN	OM594	P367	-	-	-	-	-	-	-	-
595 MAINTENANCE OF LINE TRANSFORME	OM595	P368	196,978	137,757	-	-		-	-	-
596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS	OM596	P373	-	-	-	-	355,341	-	-	-
597 MAINTENANCE OF METERS 598 MISCELLANEOUS DISTRIBUTION EXPENSES	OM597 OM598	P370 PDIST	- 48.916	- 34.209	- 16,989	1,427,89 19.70		-	-	-
596 MISCELLANEOUS DISTRIBUTION EXPENSES	ONDBO	PDIST	40,910	34,209	10,909	19,70	53,998	-	-	-
Total Distribution Maintenance Expense	OMDM		\$ 246,982 \$	172,728	\$ 16,989	\$ 1,447,60	5 \$ 409,501	\$-	\$ -	\$-
Total Distribution Operation and Maintenance Expenses			672,706	470,459	164,848	10,683,98	5 879,457	-	-	-
Transmission and Distribution Expenses			672,706	470,459	164,848	10,683,98	5 879,457	-	-	-
Production, Transmission and Distribution Expenses	OMSUB		\$ 672,706 \$	470,459	\$ 164,848	\$ 10,683,98	5 \$ 879,457	\$-	\$-	\$-

## LOLP METHODOLOGY

Description	Name	Functional Vector	Total System	Produ Base	ction Demand Winter Peak	Summer Peak	Production Energy	Transmission Demand Demand
Operation and Maintenance Expenses (Continued)								
Customer Accounts Expense								
901 SUPERVISION/CUSTOMER ACCTS	OM901	F025	\$ 1,267,537	-	-	-	-	-
902 METER READING EXPENSES	OM902	F025	2,546,374	-	-	-	-	-
903 RECORDS AND COLLECTION	OM903	F025	7,699,624	-	-	-	-	-
904 UNCOLLECTIBLE ACCOUNTS	OM904	F025	2,477,177	-	-	-	-	-
905 MISC CUST ACCOUNTS	OM903	F025	1,288	-	-	-	-	-
Total Customer Accounts Expense	OMCA		\$ 13,992,000	\$ - \$	- \$	- :	\$-\$	-
Customer Service Expense								
907 SUPERVISION	OM907	F026	\$ 364,585	-	-	-	-	-
908 CUSTOMER ASSISTANCE EXPENSES	OM908	F026	289,821	-	-	-	-	-
908 CUSTOMER ASSISTANCE EXP-INCENTIVES	OM908x	F026		-	-	-	-	-
909 INFORMATIONAL AND INSTRUCTIONA	OM909	F026	257,472	-	-	-	-	-
909 INFORM AND INSTRUC -LOAD MGMT	OM909x	F026		-	-	-	-	-
910 MISCELLANEOUS CUSTOMER SERVICE	OM910	F026	823,663	-	-	-	-	-
911 DEMONSTRATION AND SELLING EXP	OM911	F026		-	-	-	-	-
912 DEMONSTRATION AND SELLING EXP	OM912	F026		-	-	-	-	-
913 ADVERTISING EXPENSES	OM913	F026	950,847	-	-	-	-	-
915 MDSE-JOBBING-CONTRACT	OM915	F026		-	-	-	-	-
916 MISC SALES EXPENSE	OM916	F026		-	-	-	-	-
Total Customer Service Expense	OMCS		\$ 2,686,388	\$ - \$	- \$	- :	\$-\$	-
Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service	OMSUB2		597,552,678	22,381,959	23,446,519	19,272,960	445,243,825	16,509,511

## LOLP METHODOLOGY

		Functional	)istribution Substation			ion Primary L		Distribution S	
Description	Name	Vector	General	Specific	:	Demand	Customer	Demand	Customer
Operation and Maintenance Expenses (Continued)									
Customer Accounts Expense									
901 SUPERVISION/CUSTOMER ACCTS	OM901	F025	-	-		-	-	-	-
902 METER READING EXPENSES	OM902	F025	-	-		-	-	-	-
903 RECORDS AND COLLECTION	OM903	F025	-	-		-	-	-	-
904 UNCOLLECTIBLE ACCOUNTS	OM904	F025	-	-		-	-	-	-
905 MISC CUST ACCOUNTS	OM903	F025	-	-		-	-	-	-
Total Customer Accounts Expense	OMCA		\$ -	\$ -	\$	-	\$ -	\$ - 9	
Customer Service Expense									
907 SUPERVISION	OM907	F026	-	-		-	-	-	-
908 CUSTOMER ASSISTANCE EXPENSES	OM908	F026	-	-		-	-	-	-
908 CUSTOMER ASSISTANCE EXP-INCENTIVES	OM908x	F026	-	-		-	-	-	-
909 INFORMATIONAL AND INSTRUCTIONA	OM909	F026	-	-		-	-	-	-
909 INFORM AND INSTRUC -LOAD MGMT	OM909x	F026	-	-		-	-	-	-
910 MISCELLANEOUS CUSTOMER SERVICE	OM910	F026	-	-		-	-	-	-
911 DEMONSTRATION AND SELLING EXP	OM911	F026	-	-		-	-	-	-
912 DEMONSTRATION AND SELLING EXP	OM912	F026	-	-		-	-	-	-
913 ADVERTISING EXPENSES	OM913	F026	-	-		-	-	-	-
915 MDSE-JOBBING-CONTRACT	OM915	F026	-	-		-	-	-	-
916 MISC SALES EXPENSE	OM916	F026	-	-		-	-	-	-
Total Customer Service Expense	OMCS		\$ -	\$ -	\$	-	\$ -	\$ - \$	; -
Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service	OMSUB2		4,886,677	-		10,886,721	16,210,312	3,716,796	5,447,555

#### LOLP METHODOLOGY

									Customer		
						Distribution		Distribution St. &		Customer	
		Functional	Distribution L			Services	Meters	Cust. Lighting	Expense	Service & Info.	Sales Expense
Description	Name	Vector	Demand	Custor	er	Customer					
Operation and Maintenance Expenses (Continued)											
Customer Accounts Expense											
901 SUPERVISION/CUSTOMER ACCTS	OM901	F025	-	-		-	-	-	1,267,537	-	-
902 METER READING EXPENSES	OM902	F025	-	-		-	-	-	2,546,374	-	-
903 RECORDS AND COLLECTION	OM903	F025	-	-		-	-	-	7,699,624	-	-
904 UNCOLLECTIBLE ACCOUNTS	OM904	F025	-	-		-	-	-	2,477,177	-	-
905 MISC CUST ACCOUNTS	OM903	F025	-	-		-	-	-	1,288	-	-
Total Customer Accounts Expense	OMCA		\$ - \$	ş -	\$	-	\$-	\$-	\$ 13,992,000	\$-	\$-
Customer Service Expense											
907 SUPERVISION	OM907	F026	-	-		-	-	-	-	364,585	-
908 CUSTOMER ASSISTANCE EXPENSES	OM908	F026	-	-		-	-	-	-	289,821	-
908 CUSTOMER ASSISTANCE EXP-INCENTIVES	OM908x	F026	-	-		-	-	-	-	-	-
909 INFORMATIONAL AND INSTRUCTIONA	OM909	F026	-	-		-	-	-	-	257,472	-
909 INFORM AND INSTRUC -LOAD MGMT	OM909x	F026	-	-		-	-	-	-	-	-
910 MISCELLANEOUS CUSTOMER SERVICE	OM910	F026	-	-		-	-	-	-	823,663	-
911 DEMONSTRATION AND SELLING EXP	OM911	F026	-	-		-	-	-	-	-	-
912 DEMONSTRATION AND SELLING EXP	OM912	F026	-	-		-	-	-	-	-	-
913 ADVERTISING EXPENSES	OM913	F026	-	-		-	-	-	-	950,847	-
915 MDSE-JOBBING-CONTRACT	OM915	F026	-	-		-	-	-	-	-	-
916 MISC SALES EXPENSE	OM916	F026	-	-		-	-	-	-	-	-
Total Customer Service Expense	OMCS		\$ - \$	- 3	\$	-	\$-	\$-	\$-	\$ 2,686,388	\$-
Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service	OMSUB2		672,706	470,4	59	164,848	10,683,985	879,457	13,992,000	2,686,388	-

#### LOLP METHODOLOGY

Description	Name	Functional Vector	Total System	Produ Base	ction Demand Winter Peak	Summer Peak	Production Energy	Transmission Demand Demand
Operation and Maintenance Expenses (Continued)				2400				
Administrative and General Expense 920 ADMIN. & GEN. SALARIES- 921 OFFICE SUPPLIES AND EXPENSES 922 ADMINISTRATIVE EXPENSES TRANSFERRED 923 OUTSIDE SERVICES EMPLOYED 924 PROPERTY INSURANCE 925 INJURIES AND DAMAGES 926 EMPLOYEE BENEFITS 927 FRANCHISE REQUIREMENTS 928 REGULATORY COMMISSION FEES 929 DUPLICATE CHARGES-CR 930 MISCELLANEOUS GENERAL EXPENSES 931 RENTS AND LEASES 935 MAINTENANCE OF GENERAL PLANT	OM920 OM921 OM922 OM924 OM925 OM926 OM926 OM927 OM928 OM929 OM930 OM931 OM935	LBSUB7 LBSUB7 LBSUB7 TUP LBSUB7 LBSUB7 TUP TUP LBSUB7 LBSUB7 LBSUB7 PGP PGP	\$ 27,330,835 5,910,353 (4,320,827) 15,873,533 4,610,558 2,835,056 29,197,096 - 1,404,080 (229,428) 3,716,685 1,123,825 617,459	3,179,339 687,539 (502,633) 1,846,535 891,486 329,796 3,396,437 - 271,489 (26,689) 432,354 216,717 119,070	3,330,558 720,241 (526,540) 1,934,362 933,888 345,482 3,557,983 - 284,402 (27,958) 452,918 227,025 124,734	2,737,708 592,035 (432,814) 1,590,039 767,653 283,985 2,924,650 - 233,778 (22,982) 372,297 186,614 102,531	6,907,180 1,493,693 (1,091,980) 4,011,635 - 716,489 7,378,830 - (57,982) 939,298 - -	1,638,279 354,281 (259,001) 951,499 491,106 169,940 1,750,147 - - 149,559 (13,752) 222,787 120,907 66,430
Total Administrative and General Expense	OMAG		\$ 88,069,225	\$ 10,841,440 \$	11,357,095 \$	9,335,494	\$ 20,297,163 \$	5,642,184
Total Operation and Maintenance Expenses	TOM		\$ 685,621,903	\$ 33,223,400 \$	34,803,614 \$	28,608,453	\$ 465,540,988 \$	22,151,695
Operation and Maintenance Expenses Less Purchase Power	OMLPP		\$ 631,684,225	\$ 27,648,047 \$	28,963,079 \$	23,807,553	\$ 427,820,099 \$	22,151,695

## LOLP METHODOLOGY

							1		
			Distribution						
		Functional	Substation	D	istribu	tion Primary Line	s	Distribution Se	ec. Lines
Description	Name	Vector	General	Speci	ic	Demand	Customer	Demand	Customer
Operation and Maintenance Expenses (Continued)									
Administrative and General Expense									
920 ADMIN. & GEN. SALARIES-	OM920	LBSUB7	1,025,946	-		970,304	1,465,760	317,639	468,593
921 OFFICE SUPPLIES AND EXPENSES	OM921	LBSUB7	221,863	-		209,830	316,974	68,690	101,334
922 ADMINISTRATIVE EXPENSES TRANSFERRED	OM922	LBSUB7	(162,195)	-		(153,399)	(231,727)	(50,217)	(74,082)
923 OUTSIDE SERVICES EMPLOYED	OM923	LBSUB7	595,861	-		563,545	851,302	184,482	272,155
924 PROPERTY INSURANCE	OM924	TUP	171,024	-		292,469	465,427	80,401	122,182
925 INJURIES AND DAMAGES	OM925	LBSUB7	106,422	-		100,651	152,045	32,949	48,608
926 EMPLOYEE BENEFITS	OM926	LBSUB7	1,096,001	-		1,036,560	1,565,849	339,329	500,590
927 FRANCHISE REQUIREMENTS	OM927	TUP	-	-		-	-	-	-
928 REGULATORY COMMISSION FEES	OM928	TUP	52,083	-		89,067	141,739	24,485	37,209
929 DUPLICATE CHARGES-CR	OM929	LBSUB7	(8,612)	-		(8,145)	(12,304)	(2,666)	(3,934)
930 MISCELLANEOUS GENERAL EXPENSES	OM930	LBSUB7	139,517	-		131,950	199,327	43,195	63,723
931 RENTS AND LEASES	OM931	PGP	41,743	-		71,384	113,599	19,624	29,821
935 MAINTENANCE OF GENERAL PLANT	OM935	PGP	22,934	-		39,220	62,414	10,782	16,385
Total Administrative and General Expense	OMAG		\$ 3,302,587	\$-	\$	3,343,437 \$	5,090,404	\$ 1,068,694 \$	1,582,585
Total Operation and Maintenance Expenses	ТОМ		\$ 8,189,264	\$-	\$	14,230,158 \$	21,300,716	\$ 4,785,490 \$	7,030,141
Operation and Maintenance Expenses Less Purchase Power	OMLPP		\$ 8,189,264	\$-	\$	14,230,158 \$	21,300,716	\$ 4,785,490 \$	7,030,141

#### LOLP METHODOLOGY

				_	Distribution			Distribution St. &	Customer Accounts	Customer	
		Functional	Distribution Line		Services		Meters	Cust. Lighting	Expense	Service & Info.	Sales Expense
Description	Name	Vector	Demand	Customer	Customer						
Operation and Maintenance Expenses (Continued)											
Administrative and General Expense											
920 ADMIN. & GEN. SALARIES-	OM920	LBSUB7	88,573	61,944	22,463	2,	181,981	74,950	2,243,650	615,970	-
921 OFFICE SUPPLIES AND EXPENSES	OM921	LBSUB7	19,154	13,395	4,858	4	471,858	16,208	485,194	133,205	-
922 ADMINISTRATIVE EXPENSES TRANSFERRED	OM922	LBSUB7	(14,003)	(9,793)	(3,551)	(3	344,957)	(11,849)	(354,707)	(97,381)	-
923 OUTSIDE SERVICES EMPLOYED	OM923	LBSUB7	51,442	35,976	13,046	1,2	267,277	43,530	1,303,094	357,750	-
924 PROPERTY INSURANCE	OM924	TUP	111,138	77,725	38,600		44,774	122,685	-	-	-
925 INJURIES AND DAMAGES	OM925	LBSUB7	9,188	6,425	2,330	2	226,339	7,775	232,736	63,895	-
926 EMPLOYEE BENEFITS	OM926	LBSUB7	94,621	66,173	23,997	2,3	330,975	80,068	2,396,856	658,031	-
927 FRANCHISE REQUIREMENTS	OM927	TUP	-	-	-		-	-	-	-	-
928 REGULATORY COMMISSION FEES	OM928	TUP	33,846	23,670	11,755		13,635	37,362	-	-	-
929 DUPLICATE CHARGES-CR	OM929	LBSUB7	(744)	(520)	(189)		(18,317)	(629)	(18,834)	(5,171)	-
930 MISCELLANEOUS GENERAL EXPENSES	OM930	LBSUB7	12,045	8,424	3,055	2	296,725	10,192	305,111	83,765	-
931 RENTS AND LEASES	OM931	PGP	27,126	18,971	9,421		10,928	29,944	-	-	-
935 MAINTENANCE OF GENERAL PLANT	OM935	PGP	14,904	10,423	5,176		6,004	16,452	-	-	-
Total Administrative and General Expense	OMAG		\$ 447,290 \$	312,813	\$ 130,961	\$ 6,4	187,224	\$ 426,688	\$ 6,593,101	\$ 1,810,064 \$	5 -
Total Operation and Maintenance Expenses	ТОМ		\$ 1,119,996 \$	783,272	\$ 295,809	\$	171,209	\$ 1,306,145	\$ 20,585,101	\$ 4,496,452 \$	s -
Operation and Maintenance Expenses Less Purchase Power	OMLPP		\$ 1,119,996 \$	783,272	\$ 295,809	\$       17, <sup>-</sup>	171,209	\$ 1,306,145	\$ 20,585,101	\$ 4,496,452	s -
					:	\$ 74,9	906,055				

## LOLP METHODOLOGY

				-				T	
			_					Production	
		Functional	Total			duction Demand		Energy	
Description	Name	Vector	System		Base	Winter Peak	Summer Peak		Demand
Labor Expenses									
Steam Power Generation Operation Expenses									
500 OPERATION SUPERVISION & ENGINEERING	LB500	F019	\$ 3,138,068		912,472	955,872	785,724	484,001	-
501 FUEL	LB501	Energy	2,187,724		-	-	-	2,187,724	-
502 STEAM EXPENSES	LB502	PROFIX	8,374,877		2,879,294	3,016,242	2,479,341	-	-
504 STEAM TRANSFER EXPENSES	LB504	PROFIX	-		-	-	-	-	-
505 ELECTRIC EXPENSES	LB505	PROFIX	2,130,001		732,297	767,128	630,576	-	-
506 MISC. STEAM POWER EXPENSES	LB506	PROFIX	1,491,734		512,860	537,253	441,620	-	-
507 RENTS	LB507	PROFIX			-	-	-	-	-
Total Steam Power Operation Expenses	LBSUB1		\$ 17,322,404	\$	5,036,923 \$	5,276,495	\$ 4,337,261	\$ 2,671,725	\$-
Steam Power Generation Maintenance Expenses									
510 MAINTENANCE SUPERVISION & ENGINEERING	LB510	F020	\$ 3,390,539		-	-	-	3,390,539	-
511 MAINTENANCE OF STRUCTURES	LB511	PROFIX	-		-	-	-	-	-
512 MAINTENANCE OF BOILER PLANT	LB512	Energy	4,117,208		-	-	-	4,117,208	-
513 MAINTENANCE OF ELECTRIC PLANT	LB513	Energy	2,830,954		-	-	-	2,830,954	-
514 MAINTENANCE OF MISC STEAM PLANT	LB514	Energy	57,828		-	-	-	57,828	-
Total Steam Power Generation Maintenance Expense	LBSUB2		\$ 10,396,529	\$	- \$	-	\$-	\$ 10,396,529	\$-
Total Steam Power Generation Expense			\$ 27,718,933	\$	5,036,923 \$	5,276,495	\$ 4,337,261	\$ 13,068,254	\$-
Hydraulic Power Generation Operation Expenses									
535 OPERATION SUPERVISION & ENGINEERING	LB535	F021	\$ 95,870		32,960	34,528	28,382	-	-
536 WATER FOR POWER	LB536	PROFIX	-		-	-	-	-	-
537 HYDRAULIC EXPENSES	LB537	PROFIX			-	-	-	-	-
538 ELECTRIC EXPENSES	LB538	PROFIX	180,161		61,940	64,886	53,336	-	-
539 MISC. HYDRAULIC POWER EXPENSES	LB539	PROFIX	60,427		20,775	21,763	17,889	-	-
540 RENTS		PROFIX	-		-	-	-	-	-
Total Hydraulic Power Operation Expenses	LBSUB3		\$ 336,458	\$	115,675 \$	121,177	\$ 99,607	\$-	\$-
Hydraulic Power Generation Maintenance Expenses									
541 MAINTENANCE SUPERVISION & ENGINEERING	LB541	F022	\$ -		-	-	-	-	-
542 MAINTENANCE OF STRUCTURES	LB542	PROFIX	46,873		16,115	16,881	13,877	-	-
543 MAINT. OF RESERVES, DAMS, AND WATERWAYS	LB543	PROFIX	46,873		16,115	16,881	13,877	-	-
544 MAINTENANCE OF ELECTRIC PLANT	LB544	Energy	151,040		-	-	-	151,040	-
545 MAINTENANCE OF MISC HYDRAULIC PLANT	LB545	Energy	-		-	-	-	-	-
Total Hydraulic Power Generation Maint. Expense	LBSUB4		\$ 244,786	\$	32,230 \$	33,763	\$ 27,753	\$ 151,040	\$-
Total Hydraulic Power Generation Expense			\$ 581,244	\$	147,905 \$	154,940	\$ 127,360	\$ 151,040	\$-

## LOLP METHODOLOGY

				stribution		 			
Description	Name	Functional Vector	3	Substation Genera	Specific	on Primary Line Demand	s Customer	Distribution S Demand	ec. Lines Customer
Labor Expenses	Nullio	Vector		Genera	opcome	Domana	oustonier	Demana	Guotomer
Steam Power Generation Operation Expenses		5040							
500 OPERATION SUPERVISION & ENGINEERING 501 FUEL	LB500 LB501	F019 Energy		-	-	-	-	-	-
501 FOEL 502 STEAM EXPENSES	LB501	PROFIX		-	-	-	-	-	-
502 STEAM EXPENSES 504 STEAM TRANSFER EXPENSES	LB502 LB504	PROFIX		-	-	-	-	-	-
505 ELECTRIC EXPENSES	LB504 LB505	PROFIX		-	-	-	-	-	-
505 ELECTRIC EXPENSES 506 MISC. STEAM POWER EXPENSES	LB505 LB506	PROFIX		-	-	-	-	-	-
507 RENTS	LB500	PROFIX		-	-	-	-	-	-
507 RENTS	LB507	PROFIX		-	-	-	-	-	-
Total Steam Power Operation Expenses	LBSUB1		\$	-	\$ -	\$ - \$	- 9	6 - \$	-
Steam Power Generation Maintenance Expenses									
510 MAINTENANCE SUPERVISION & ENGINEERING	LB510	F020		-	-	-	-	-	-
511 MAINTENANCE OF STRUCTURES	LB511	PROFIX		-	-	-	-	-	-
512 MAINTENANCE OF BOILER PLANT	LB512	Energy		-	-	-	-	-	-
513 MAINTENANCE OF ELECTRIC PLANT	LB513	Energy		-	-	-	-	-	-
514 MAINTENANCE OF MISC STEAM PLANT	LB514	Energy		-	-	-	-	-	-
Total Steam Power Generation Maintenance Expense	LBSUB2		\$	-	\$ -	\$ - \$	- 9	s - \$	-
Total Steam Power Generation Expense			\$	-	\$ -	\$ - \$	- 9	5 - \$	-
Hydraulic Power Generation Operation Expenses									
535 OPERATION SUPERVISION & ENGINEERING	LB535	F021		-	-	-	-	-	-
536 WATER FOR POWER	LB536	PROFIX		-	-	-	-	-	-
537 HYDRAULIC EXPENSES	LB537	PROFIX		-	-	-	-	-	-
538 ELECTRIC EXPENSES	LB538	PROFIX		-	-	-	-	-	-
539 MISC. HYDRAULIC POWER EXPENSES	LB539	PROFIX		-	-	-	-	-	-
540 RENTS		PROFIX		-	-	-	-	-	-
Total Hydraulic Power Operation Expenses	LBSUB3		\$	-	\$ -	\$ - \$	- 9	5 - \$	-
Hydraulic Power Generation Maintenance Expenses									
541 MAINTENANCE SUPERVISION & ENGINEERING	LB541	F022		-	-	-	-	-	-
542 MAINTENANCE OF STRUCTURES	LB542	PROFIX		-	-	-	-	-	-
543 MAINT. OF RESERVES, DAMS, AND WATERWAYS	LB543	PROFIX		-	-	-	-	-	-
544 MAINTENANCE OF ELECTRIC PLANT	LB544	Energy		-	-	-	-	-	-
545 MAINTENANCE OF MISC HYDRAULIC PLANT	LB545	Energy		-	-	-	-	-	-
Total Hydraulic Power Generation Maint. Expense	LBSUB4		\$	-	\$ -	\$ - \$	- 9	5 - \$	-
Total Hydraulic Power Generation Expense			\$	-	\$ -	\$ - \$	- 9	s - \$	-
-									

#### LOLP METHODOLOGY

										Customer		
							tribution		Distribution St. &		Customer	
Description	News	Functional	D	istribution	 		Services	Meters	Cust. Lighting	Expense	Service & Info.	Sales Expense
Description	Name	Vector		Demand	Customer	ι U	ustomer					
Labor Expenses												
Steam Power Generation Operation Expenses												
500 OPERATION SUPERVISION & ENGINEERING	LB500	F019		-	-			-	-	-	-	-
501 FUEL	LB501	Energy		-	-		-	-	-	-	-	-
502 STEAM EXPENSES	LB502	PROFIX		-	-		-	-	-	-	-	-
504 STEAM TRANSFER EXPENSES	LB504	PROFIX		-	-		-	-	-	-	-	-
505 ELECTRIC EXPENSES	LB505	PROFIX		-	-		-	-	-	-	-	-
506 MISC. STEAM POWER EXPENSES	LB506	PROFIX		-	-		-	-	-	-	-	-
507 RENTS	LB507	PROFIX		-	-		-	-	-	-	-	-
Total Steam Power Operation Expenses	LBSUB1		\$	-	\$ -	\$	-	\$ -	\$-	\$-	\$ -	\$ -
Steam Power Generation Maintenance Expenses												
510 MAINTENANCE SUPERVISION & ENGINEERING	LB510	F020		-	-		-	-			-	-
511 MAINTENANCE OF STRUCTURES	LB511	PROFIX		-	-		-	-	-	-	-	-
512 MAINTENANCE OF BOILER PLANT	LB512	Energy		-	-		-	-	-	-	-	-
513 MAINTENANCE OF ELECTRIC PLANT	LB513	Energy		-	-			-	-	-	-	-
514 MAINTENANCE OF MISC STEAM PLANT	LB514	Energy		-	-		-	-	-	-	-	-
Total Steam Power Generation Maintenance Expense	LBSUB2		\$	-	\$ -	\$	-	\$-	\$-	\$-	\$-	\$-
Total Steam Power Generation Expense			\$	-	\$ -	\$	-	\$-	\$-	\$-	\$-	\$-
Hydraulic Power Generation Operation Expenses												
535 OPERATION SUPERVISION & ENGINEERING	LB535	F021		_	_		_	_	_		_	_
536 WATER FOR POWER	LB536	PROFIX		-	-			_	_	_	_	_
537 HYDRAULIC EXPENSES	LB537	PROFIX		-	-		-	-			-	-
538 ELECTRIC EXPENSES	LB538	PROFIX		-	-		-	-			-	-
539 MISC. HYDRAULIC POWER EXPENSES	LB539	PROFIX		-	-		-	-	-	-	-	-
540 RENTS		PROFIX		-	-		-	-	-	-	-	-
Total Hydraulic Power Operation Expenses	LBSUB3		\$	-	\$ -	\$	-	\$-	\$-	\$-	\$-	\$-
Hydraulic Power Generation Maintenance Expenses												
541 MAINTENANCE SUPERVISION & ENGINEERING	LB541	F022		_	_		_	_	_	_	_	
542 MAINTENANCE OF STRUCTURES	LB542	PROFIX		_	-			_	_	_	_	-
543 MAINT. OF RESERVES, DAMS, AND WATERWAYS	LB543	PROFIX		-	-		-	-	-	-	-	-
544 MAINTENANCE OF ELECTRIC PLANT	LB544	Energy		-	-			-	-	-	-	-
545 MAINTENANCE OF MISC HYDRAULIC PLANT	LB545	Energy		-	-		-	-	-	-	-	-
Total Hydraulic Power Generation Maint. Expense	LBSUB4		\$	-	\$ -	\$	-	\$-	\$-	\$-	\$-	\$-
Total Hydraulic Power Generation Expense			\$	-	\$ -	\$	-	\$ -	\$-	\$-	\$-	\$-

## LOLP METHODOLOGY

											Duraduration	Turninin
		Functional		Total		P	roduct	tion Demand			Production Energy	Transmission Demand
Description	Name	Vector		System	L	Base		Winter Peak	Summer Peak		37	Demand
Labor Expenses (Continued)												
Other Power Generation Operation Expense												
546 OPERATION SUPERVISION & ENGINEERING	LB546	PROFIX	\$	468,874		161,199		168,867	138,808		-	-
547 FUEL 548 GENERATION EXPENSE	LB547 LB548	Energy PROFIX		- 161,301		-		- 58.093	- 47,752		-	-
540 GENERATION EXPENSE 549 MISC OTHER POWER GENERATION	LB540 LB549	PROFIX		354,300		55,455 121,809		127,602	104,889		-	-
550 RENTS	LB550	PROFIX		-		-		-	-		-	-
Total Other Power Generation Expenses	LBSUB5		\$	984,475	\$	338,464	\$	354,562	\$ 291,449	\$	-	\$ -
Other Power Generation Maintenance Expense												
551 MAINTENANCE SUPERVISION & ENGINEERING	LB551	PROFIX	\$	230,613		79,285		83,056	68,272		-	-
552 MAINTENANCE OF STRUCTURES	LB552	PROFIX		-		-		-	-		-	-
553 MAINTENANCE OF GENERATING & ELEC PLANT	LB553	PROFIX		606,788		208,615		218,537	179,637		-	-
554 MAINTENANCE OF MISC OTHER POWER GEN PLT	LB554	PROFIX		(160,951)		(55,335)		(57,967)	(47,649)		-	-
Total Other Power Generation Maintenance Expense	LBSUB6		\$	676,450	\$	232,564	\$	243,626	\$ 200,260	\$	-	\$ -
Total Other Power Generation Expense			\$	1,660,925	\$	571,028	\$	598,188	\$ 491,709	\$	-	\$ -
Total Production Expense	LPREX		\$	29,961,102	\$	5,755,856	\$	6,029,623	\$ 4,956,330	\$	13,219,294	\$ -
Purchased Power 555 PURCHASED POWER	LB555	OMPP	\$					_				
556 SYSTEM CONTROL AND LOAD DISPATCH	LB556	PROFIX	Ψ	956,703		328,916		344,560	283,227		_	-
557 OTHER EXPENSES	LB557	PROFIX		-		-		-			-	-
Total Purchased Power Labor	LBPP		\$	956,703	\$	328,916	¢	344,560	\$ 283,227	¢	_	\$ -
			Ψ	550,705	Ψ	020,010	Ψ	547,500	φ 200,227	Ψ	-	Ŷ ·

## LOLP METHODOLOGY

			Distribution										
		Functional	Substation	1	Dis	tributi	on Primary L	ines			Distributio	n Sec. Li	ines
Description	Name	Vector	General		Specific	:	Demand		Custome	r	Demand		Customer
Labor Expenses (Continued)													
Other Power Generation Operation Expense													
546 OPERATION SUPERVISION & ENGINEERING	LB546	PROFIX	-		-		-		-		-		-
547 FUEL	LB547	Energy	-		-		-		-		-		-
548 GENERATION EXPENSE	LB548	PROFIX	-		-		-		-		-		-
549 MISC OTHER POWER GENERATION	LB549	PROFIX	-		-		-		-		-		-
550 RENTS	LB550	PROFIX	-		-		-		-		-		-
Total Other Power Generation Expenses	LBSUB5		\$ -	\$	-	\$	-	\$	-	\$	-	\$	-
Other Power Generation Maintenance Expense													
551 MAINTENANCE SUPERVISION & ENGINEERING	LB551	PROFIX	-		-		-		-		-		-
552 MAINTENANCE OF STRUCTURES	LB552	PROFIX	-		-		-		-		-		-
553 MAINTENANCE OF GENERATING & ELEC PLANT	LB553	PROFIX	-		-		-		-		-		-
554 MAINTENANCE OF MISC OTHER POWER GEN PLT	LB554	PROFIX	-		-		-		-		-		-
Total Other Power Generation Maintenance Expense	LBSUB6		\$ -	\$	-	\$	-	\$	-	\$	-	\$	-
Total Other Power Generation Expense			\$ -	\$	-	\$	-	\$	-	\$	-	\$	-
Total Production Expense	LPREX		\$ -	\$	-	\$	-	\$	-	\$	-	\$	-
Purchased Power													
555 PURCHASED POWER	LB555	OMPP	-				-		-		-		-
556 SYSTEM CONTROL AND LOAD DISPATCH	LB556	PROFIX	-		-		-		-		-		-
557 OTHER EXPENSES	LB557	PROFIX	-		-		-		-		-		-
Total Purchased Power Labor	LBPP		\$ -	\$	-	\$	-	\$	-	\$	-	\$	-

## LOLP METHODOLOGY

		Functional		Distribution	Line T	rans.		Distribution Services	Distribution Meters	Distribution St. & Cust. Lighting			Sales Expense
Description	Name	Vector		Demand		Customer		Customer			-	• •	
Labor Expenses (Continued)													
Other Power Generation Operation Expense													
546 OPERATION SUPERVISION & ENGINEERING	LB546	PROFIX		-		-		-	-	-	-	-	-
547 FUEL	LB547	Energy		-		-		-	-	-	-	-	-
548 GENERATION EXPENSE	LB548	PROFIX		-		-		-	-	-	-	-	-
549 MISC OTHER POWER GENERATION	LB549	PROFIX		-		-		-	-	-	-	-	-
550 RENTS	LB550	PROFIX		-		-		-	-	-	-	-	-
Total Other Power Generation Expenses	LBSUB5		\$	-	\$	-	\$	- 9	\$-	\$-	\$-	\$-	\$-
Other Power Generation Maintenance Expense 551 MAINTENANCE SUPERVISION & ENGINEERING	LB551	PROFIX		-		-		-	_	-	-	_	_
552 MAINTENANCE OF STRUCTURES	LB552	PROFIX		-		-		-	-	-	-	-	-
553 MAINTENANCE OF GENERATING & ELEC PLANT	LB553	PROFIX		-		-		-	-	-	-	-	-
554 MAINTENANCE OF MISC OTHER POWER GEN PLT	LB554	PROFIX		-		-		-	-	-	-	-	-
	LBSUB6		•		•		•		<b>^</b>	<u>^</u>	•	<u>^</u>	
Total Other Power Generation Maintenance Expense	LBSUB0		\$	-	\$	-	\$	- 5	\$-	\$ -	\$ -	\$ -	\$-
Total Other Power Generation Expense			\$	-	\$	-	\$	- 9	\$-	\$-	\$-	\$-	\$-
Total Production Expense	LPREX		\$	-	\$	-	\$	- 9	\$-	\$-	\$-	\$ -	\$-
Purchased Power													
555 PURCHASED POWER	LB555	OMPP		-		-		-	-	-	-	-	-
556 SYSTEM CONTROL AND LOAD DISPATCH	LB556	PROFIX		-		-		-	-	-	-	-	-
557 OTHER EXPENSES	LB557	PROFIX		-		-		-	-	-	-	-	-
Total Purchased Power Labor	LBPP		\$	-	\$	-	\$	- 5	\$-	\$-	\$-	\$-	\$-

## LOLP METHODOLOGY

		Functional	Total		duction Demand		Production Energy	Transmission Demand
Description	Name	Vector	System	Base	Winter Peak	Summer Peak		Demand
Labor Expenses (Continued)								
Transmission Labor Expenses								
560 OPERATION SUPERVISION AND ENG	LB560	PTRAN	\$ 642,049	-	-	-	-	642,049
561 LOAD DISPATCHING	LB561	PTRAN	1,454,366	-	-	-	-	1,454,366
562 STATION EXPENSES	LB562	PTRAN	433,996	-	-	-	-	433,996
563 OVERHEAD LINE EXPENSES	LB563	PTRAN	-	-	-	-	-	-
566 MISC. TRANSMISSION EXPENSES	LB566	PTRAN	105,592	-	-	-	-	105,592
569 MAINTENACE OF STRUCTURES	LB569	PTRAN	-	-	-	-	-	-
570 MAINT OF STATION EQUIPMENT	LB570	PTRAN	416,335	-	-	-	-	416,335
571 MAINT OF OVERHEAD LINES	LB571	PTRAN	83,079	-	-	-	-	83,079
573 MAINT OF MISC. TRANSMISSION PLANT	LB573	PTRAN	-	-	-	-	-	-
Total Transmission Labor Expenses	LBTRAN		\$ 3,135,417	\$ - \$	- 5	ş -	\$-	\$ 3,135,417
Distribution Operation Labor Expense								
580 OPERATION SUPERVISION AND ENGI	LB580	F023	\$ 898,041	-	-	-	-	-
581 LOAD DISPATCHING	LB581	P362	574,384	-	-	-	-	-
582 STATION EXPENSES	LB582	P362	851,000	-	-	-	-	-
583 OVERHEAD LINE EXPENSES	LB583	P365	1,741,898	-	-	-	-	-
584 UNDERGROUND LINE EXPENSES	LB584	P367	168,503	-	-	-	-	-
585 STREET LIGHTING EXPENSE	LB585	P373	-	-	-	-	-	-
586 METER EXPENSES	LB586	P370	3,736,471	-	-	-	-	-
586 METER EXPENSES - LOAD MANAGEMENT	LB586x	F012		-	-	-	-	-
587 CUSTOMER INSTALLATIONS EXPENSE	LB587	P371	-	-	-	-	-	-
588 MISCELLANEOUS DISTRIBUTION EXP	LB588	PDIST	1,539,532	-	-	-	-	-
589 RENTS	LB589	PDIST	-	-	-	-	-	-
Total Distribution Operation Labor Expense	LBDO		\$ 9,509,829	\$ - \$	- 9	ş -	\$ -	\$-

## LOLP METHODOLOGY

		Functional	Distribution Substation		ion Primary Lines		Distribution Sec	
Description	Name	Vector	General	Specific	Demand	Customer	Demand	Customer
Labor Expenses (Continued)								
Transmission Labor Expenses								
560 OPERATION SUPERVISION AND ENG	LB560	PTRAN	-	-	-	-	-	-
561 LOAD DISPATCHING	LB561	PTRAN	-	-	-	-	-	-
562 STATION EXPENSES	LB562	PTRAN	-	-	-	-	-	-
563 OVERHEAD LINE EXPENSES	LB563	PTRAN	-	-	-	-	-	-
566 MISC. TRANSMISSION EXPENSES	LB566	PTRAN	-	-	-	-	-	-
569 MAINTENACE OF STRUCTURES	LB569	PTRAN	-	-	-	-	-	-
570 MAINT OF STATION EQUIPMENT	LB570	PTRAN	-	-	-	-	-	-
571 MAINT OF OVERHEAD LINES	LB571	PTRAN	-	-	-	-	-	-
573 MAINT OF MISC. TRANSMISSION PLANT	LB573	PTRAN	-	-	-	-	-	-
Total Transmission Labor Expenses	LBTRAN		\$ - \$	- \$	- \$	- \$	- \$	-
Distribution Operation Labor Expense								
580 OPERATION SUPERVISION AND ENGI	LB580	F023	166,627	-	90,525	137,597	29,083	43,032
581 LOAD DISPATCHING	LB581	P362	574,384	-	-	-	-	-
582 STATION EXPENSES	LB582	P362	851,000	-	-	-	-	-
583 OVERHEAD LINE EXPENSES	LB583	P365	-	-	520,214	754,507	190,655	276,522
584 UNDERGROUND LINE EXPENSES	LB584	P367	-	-	52,893	95,558	7,144	12,907
585 STREET LIGHTING EXPENSE	LB585	P373	-	-	-	-	-	-
586 METER EXPENSES	LB586	P370	-	-	-	-	-	-
586 METER EXPENSES - LOAD MANAGEMENT	LB586x	F012	-	-	-	-	-	-
587 CUSTOMER INSTALLATIONS EXPENSE	LB587	P371	-	-	-	-	-	-
588 MISCELLANEOUS DISTRIBUTION EXP	LB588	PDIST	172,493	-	294,980	469,423	81,091	123,231
589 RENTS	LB589	PDIST	-	-	-	-	-	-
Total Distribution Operation Labor Expense	LBDO		\$ 1,764,504 \$	- \$	958,612 \$	1,457,086 \$	307,973 \$	455,693

## LOLP METHODOLOGY

						Distribution	Distribution	Distribution St. &	Customer Accounts	Customer	
		Functional	D	Distribution Line	Trans.	Services	Meters	Cust. Lighting	Expense	Service & Info.	Sales Expense
Description	Name	Vector		Demand	Customer	Customer					
Labor Expenses (Continued)											
Transmission Labor Expenses											
560 OPERATION SUPERVISION AND ENG	LB560	PTRAN		-	-	-	-	-	-	-	-
561 LOAD DISPATCHING	LB561	PTRAN		-	-	-	-	-	-	-	-
562 STATION EXPENSES	LB562	PTRAN		-	-	-	-	-	-	-	-
563 OVERHEAD LINE EXPENSES	LB563	PTRAN		-	-	-	-	-	-	-	-
566 MISC. TRANSMISSION EXPENSES	LB566	PTRAN		-	-	-	-	-	-	-	-
569 MAINTENACE OF STRUCTURES	LB569	PTRAN		-	-	-	-	-	-	-	-
570 MAINT OF STATION EQUIPMENT	LB570	PTRAN		-	-	-	-	-	-	-	-
571 MAINT OF OVERHEAD LINES	LB571	PTRAN		-	-	-	-	-	-	-	-
573 MAINT OF MISC. TRANSMISSION PLANT	LB573	PTRAN		-	-	-	-	-	-	-	-
Total Transmission Labor Expenses	LBTRAN		\$	- \$	- 5	5 - 5	-	\$-	\$-	\$-	\$-
Distribution Operation Labor Expense											
580 OPERATION SUPERVISION AND ENGI	LB580	F023		11,689	8,175	4,060	394,350	12,904	-	-	-
581 LOAD DISPATCHING	LB581	P362		-	-	-	-	-	-	-	-
582 STATION EXPENSES	LB582	P362		-	-	-	-	-	-	-	-
583 OVERHEAD LINE EXPENSES	LB583	P365		-	-	-	-	-	-	-	-
584 UNDERGROUND LINE EXPENSES	LB584	P367		-	-	-	-	-	-	-	-
585 STREET LIGHTING EXPENSE	LB585	P373		-	-	-	-	-	-	-	-
586 METER EXPENSES	LB586	P370		-	-	-	3,736,471	-	-	-	-
586 METER EXPENSES - LOAD MANAGEMENT	LB586x	F012		-	-	-	-	-	-	-	-
587 CUSTOMER INSTALLATIONS EXPENSE	LB587	P371		-	-	-	-	-	-	-	-
588 MISCELLANEOUS DISTRIBUTION EXP	LB588	PDIST		112,093	78,392	38,931	45,159	123,739	-	-	-
589 RENTS	LB589	PDIST		-	-	-	-	-	-	-	-
Total Distribution Operation Labor Expense	LBDO		\$	123,782 \$	86,567	\$ 42,991 \$	4,175,980	\$ 136,642	\$ -	\$-	\$-

## LOLP METHODOLOGY

								Desidentian	Turnensierien
		Functional		Total	Prod	uction Demand		Production Energy	Transmission Demand
Description	Name	Vector		System	 Base	Winter Peak	Summer Peak	Lifergy	Demand
·									
Labor Expenses (Continued)									
Distribution Maintenance Labor Expense									
590 MAINTENANCE SUPERVISION AND EN	LB590	F024	\$	-	-	-	-	-	-
591 MAINTENANCE OF STRUCTURES	LB591	P362		-	-	-	-	-	-
592 MAINTENANCE OF STATION EQUIPME	LB592	P362		199,000	-	-	-	-	-
593 MAINTENANCE OF OVERHEAD LINES	LB593	P365		2,584,023	-	-	-	-	-
594 MAINTENANCE OF UNDERGROUND LIN	LB594	P367		403,600	-	-	-	-	-
595 MAINTENANCE OF LINE TRANSFORME	LB595	P368		77,717	-	-	-	-	-
596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS	LB596	P373		6,800	-	-	-	-	-
597 MAINTENANCE OF METERS	LB597	P370		-	-	-	-	-	-
598 MAINTENANCE OF MISC DISTR PLANT	LB598	PDIST		-	-	-	-	-	-
Total Distribution Maintenance Labor Expense	LBDM		\$	3,271,140	\$ - \$	- \$	- \$	- \$	-
Total Distribution Operation and Maintenance Labor Expenses		PDIST	\$	12,780,969	-	-	-	-	-
Transmission and Distribution Labor Expenses			\$	15,916,386	-	-	-	-	3,135,417
Production, Transmission and Distribution Labor Expenses	LBSUB		\$	46,834,191	\$ 6,084,771 \$	6,374,183 \$	5,239,557 \$	13,219,294 \$	3,135,417
Customer Accounts Expense									
901 SUPERVISION/CUSTOMER ACCTS	LB901	F025	\$	869,231	_	_	_	_	_
902 METER READING EXPENSES	LB902	F025	ψ	340.095	-	-	-	-	-
903 RECORDS AND COLLECTION	LB902	F025		3,084,679				_	_
904 UNCOLLECTIBLE ACCOUNTS	LB904	F025		3,004,073	-	-	-	-	-
905 MISC CUST ACCOUNTS	LB904 LB903	F025		-	-	-	-	-	-
303 MIGC COST ACCOUNTS	LD903	1 025		-	-	-	-	-	-
Total Customer Accounts Labor Expense	LBCA		\$	4,294,006	\$ - \$	- \$	- \$	- \$	-
Customer Service Expense									
907 SUPERVISION	LB907	F026	\$	262,521	-	-	-	-	-
908 CUSTOMER ASSISTANCE EXPENSES	LB908	F026		916,352	-	-	-	-	-
908 CUSTOMER ASSISTANCE EXP-LOAD MGMT	LB908x	F026			-	-	-	-	-
909 INFORMATIONAL AND INSTRUCTIONA	LB909	F026			-	-	-	-	-
909 INFORM AND INSTRUC -LOAD MGMT	LB909x	F026			-	-	-	-	-
910 MISCELLANEOUS CUSTOMER SERVICE	LB910	F026			-	-	-	-	-
911 DEMONSTRATION AND SELLING EXP	LB911	F026			-	-	-	-	-
912 DEMONSTRATION AND SELLING EXP	LB912	F026			-	-	-	-	-
913 WATER HEATER - HEAT PUMP PROGRAM	LB913	F026			-	-	-	-	-
915 MDSE-JOBBING-CONTRACT	LB915	F026			-	-	-	-	-
916 MISC SALES EXPENSE	LB916	F026			-	-	-	-	-
Total Customer Service Labor Expense	LBCS		\$	1,178,872	\$ - \$	- \$	- \$	- \$	-
Sub-Total Labor Exp	LBSUB7		\$	52,307,069	6,084,771	6,374,183	5,239,557	13,219,294	3,135,417

## LOLP METHODOLOGY

		-							T		
			Distribution								
	Functional		Substation								
Name	Vector		General		Specific	Deman	d	Customer		Demand	Customer
LB590	F024		-		-	-		-		-	-
LB591	P362		-		-	-		-		-	-
LB592	P362		199,000		-	-		-		-	-
LB593	P365		-		-	771,71	2	1,119,276		282,828	410,207
LB594	P367		-		-	126,69	)	228,881		17,113	30,916
LB595	P368		-		-	-		-		-	-
LB596	P373		-		-	-		-		-	-
LB597	P370		-		-	-		-		-	-
LB598	PDIST		-		-	-		-		-	-
		•		•					•		• • • • • • • • •
LBDM		\$	199,000	\$	- 3	6 898,40	2\$	1,348,157	\$	299,940	\$ 441,123
	PDIST		1,963,504		-	1,857,014	4	2,805,243		607,914	896,816
			1,963,504		-	1,857,01	4	2,805,243		607,914	896,816
LBSUB		\$	1,963,504	\$	- 5	1,857,014	4 \$	2,805,243	\$	607,914	\$ 896,816
LB901	F025		-		-	-		-		-	-
LB902	F025		-		-	-		-		-	-
LB903	F025		-		-	-		-		-	-
LB904			-		-	-		-		-	-
LB903	F025		-		-	-		-		-	-
LBCA		\$	-	\$	- 5	- S	\$	-	\$	-	\$-
LB907	F026		-		-	-		-		-	-
LB908	F026		-		-	-		-		-	-
LB908x	F026		-		-	-		-		-	-
LB909	F026		-		-	-		-		-	-
LB909x	F026		-		-	-		-		-	-
LB910	F026		-		-	-		-		-	-
LB911	F026		-		-	-		-		-	-
LB912	F026		-		-	-		-		-	-
LB913	F026		-		-	-		-		-	-
LB915	F026		-		-	-		-		-	-
LB916	F026		-		-	-		-		-	-
LBCS		\$	-	\$	- 9	- 5	\$	-	\$	-	\$ -
LBSUB7			1,963,504		-	1,857,014	4	2,805,243		607,914	896,816
	LB590 LB591 LB592 LB593 LB594 LB596 LB597 LB598 LBDM LB901 LB901 LB902 LB903 LB904 LB903 LB04 LB903 LB04 LB903 LB04 LB903 LB04 LB903 LB904 LB903 LB904 LB903 LB904 LB903 LB904 LB903 LB904 LB905 LB908 LB908 LB908 LB909 LB910 LB911 LB911 LB913 LB915 LB916 LBCS	Name         Vector           LB590         F024           LB591         P362           LB592         P362           LB593         P365           LB594         P367           LB595         P368           LB596         P373           LB597         P370           LB598         PDIST           LBDM         PDIST           LB901         F025           LB902         F025           LB903         F025           LB904         F025           LB903         F025           LB904         F025           LB903         F026           LB904         F026           LB905         F026           LB906         F026           LB907         F026           LB908         F026           LB909         F026           LB908         F026           LB909         F026           LB910         F026           LB911         F026           LB913         F026           LB914         F026           LB915         F026           LB916         F026	Name         Vector           LB590         F024           LB591         P362           LB592         P362           LB593         P365           LB594         P367           LB595         P368           LB596         P373           LB597         P370           LB598         PDIST           LBDM         \$           PDIST         \$           LB902         F025           LB902         F025           LB903         F025           LB904         F025           LB903         F025           LB904         F025           LB903         F026           LB904         F026           LB905         F026           LB908         F026           LB909         F026           LB909         F026           LB909         F026           LB909         F026           LB911         F026           LB912         F026           LB913         F026           LB914         F026           LB915         F026           LB915         F026	Name         Functional Vector         Substation General           LB590         F024         -           LB591         P362         -           LB592         P362         199,000           LB593         P365         -           LB594         P367         -           LB595         P368         -           LB596         P373         -           LB597         P370         -           LB598         PDIST         -           LB598         PDIST         1,963,504           LB591         F025         -           LB0M         \$         1,963,504           LB901         F025         -           LB902         F025         -           LB903         F025         -           LB904         F025         -           LB903         F025         -           LB904         F026         -           LB907         F026         -           LB908         F026         -           LB909         F026         -           LB909         F026         -           LB910         F026         -	Name         Functional Vector         Substation General           LB590         F024         -           LB591         P362         199,000           LB592         P362         199,000           LB593         P365         -           LB594         P367         -           LB595         P368         -           LB596         P373         -           LB597         P370         -           LB598         PDIST         -           LB598         PDIST         1,963,504           LB901         F025         -           LB902         F025         -           LB903         F025         -           LB903         F025         -           LB903         F025         -           LB903         F025         -           LB904         F025         -           LB905         F026         -           LB906         F026         -           LB907         F026         -           LB908         F026         -           LB909         F026         -           LB909         F026         -	Functional Vector         Substation         Distri Specific           LB590         F024         -         -           LB591         P362         -         -           LB592         P362         199,000         -           LB593         P365         -         -           LB595         P368         -         -           LB596         P373         -         -           LB596         P373         -         -           LB596         P373         -         -           LB596         P373         -         -           LB597         P370         -         -           LB598         PDIST         -         -           LB598         PDIST         1,963,504         -         -           LB901         F025         -         -         -           LB902         F025         -         -         -           LB903         F025         -         -         -           LB903         F025         -         -         -           LB903         F026         -         -         -           LB903         F026 <td< td=""><td>Name         Functional Vector         Substation         Distribution Primary           LBS90         F024         -</td><td>Name         Functional Vector         Substation         Distribution Primary Lines           LB590         F024         -         -         -         -           LB591         P362         199,000         -         -         -           LB592         P362         199,000         -         -         -           LB593         P365         -         -         126,690           LB594         P367         -         -         126,690           LB596         P373         -         -         -           LB597         P370         -         -         -           LB598         PDIST         1,963,504         -         \$         898,402         \$           LB598         PDIST         1,963,504         -         \$         1,857,014         \$           LB500         F025         -         -         -         -         -         -           LB901         F025         -         -         -         -         -         -           LB904         F025         -         -         -         -         -         -           LB903         F025         -         <td< td=""><td>Name         Functional Vector         Substation General         Distribution Primary Lines           LB590         F024         -         <t< td=""><td>Name         Functional Vector         Substation General         Distribution Primary Lines         Customer           LB590         F024         -</td><td>Functional Vector         Substation General         Distribution Primary Lines         Distribution Customer         Distribution Demand           LB590         F024         -</td></t<></td></td<></td></td<>	Name         Functional Vector         Substation         Distribution Primary           LBS90         F024         -	Name         Functional Vector         Substation         Distribution Primary Lines           LB590         F024         -         -         -         -           LB591         P362         199,000         -         -         -           LB592         P362         199,000         -         -         -           LB593         P365         -         -         126,690           LB594         P367         -         -         126,690           LB596         P373         -         -         -           LB597         P370         -         -         -           LB598         PDIST         1,963,504         -         \$         898,402         \$           LB598         PDIST         1,963,504         -         \$         1,857,014         \$           LB500         F025         -         -         -         -         -         -           LB901         F025         -         -         -         -         -         -           LB904         F025         -         -         -         -         -         -           LB903         F025         - <td< td=""><td>Name         Functional Vector         Substation General         Distribution Primary Lines           LB590         F024         -         <t< td=""><td>Name         Functional Vector         Substation General         Distribution Primary Lines         Customer           LB590         F024         -</td><td>Functional Vector         Substation General         Distribution Primary Lines         Distribution Customer         Distribution Demand           LB590         F024         -</td></t<></td></td<>	Name         Functional Vector         Substation General         Distribution Primary Lines           LB590         F024         - <t< td=""><td>Name         Functional Vector         Substation General         Distribution Primary Lines         Customer           LB590         F024         -</td><td>Functional Vector         Substation General         Distribution Primary Lines         Distribution Customer         Distribution Demand           LB590         F024         -</td></t<>	Name         Functional Vector         Substation General         Distribution Primary Lines         Customer           LB590         F024         -	Functional Vector         Substation General         Distribution Primary Lines         Distribution Customer         Distribution Demand           LB590         F024         -

## LOLP METHODOLOGY

Description	Name	Functional Vector	Distribution Lir Demand	ne Trans. Customer	Distribution Services Customer	Distribution Meters	Distribution St. & Cust. Lighting	Customer Accounts Expense	Customer Service & Info.	Sales Expense
boonpaion	Humo	100101	Beillana	ouotointei	Guotomer					
Labor Expenses (Continued)										
Distribution Maintenance Labor Expense										
590 MAINTENANCE SUPERVISION AND EN	LB590	F024	-	-	-	-	-	-	-	-
591 MAINTENANCE OF STRUCTURES	LB591	P362	-	-	-	-	-	-	-	-
592 MAINTENANCE OF STATION EQUIPME	LB592	P362	-	-	-	-	-	-	-	-
593 MAINTENANCE OF OVERHEAD LINES	LB593	P365	-	-	-	-	-	-	-	-
594 MAINTENANCE OF UNDERGROUND LIN	LB594	P367	-	-	-	-	-	-	-	-
595 MAINTENANCE OF LINE TRANSFORME	LB595	P368	45,733	31,984	-	-	-	-	-	-
596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS	LB596	P373	-	-	-	-	6,800	-	-	-
597 MAINTENANCE OF METERS	LB597	P370	-	-	-	-	-	-	-	-
598 MAINTENANCE OF MISC DISTR PLANT	LB598	PDIST	-	-	-	-	-	-	-	-
Total Distribution Maintenance Labor Expense	LBDM		\$ 45,733 \$	31,984	\$ - 9	- 3	\$ 6,800 \$	-	\$ - \$	\$-
Total Distribution Operation and Maintenance Labor Expenses		PDIST	169,515	118,551	42,991	4,175,980	143,442	-	-	-
Transmission and Distribution Labor Expenses			169,515	118,551	42,991	4,175,980	143,442	-	-	-
Production, Transmission and Distribution Labor Expenses	LBSUB		\$ 169,515 \$	118,551	\$ 42,991 \$	4,175,980	\$ 143,442 \$	-	\$ - :	\$-
Customer Accounts Expense										
901 SUPERVISION/CUSTOMER ACCTS	LB901	F025	-		-			869,231		-
902 METER READING EXPENSES	LB902	F025	-		-			340,095		
903 RECORDS AND COLLECTION	LB903	F025	-	-	-	-	-	3,084,679	-	-
904 UNCOLLECTIBLE ACCOUNTS	LB904	F025	-		-	-		-,		
905 MISC CUST ACCOUNTS	LB903	F025	-	-	-	-	-	-	-	-
Total Customer Accounts Labor Expense	LBCA		\$ - \$	-	\$ - 9	· -	\$-\$	4,294,006	\$ - 3	\$-
Customer Service Expense										
907 SUPERVISION	LB907	F026	-	-	-	-	-		262,521	-
908 CUSTOMER ASSISTANCE EXPENSES	LB908	F026	-		-	-		-	916,352	
908 CUSTOMER ASSISTANCE EXP-LOAD MGMT	LB908x	F026	-	-	-	-	-	-	-	
909 INFORMATIONAL AND INSTRUCTIONA	LB909	F026	-	-	-	-	-	-	-	-
909 INFORM AND INSTRUC -LOAD MGMT	LB909x	F026	-	-	-	-	-	-	-	-
910 MISCELLANEOUS CUSTOMER SERVICE	LB910	F026	-	-	-	-	-	-	-	-
911 DEMONSTRATION AND SELLING EXP	LB911	F026	-	-	-	-	-	-	-	-
912 DEMONSTRATION AND SELLING EXP	LB912	F026	-	-	-	-	-	-	-	-
913 WATER HEATER - HEAT PUMP PROGRAM	LB913	F026	-	-	-	-	-	-	-	-
915 MDSE-JOBBING-CONTRACT	LB915	F026	-	-	-	-	-	-	-	-
916 MISC SALES EXPENSE	LB916	F026	-	-	-	-	-	-	-	-
Total Customer Service Labor Expense	LBCS		\$ - \$	-	\$ - 9		\$ - \$	-	\$ 1,178,872	\$-
Sub-Total Labor Exp	LBSUB7		169,515	118,551	42,991	4,175,980	143,442	4,294,006	1,178,872	-

## LOLP METHODOLOGY

		Functional	Total		ction Demand		Production Energy	Transmission Demand
Description	Name	Vector	System	Base	Winter Peak	Summer Peak		Demand
Labor Expenses (Continued)								
Administrative and General Expense								
920 ADMIN. & GEN. SALARIES-	LB920	LBSUB7	\$ 21,224,500	2,469,001	2,586,435	2,126,041	5,363,958	1,272,250
921 OFFICE SUPPLIES AND EXPENSES	LB920	LBSUB7		-	-	-	-	-
922 ADMIN. EXPENSES TRANSFERRED - CREDIT	LB922	LBSUB7	(2,423,558)	(281,927)	(295,337)	(242,766)	(612,493)	(145,274)
923 OUTSIDE SERVICES EMPLOYED	LB923	LBSUB7		-	-	-	-	-
924 PROPERTY INSURANCE	LB924	TUP		-	-	-	-	-
925 INJURIES AND DAMAGES	LB925	LBSUB7		-	-	-	-	-
926 EMPLOYEE BENEFITS	LB926	LBSUB7		-	-	-	-	-
928 REGULATORY COMMISSION FEES	LB928	TUP		-	-	-	-	-
929 DUPLICATE CHARGES-CR	LB929	LBSUB7		-	-	-	-	-
930 MISCELLANEOUS GENERAL EXPENSES	LB930	LBSUB7		-	-	-	-	-
931 RENTS AND LEASES 935 MAINTENANCE OF GENERAL PLANT	LB931	PGP PGP	400 740	-	-	-	-	-
935 MAINTENANCE OF GENERAL PLANT	LB932	PGP	430,713	83,058	87,009	71,521	-	46,339
Total Administrative and General Expense	LBAG		\$ 19,231,655	\$ 2,270,132 \$	2,378,107 \$	1,954,796	\$ 4,751,464 \$	1,173,314
Total Operation and Maintenance Expenses	TLB		\$ 71,538,724	\$ 8,354,904 \$	8,752,290 \$	7,194,353	\$ 17,970,758 \$	4,308,731
Operation and Maintenance Expenses Less Purchase Power	LBLPP		\$ 71,538,724	\$ 8,354,904 \$	8,752,290 \$	7,194,353	\$ 17,970,758 \$	4,308,731

## LOLP METHODOLOGY

			_	tribution										
		Functional	Su	ubstation		Dis	tributi	on Primary Li	ines		Disti	ibution	Sec. Lines	,
Description	Name	Vector		General	-	Specific		Demand		Customer	D	emand	Cust	tomer
Labor Expenses (Continued)														
Administrative and General Expense														
920 ADMIN. & GEN. SALARIES-	LB920	LBSUB7		796,726		-		753,516		1,138,276	24	6,671	363	3,899
921 OFFICE SUPPLIES AND EXPENSES	LB920	LBSUB7		-		-		-		-		-		-
922 ADMIN. EXPENSES TRANSFERRED - CREDIT	LB922	LBSUB7		(90,976)		-		(86,042)		(129,976)	(2	28,167)	(41	1,552)
923 OUTSIDE SERVICES EMPLOYED	LB923	LBSUB7				-						-		-
924 PROPERTY INSURANCE	LB924	TUP		-		-		-		-		-		-
925 INJURIES AND DAMAGES	LB925	LBSUB7		-		-		-		-		-		-
926 EMPLOYEE BENEFITS	LB926	LBSUB7		-		-		-		-		-		-
928 REGULATORY COMMISSION FEES	LB928	TUP		-		-		-		-		-		-
929 DUPLICATE CHARGES-CR	LB929	LBSUB7		-		-		-		-		-		-
930 MISCELLANEOUS GENERAL EXPENSES	LB930	LBSUB7		-		-		-		-		-		-
931 RENTS AND LEASES	LB931	PGP		-		-		-		-		-		-
935 MAINTENANCE OF GENERAL PLANT	LB932	PGP		15,998		-		27,358		43,537		7,521	11	1,429
Total Administrative and General Expense	LBAG		\$	721,748	\$	-	\$	694,833	\$	1,051,837	\$ 22	26,026	\$ 333	3,775
Total Operation and Maintenance Expenses	TLB		\$2	,685,252	\$	-	\$	2,551,847	\$	3,857,080	\$ 83	3,939	\$ 1,230	0,591
Operation and Maintenance Expenses Less Purchase Power	LBLPP		\$2	,685,252	\$	-	\$	2,551,847	\$	3,857,080	\$ 83	3,939	\$ 1,230	0,591

## LOLP METHODOLOGY

Description	Name	Functional Vector	Di	stribution Line	e Trans. Customer	Distribution Services Customer	Distribution Meters	Distribution St. & Cust. Lighting	Customer Accounts Expense S	Customer Service & Info.	Sales Expense
Labor Expenses (Continued)											
Administrative and General Expense											
920 ADMIN. & GEN. SALARIES-	LB920	LBSUB7		68,784	48,104	17,444	1,694,476	58,204	1,742,367	478,348	-
921 OFFICE SUPPLIES AND EXPENSES	LB920	LBSUB7		-	-	-	-	-	-	-	-
922 ADMIN. EXPENSES TRANSFERRED - CREDIT	LB922	LBSUB7		(7,854)	(5,493)	(1,992)	(193,487)	(6,646)	(198,955)	(54,621)	-
923 OUTSIDE SERVICES EMPLOYED	LB923	LBSUB7		-	-	-	-	-	-		-
924 PROPERTY INSURANCE	LB924	TUP		-	-	-	-	-	-	-	-
925 INJURIES AND DAMAGES	LB925	LBSUB7		-	-	-	-	-	-	-	-
926 EMPLOYEE BENEFITS	LB926	LBSUB7		-	-	-	-	-	-	-	-
928 REGULATORY COMMISSION FEES	LB928	TUP		-	-	-	-	-	-	-	-
929 DUPLICATE CHARGES-CR	LB929	LBSUB7		-	-	-	-	-	-	-	-
930 MISCELLANEOUS GENERAL EXPENSES	LB930	LBSUB7		-	-	-	-	-	-	-	-
931 RENTS AND LEASES	LB931	PGP		-	-	-	-	-	-	-	-
935 MAINTENANCE OF GENERAL PLANT	LB932	PGP		10,396	7,271	3,611	4,188	11,476	-	-	-
Total Administrative and General Expense	LBAG		\$	71,326 \$	49,882	19,063	\$ 1,505,178	\$ 63,034	\$ 1,543,412 \$	423,727	\$-
Total Operation and Maintenance Expenses	TLB		\$	240,841 \$	168,432	62,054	\$ 5,681,158	\$ 206,477	\$ 5,837,418	\$ 1,602,599	\$-
Operation and Maintenance Expenses Less Purchase Power	LBLPP		\$	240,841 \$	168,432	62,054	\$ 5,681,158	\$ 206,477	\$ 5,837,418	\$ 1,602,599	\$-

## LOLP METHODOLOGY

									1
								Production	Transmission
		Functional		Total	Produ	uction Demand		Energy	Demand
Description	Name	Vector		System	Base	Winter Peak	Summer Peak		Demand
Other Expenses									
Depreciation Expenses			¢	E1 172 040	17 502 670	10 400 400	16 140 705		
Steam Production Hydraulic Production	DEPRTP DEPRDP1	PPRTL PPRTL	\$	51,173,949 4,023,933	17,593,670 1,383,433	18,430,483 1,449,234	15,149,795 1,191,265	-	-
Other Production	DEPRDP1 DEPRDP2	PPRTL		4,023,933	5,589,598	5,855,458	4,813,166	-	-
Transmission - Kentucky System Property	DEPRDP3	PTRAN		9,613,105	3,309,390	5,055,450	4,013,100		- 9,613,105
Transmission - Virginia Property	DEPRDP4	PTRAN		3,010,100	-	-	_	-	5,015,105
Distribution	DEPRDP5	PDIST		37,717,920	-	-	-	-	
General & Common Plant	DEPRDP6	PGP		20,055,398	3,867,464	4,051,414	3,330,248	-	2,157,674
Intangible Plant	DEPRAADJ	PINT		,,	-	-	-	-	_,,
Total Depreciation Expense	TDEPR		\$	138,842,527	28,434,166	29,786,588	24,484,475	-	11,770,778
Regulatory Credits									
Production	RCTNP	F017	\$	-			-		
Transmission	RCTNT	PTRAN	ψ		_	-			
Distribution	RDTND	PDIST		_	_	-	_		_
Common	RCTNC	PGP		-	-	-	-	-	-
Total Regulatory Credits	TRCTN		\$	-	\$ - \$	- \$	; <u>-</u>	\$-	\$-
Accretion Expense									
Production	ACRTNP	F017	\$	-	-	-	-	-	-
Transmission	ACRTNT	PTRAN	Ŷ	-	-	-	-	-	-
Distribution	ACRTND	PDIST		-	-	-	-	-	-
Common	ACRTNC	PGP		-	-	-	-	-	-
Total Accretion Expense	TACRTN		\$	-	\$ - \$	- \$	-	\$ -	\$ -
Property Taxes & Other	PTAX	TUP	\$	32,529,209	6,289,767	6,588,929	5,416,077	-	3,464,937
Amortization of Investment Tax Credit	ΟΤΑΧ	TUP	\$	(1,002,535)	(193,848)	(203,068)	(166,921)	-	(106,788)
Gain on Disposition of Allowances	ОТ	TUP	\$	-	-	-	-	-	-
Interest	INTLTD	TUP	\$	62,185,554	12,024,044	12,595,947	10,353,826	-	6,623,863
Other Deductions	DEDUCT	TUP	\$	-	-	-	-	-	-
Total Other Expenses	TOE		\$	232,554,755	\$ 46,554,129 \$	48,768,397 \$	40,087,458	\$-	\$ 21,752,790
Total Cost of Service (O&M + Other Expenses)			\$	918,176,657	\$ 79,777,529 \$	83,572,011 \$	68,695,911	\$ 465,540,988	\$ 43,904,484

## LOLP METHODOLOGY

			Distribution						
			Distribution						
		Eurotional	Substation	Distr		on Drimon Line		Distribution Co	
Description	Name	Functional Vector	General	Specific	Duti	on Primary Lines Demand	Customer	Distribution Se Demand	Customer
Other Expenses									
Depreciation Expenses									
Steam Production	DEPRTP	PPRTL	-	-		-	-	-	-
Hydraulic Production	DEPRDP1	PPRTL	-	-		-	-	-	-
Other Production	DEPRDP2	PPRTL	-	-		-	-	-	-
Transmission - Kentucky System Property	DEPRDP3	PTRAN	-	-		-	-	-	-
Transmission - Virginia Property	DEPRDP4	PTRAN	-	-		-	-	-	-
Distribution	DEPRDP5	PDIST	4,226,005	-		7,226,902	11,500,688	1,986,703	3,019,105
General & Common Plant	DEPRDP6	PGP	744,925	-		1,273,898	2,027,245	350,199	532,182
Intangible Plant	DEPRAADJ	PINT	-	-		-	-	-	-
Total Depreciation Expense	TDEPR		4,970,929	-		8,500,800	13,527,932	2,336,902	3,551,287
Regulatory Credits									
Production	RCTNP	F017	-	-		-	-	-	-
Transmission	RCTNT	PTRAN	-	-		-	-	-	-
Distribution	RDTND	PDIST	-	-		-	-	-	-
Common	RCTNC	PGP	-	-		-	-	-	-
Total Regulatory Credits	TRCTN		\$ -	\$ -	\$	- \$	-	\$ - \$	-
Accretion Expense									
Production	ACRTNP	F017	-	-		-	-	-	-
Transmission	ACRTNT	PTRAN	-	-		-	-	-	-
Distribution	ACRTND	PDIST	-	-		-	-	-	-
Common	ACRTNC	PGP	-	-		-	-	-	-
Total Accretion Expense	TACRTN		\$ -	\$ -	\$	- \$	-	\$ - \$	-
Property Taxes & Other	PTAX	TUP	1,206,640	-		2,063,479	3,283,761	567,258	862,037
Amortization of Investment Tax Credit	OTAX	TUP	(37,188)	-		(63,595)	(101,204)	(17,483)	(26,568)
Gain on Disposition of Allowances	OT	TUP	-	-		-	-	-	-
Interest	INTLTD	TUP	2,306,714	-		3,944,718	6,277,512	1,084,418	1,647,942
Other Deductions	DEDUCT	TUP	-	-		-	-	-	-
Total Other Expenses	TOE		\$ 8,447,095	\$ -	\$	14,445,401 \$	22,988,002	\$ 3,971,095 \$	6,034,699
Total Cost of Service (O&M + Other Expenses)			\$ 16,636,359	\$ -	\$	28,675,559 \$	44,288,719	\$ 8,756,585 \$	13,064,839

#### LOLP METHODOLOGY

		Functional		Distribution Lin	e Trans.	C	Distribution Services	Distribution Meters	Distribution St. & Cust. Lighting	Customer Accounts Expense	Customer Service & Info.	Sales Expense
Description	Name	Vector	R	Demand	Customer		Customer			-		
Other Expenses												
Depreciation Expenses												
Steam Production	DEPRTP	PPRTL		-	-		-	-	-	-	-	-
Hydraulic Production	DEPRDP1	PPRTL		-	-		-	-	-	-	-	-
Other Production	DEPRDP2	PPRTL		-	-		-	-	-	-	-	-
Transmission - Kentucky System Property	DEPRDP3 DEPRDP4	PTRAN		-	-		-	-	-	-	-	-
Transmission - Virginia Property		PTRAN		-	-		-	-	-	-	-	-
Distribution General & Common Plant	DEPRDP5 DEPRDP6	PDIST PGP		2,746,222	1,920,577		953,795 168,127	1,106,375 195,022	3,031,549	-	-	-
Intangible Plant	DEPROPO	PGP PINT		484,081	338,543		108,127		534,376	-	-	-
	DEPRAADJ	PINI		-	-		-	-	-	-	-	-
Total Depreciation Expense	TDEPR			3,230,303	2,259,120		1,121,921	1,301,397	3,565,925	-	-	-
Regulatory Credits												
Production	RCTNP	F017		-	-		-	-	-	-	-	-
Transmission	RCTNT	PTRAN		-	-		-	-	-	-	-	-
Distribution	RDTND	PDIST		-	-		-	-	-	-	-	-
Common	RCTNC	PGP		-	-		-	-	-	-	-	-
Total Regulatory Credits	TRCTN		\$	- \$	-	\$	- \$	-	\$ - :	\$-	\$-	\$ -
Accretion Expense												
Production	ACRTNP	F017		-	-		-	-	-	-	-	-
Transmission	ACRTNT	PTRAN		-	-		-	-	-	-	-	-
Distribution	ACRTND	PDIST		-	-		-	-	-	-	-	-
Common	ACRTNC	PGP		-	-		-	-	-	-	-	-
Total Accretion Expense	TACRTN		\$	- \$	-	\$	- \$	-	\$ - 3	\$-	\$-	\$-
Property Taxes & Other	PTAX	TUP		784,122	548,377		272,334	315,900	865,590	-	-	-
Amortization of Investment Tax Credit	ΟΤΑΧ	TUP		(24,166)	(16,901)		(8,393)	(9,736)	(26,677)	-	-	-
Gain on Disposition of Allowances	ОТ	TUP		-	-		-	-	-	-	-	-
Interest	INTLTD	TUP		1,498,993	1,048,324		520,617	603,902	1,654,735	-	-	-
Other Deductions	DEDUCT	TUP		-	-		-	-	-	-	-	-
Total Other Expenses	TOE		\$	5,489,251 \$	3,838,921	\$	1,906,480 \$	2,211,463	\$ 6,059,573	\$-	\$-	\$-
Total Cost of Service (O&M + Other Expenses)			\$	6,609,248 \$	4,622,193	\$	2,202,289 \$	19,382,672	\$ 7,365,718	\$ 20,585,101	\$ 4,496,452	\$-

#### LOLP METHODOLOGY

							Production	Transmission
		Functional	Total	Prod	uction Demand		Energy	Demand
Description	Name	Vector	System	Base	Winter Peak	Summer Peak		Demand
External Functional Vectors								
Station Equipment	F001		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Poles, Towers and Fixtures	F002		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Overhead Conductors and Devices	F003		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Underground Conductors and Devices	F004		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Line Transformers	F005		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Services Meters	F006 F007		1.000000 1.000000	0.000000 0.000000	0.000000 0.000000	0.000000 0.000000	0.000000 0.000000	0.000000 0.000000
Street Lighting	F007 F008		1.000000	0.00000	0.000000	0.000000	0.000000	0.000000
Meter Reading	F009		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Billing	F010		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Transmission	F011		1.000000	0.000000	0.000000	0.000000	0.000000	1.000000
Load Management	F012		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Production Plant	F017		1.000000	0.343801	0.360154	0.296045	0.000000	0.000000
Provar	PROVAR		1.000000	0.000000	0.000000	0.000000	1.000000	0.000000
Fuel	F018		1.000000	0.000000	0.000000	0.000000	1.000000	0.000000
Steam Generation Operation Labor	F019		14,184,336	4,124,451	4,320,623	3,551,538	2,187,724	-
PROFIX Steam Generation Maintenance Labor	PROFIX F020		1.000000 7.005.990	0.343801	0.360154	0.296045	0.000000 7.005.990	0.000000
Hydraulic Generation Operation Labor	F020 F021		240,588	- 82,714	86,649	71,225	7,005,990	-
Hydraulic Generation Maintenance Labor	F021		240,500	32,230	33,763	27,753	- 151,040	-
Distribution Operation Labor	F023		8,611,788	-	-	-	-	-
Distribution Maintenance Labor	F024		3,271,140	-	-	-	-	-
Customer Accounts Expense	F025		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Customer Service Expense	F026		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Customer Advances	F027		857,428,693	-	-	-	-	-
Purchase Power Demand		F017	20,765,366	7,139,160	7,478,722	6,147,484	-	-
Purchase Power Energy	OMPP	F018	48,301,062	-	-	-	48,301,062	-
Purchased Power Expenses Intallations on Customer Premises - Plant in Service	F013		69,066,428 1.00000	7,139,160	7,478,722	6,147,484	48,301,062	-
Intallations on Customer Premises - Accum Depr	F014		1.00000			_	_	
Generators -Energy	F015		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Generators - Demand	F016		1.000000	1.000000	0.000000	0.000000	0.000000	0.000000
	Energy		1.000000	0.000000	0.000000	0.000000	1.000000	0.000000
Internally Generated Functional Vectors								
Total Prod, Trans, and Dist Plant		PT&D	1.000000	0.192839	0.202011	0.166052	-	0.107586
Total Distribution Plant		PDIST	1.000000	-	-	-	-	-
Total Transmission Plant		PTRAN	1.000000	-	-	-	-	1.000000
Operation and Maintenance Expenses Less Purchase Power		OMLPP	1.000000	0.043769	0.045851	0.037689	0.677269	0.035068
Total Plant in Service		TPIS	1.000000	0.192717	0.201883	0.165947	-	0.107508
Total Operation and Maintenance Expenses (Labor)		TLB	1.000000	0.116789	0.122343	0.100566	0.251203	0.060229
Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service		OMSUB2	1.000000	0.037456	0.039238	0.032253	0.745112	0.027629
Total Steam Power Operation Expenses (Labor) Total Steam Power Generation Maintenance Expense (Labor)		LBSUB1 LBSUB2	1.000000 1.000000	0.290775	0.304605	0.250384	0.154235 1.000000	-
Total Hydraulic Power Operation Expenses (Labor)		LBSUB3	1.000000	0.343801	0.360154	- 0.296045	1.000000	-
Total Hydraulic Power Generation Maint. Expenses (Labor)		LBSUB4	1.000000	0.131666	0.137928	0.113377	0.617029	-
Total Other Power Generation Expenses (Labor)		LBSUB5	1.000000	0.343801	0.360154	0.296045	-	-
Total Transmission Labor Expenses		LBTRAN	1.000000	-	-	-	-	1.0000000
Total Distribution Operation Labor Expense		LBDO	1.000000	-	-	-	-	-
Total Distribution Maintenance Labor Expense		LBDM	1.000000	-	-	-	-	-
Sub-Total Labor Exp		LBSUB7	1.000000	0.116328	0.121861	0.100169	0.252725	0.059943
Total General Plant		PGP	1.000000	0.192839	0.202011	0.166052	-	0.107586
Total Production Plant		PPRTL	1.000000	0.343801	0.360154	0.296045	-	-
Total Intangible Plant		PINT	1.000000	0.192839	0.202011	0.166052	-	0.107586

#### LOLP METHODOLOGY

			<u>г</u>					
			Distribution					
		Functional	Substation	Distrib	ution Primary Lin	es	Distribution S	ec. Lines
Description	Name	Vector	General	Specific	Demand	Customer	Demand	Customer
External Functional Vectors								
Station Equipment	F001		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Poles. Towers and Fixtures	F001		0.000000	0.000000	0.298648	0.433152	0.109452	0.158748
	F002							
Overhead Conductors and Devices			0.000000	0.000000	0.298648	0.433152	0.109452	0.158748
Underground Conductors and Devices	F004		0.000000	0.000000	0.313900	0.567100	0.042400	0.076600
Line Transformers	F005		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Services	F006		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Meters	F007		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Street Lighting	F008		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Meter Reading	F009		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Billing	F010		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Transmission	F011		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Load Management	F012		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Production Plant	F017		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Provar	PROVAR		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Fuel	F018		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Steam Generation Operation Labor	F019		-	-	-	-	-	-
PROFIX	PROFIX		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Steam Generation Maintenance Labor	F020		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Hydraulic Generation Operation Labor	F020		-	-	-	-	-	-
			-	-	-	-	-	-
Hydraulic Generation Maintenance Labor	F022		-	-	-	-	-	-
Distribution Operation Labor	F023		1,597,876.79	-	868,087.17	1,319,488.80	278,890.65	412,660.24
Distribution Maintenance Labor	F024		199,000.00		898,402.38	1,348,157.25	299,940.09	441,123.28
Customer Accounts Expense	F025		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Customer Service Expense	F026		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Customer Advances	F027		-	-	261,090,031	415,491,278	71,774,631	109,072,753
Purchase Power Demand		F017	-	-	-	-	-	-
Purchase Power Energy		F018	-	-	-	-	-	-
Purchased Power Expenses	OMPP		-	-	-	-	-	-
Intallations on Customer Premises - Plant in Service	F013		-	-	-	-	-	-
Intallations on Customer Premises - Accum Depr	F014		-	-	-	-	-	-
Generators -Energy	F015		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Generators - Demand	F016		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	Energy		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Internally Generated Functional Vectors								
Total Prod, Trans, and Dist Plant		PT&D	0.037143	-	0.063519	0.101082	0.017462	0.026536
Total Distribution Plant		PDIST	0.112042	-	0.191604	0.304913	0.052673	0.080044
Total Transmission Plant		PTRAN	-	-	-	-	-	-
Operation and Maintenance Expenses Less Purchase Power		OMLPP	0.012964	-	0.022527	0.033721	0.007576	0.011129
Total Plant in Service		TPIS	0.037192	-	0.063602	0.101214	0.017484	0.026570
Total Operation and Maintenance Expenses (Labor)		TLB	0.037536	-	0.035671	0.053916	0.011657	0.017202
Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service		OMSUB2	0.008178	-	0.018219	0.027128	0.006220	0.009116
Total Steam Power Operation Expenses (Labor)		LBSUB1	-	-	-	-	-	-
Total Steam Power Generation Maintenance Expense (Labor)		LBSUB2	-	-	-	-	-	-
Total Hydraulic Power Operation Expenses (Labor)		LBSUB3	-		-		-	-
Total Hydraulic Power Generation Maint. Expense (Labor)		LBSUB4	-	-	-	-	-	-
Total Other Power Generation Expenses (Labor)		LBSUB5	_	-	_	-	_	_
Total Transmission Labor Expenses		LBTRAN	-	-	-	-	-	-
Total Distribution Operation Labor Expense		LBDO	0.185545	-	0.100802	- 0.153219	0.032385	- 0.047918
			0.185545	-				
Total Distribution Maintenance Labor Expense		LBDM		-	0.274645	0.412137	0.091693	0.134853
Sub-Total Labor Exp		LBSUB7	0.037538	-	0.035502	0.053630	0.011622	0.017145
Total General Plant		PGP	0.037143	-	0.063519	0.101082	0.017462	0.026536
Total Production Plant		PPRTL	-	-	-	-	-	-
Total Intangible Plant		PINT	0.037143	-	0.063519	0.101082	0.017462	0.026536

#### LOLP METHODOLOGY

Description         New         Distribution         Distribution <thdistribution< th=""> <thdistribution< th=""></thdistribution<></thdistribution<>									Customer		
Description         New         Vector         Demand         Custome         Custome           External functional Vectors         Static Equipment         FOI1         0.000000									Accounts		
Extend Functional Vectors           Basics Explorent Profet, Tores and Protects         PO01         0.000000         0.0000							Meters	Cust. Lighting	Expense	Service & Info.	Sales Expense
Instrument         Ford         0.00000 <t< th=""><th>Description</th><th>Name</th><th>Vector</th><th>Demand</th><th>Customer</th><th>Customer</th><th></th><th></th><th></th><th></th><th></th></t<>	Description	Name	Vector	Demand	Customer	Customer					
Poles. Torking and Flatures         PO2         0.000000         0.00000	External Functional Vectors										
Operhead Conductors and Devices         F03         0.000000         0.0	Station Equipment										
Undergrand Conductors and Devices         FIGA +         0.00000         0.00000         0.000000         0.00000         0.00000											
Line Transformers         F05         0.88499         0.41194         0.00000											
Services         FD05         0.00000         0.000000	5										
Meters         FUOT         D.00000         0.											
Steel Lighting Meer Reading         FOOR         0.000000         0.0000											
Meter Resaming         FOGB         0.000000											
Billing         C         CO0000         D.000000         D.000000 <thd.000000< th=""> <thd.000000< th=""> <thd.00000<< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></thd.00000<<></thd.000000<></thd.000000<>											
Tanamisaina         F011         0.000000											
Laad Management         F012         0.000000	5										
Production Pinet         F017         0.0000000         0.000000         0.000000											
Prover         PROVAR         0.000000 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>											
Fuel         F018         0.000000         0.0											
PROFIX         PROFIX         0.000000 <th< td=""><td>Fuel</td><td>F018</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	Fuel	F018									
Steam Generation Maintenance Labor         F020         -	Steam Generation Operation Labor	F019		-	-	-	-	-	-	-	-
Hydraulic Generation Labor       F021       - <t< td=""><td>PROFIX</td><td>PROFIX</td><td></td><td>0.000000</td><td>0.000000</td><td>0.000000</td><td>0.000000</td><td>0.000000</td><td>0.000000</td><td>0.000000</td><td>0.000000</td></t<>	PROFIX	PROFIX		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Hydrautic Generation Maintenance Labor         F022         I	Steam Generation Maintenance Labor	F020		-	-	-	-	-	-	-	-
Distribution Appendix Labor         F024         112,025         77,392,18         38,91,02         3,78,162.90         12,78,72         -         -         -           Customer Accounts Expense         F024         0.0000000         0.000000         0.0000000	Hydraulic Generation Operation Labor			-	-	-	-	-	-	-	-
Distribution Maintenance Labor         F02         4.7.331         31.83.69         1.1.4.7.5         6.800.000         1.000000         1.000000         0.0	Hydraulic Generation Maintenance Labor			-	-	-	-	-	-	-	-
Customer Accounts Expense         F02         0.0000000         0.000000         0.000000						38,931.02	3,781,629.90		-	-	-
Customer Service Expense         F027         0.0000000         0.000000         0.000000									-	-	-
Customer Advances         F027         -	•										
Purchase Power Dengand         F017         - <td>•</td> <td></td>	•										
Purchase Power Energy         P108         -        -         -        -		F027		-	-						-
Purchased Power Express         OMPP         . </td <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>				-	-	-	-	-	-	-	-
Intallations on Customer Premises - Accum Depr         F013         -         -         -         -         1         0.0000         -         -           Generators - Energy         F015         0.000000 <td>6,</td> <td>01100</td> <td>F018</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	6,	01100	F018	-	-	-	-	-	-	-	-
Intaliations on Customer Premises - Accum Depr         F014         -         -         -         -         -         1.00000         0.000000         <				-	-	-		-	-	-	-
Generators - Energy         F015         0.000000				-	-	-	-	-		-	-
Generators - Demand         F016 Energy         0.000000 0.00000         0.000000 0.000000         0.0000000         0.0000000         0.000000         0.000000         0.000000         0.000000         0.000000         0.000000         0.000000         0.000000         0.000000         0.000000         0.0000000         0.000000         0.000000         0.000000         0.0000000         0.000000         0.000000         0.000000         0.0000000        0.000000         0.000000				- 0,00000	- 0,00000	- 0.00000	0 000000	0 000000		- 0,00000	0 000000
Energy         0.000000         0.000000         0.000000         0.000000         0.000000         0.0000000         0.0000000         0.0000000         0.00000000         0.0000000         0.0000000         0.0000000         0.0000000         0.0000000         0.0000000         0.000000         0.0000000         0.0000000         0.00000000         0.00000000         0.00000000         0.00000000         0.00000000         0.0000000         0.0000000         0.00000000         0.00000000         0.000000000000000000         0.0000000000000000000000000000											
Internally Generated Functional Vectors         PT&D         0.024137         0.016880         0.008383         0.009724         0.026645         -         -         -           Total Prod, Trans, and Dist Plant         PDIST         0.072809         0.05288         0.029333         0.000744         0.026645         -	Generators - Demand										
Total Prod. Trans, and Dist Plant       PT&D       0.024137       0.016880       0.008333       0.009724       0.026645       -       -       -         Total Distribution Plant       PDKT       0.072809       0.005019       0.025288       0.029333       0.002684       -		Energy		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Total Distribution Plant         PDIST         0.072809         0.050919         0.025288         0.029333         0.080374         -         -         -           Total Transmission Plant         PTRAN         -        <			DTAD	0.004407	0.040000	0.000000	0.000704	0.000045			
Total Transmission Plant         PTRAN         Image: Constraint of the service of th									-	-	-
Operation and Maintenance Expenses Less Purchase Power         OMLPP         0.001773         0.001240         0.000468         0.027183         0.002680         0.032588         0.007118         - <t< td=""><td></td><td></td><td></td><td>0.072809</td><td>0.050919</td><td></td><td></td><td>0.080374</td><td>-</td><td>-</td><td>-</td></t<>				0.072809	0.050919			0.080374	-	-	-
Total Plant in Service       TPIS       0.024169       0.016902       0.008394       0.009737       0.026680       -       -       -       -         Total Operation and Maintenance Expenses (Labor)       TLB       0.003367       0.002354       0.000867       0.079414       0.002866       0.081598       0.022402       -         Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service       OMSUB2       0.001126       0.000787       0.000267       0.017880       0.001472       0.023416       0.004496       -         Total Steam Power Operation Expenses (Labor)       LBSUB2       -				-	-			-	-	-	-
Total Operation and Maintenance Expenses (Labor)         TLB         0.003367         0.002354         0.000867         0.079414         0.002866         0.081598         0.022402         -           Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service         OMSUB2         0.001126         0.000787         0.000276         0.017880         0.001472         0.023416         0.004496         -           Total Steam Power Operation Expenses (Labor)         LBSUB1         -<									0.032588	0.007118	-
Sub-Total Prod, Trans, Dist, Cust Acct and Cust ServiceOMSUB20.0011260.0007870.0002760.0178800.0014720.0234160.004496-Total Steam Power Operation Expenses (Labor)LBSUB1 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td>									-	-	-
Total Steam Power Operation Expenses (Labor)LBSUB1<											-
Total Steam Power Generation Maintenance Expense (Labor)LBSUB2				0.001120	0.000707		0.017000	0.001472	0.023410	0.004430	
Total Hydraulic Power Operation Expenses (Labor)LBS UB3<				-	-	-	-	-	-	-	-
Total Hýdraulic Power Generation Maint. Expense (Labor)LBSUB4				_	_	_	_	_	_	_	_
Total Other Power Generation Expenses (Labor)LBS UB5				-	-	-	-	-	-	-	-
Total Transmission Labor Expenses       LBTRAN       -				-	-	-	-	-	-	-	-
Total Distribution Operation Labor Expense         LBDO         0.013016         0.009103         0.004521         0.439123         0.014369         -				-	-	-	-	-	-	-	-
Total Distribution Maintenance Labor Expense       LBDM       0.013981       0.009778       -       -       0.002079       -	•			0.013016	0.009103	0.004521	0.439123	0.014369	-	-	-
Sub-Total Labor Exp         LBSUB7         0.003241         0.002266         0.00822         0.079836         0.002742         0.082092         0.022538         -           Total General Plant         PGP         0.024137         0.016880         0.009724         0.026645         - <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td>-</td>						-	-		-	-	-
Total Production Plant PPRTL			LBSUB7	0.003241		0.000822	0.079836	0.002742	0.082092	0.022538	-
	Total General Plant		PGP	0.024137	0.016880	0.008383	0.009724	0.026645	-	-	-
Total Intangible Plant         PINT         0.024137         0.016880         0.009724         0.026645         -				-	-			-	-	-	-
	Total Intangible Plant		PINT	0.024137	0.016880	0.008383	0.009724	0.026645	-	-	-

# Exhibit WSS-23

Electric Cost of Service Study Class Allocation BIP Methodology

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System		Residential Rate RS		General Service Rate GS		Rate PS Primary		Rate PS Secondary
Plant in Service													
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Total Power Production Plant	TPIS TPIS TPIS TPIS	PLPPDB PLPPDI PLPPDP PLPPEB PLPPT	PPBDA PPWDA PPSDA E01	\$	834,776,533 874,481,255 718,820,643 - 2,428,078,430		302,003,812 373,681,742 281,094,822 - 956,780,375		98,140,428 122,277,055 101,580,706 - 321,998,189		11,688,692 9,508,765 8,377,545 - 29,575,002		135,428,654 127,951,297 118,251,071 - 381,631,022
Transmission Plant				Ŷ	2,120,010,100	Ŷ	000,100,010	Ŷ	021,000,100	Ť	20,010,002	Ŷ	001,001,022
Transmission Plant Transmission Demand	TPIS	PLTRB	NCPT	\$	465,684,635	\$	206,944,619	\$	59,568,432	\$	5,292,707	\$	61,430,381
Distribution Poles Specific	TPIS	PLDPS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Substation General	TPIS	PLDSG	NCPP	\$	161,101,605	\$	77,296,277	\$	22,249,518	\$	1,976,889	\$	22,944,978
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer	TPIS TPIS TPIS TPIS TPIS	PLDPLS PLDPLD PLDPLC PLDSLD PLDSLC	NCPP NCPP Cust08 SICD Cust07	\$	- 275,500,316 438,423,398 75,736,072 115,092,782	\$	- 132,184,585 377,970,614 63,558,319 99,999,544	\$	- 38,048,965 46,959,149 11,630,886 12,423,965	\$	3,380,684 74,741 -	\$	39,238,273 2,931,681 -
Total Distribution Primary & Secondary Lines	TFIS	PLDSLC	Cusion	\$	904,752,568	\$	673,713,063	\$	109,062,964	\$	- 3,455,425	\$	42,169,954
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	TPIS TPIS	PLDLTD PLDLTC PLDLTT	SICDT Cust09	\$ \$	104,690,102 73,215,269 177,905,371		72,634,069 63,146,691 135,780,760		13,291,707 7,845,358 21,137,065		-	\$ \$	11,706,101 489,789 12,195,890
Distribution Services Customer	TPIS	PLDSC	C02	\$	36,360,072	\$	27,946,947	\$	7,033,360	\$	-	\$	1,227,015
Distribution Meters Customer	TPIS	PLDMC	C03	\$	42,176,668	\$	29,520,292	\$	8,679,135	\$	337,865	\$	2,334,770
Distribution Street & Customer Lighting Customer	TPIS	PLDSCL	C04	\$	115,567,185	\$	-	\$	-	\$	-	\$	-
Customer Accounts Expense Customer	TPIS	PLCAE	C05	\$	-	\$	-	\$	-	\$	-	\$	
Customer Service & Info. Customer	TPIS	PLCSI	C06	\$	-	\$	-	\$	-	\$	-	\$	-
Sales Expense Customer	TPIS	PLSEC	C06	\$	-	\$	-	\$	-	\$	-	\$	-
Total		PLT		\$	4,331,626,534	\$	2,107,982,333	\$	549,728,664	\$	40,637,888	\$	523,934,009

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Plant in Service									
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Total Power Production Plant	TPIS TPIS TPIS TPIS	PLPPDB PLPPDI PLPPDP PLPPEB PLPPT	PPBDA PPWDA PPSDA E01	\$	130,726,251 101,893,378 89,436,342		57,495,181 68,331,135 60,407,075		79,602,275 60,945,823 51,725,640
		PLPP1		φ	322,055,971	Φ	186,233,392	Φ	192,273,738
Transmission Plant Transmission Demand	TPIS	PLTRB	NCPT	\$	55,882,901	\$	33,180,334	\$	34,368,776
Distribution Poles Specific	TPIS	PLDPS	NCPP	\$	-	\$	-	\$	-
Distribution Substation General	TPIS	PLDSG	NCPP	\$	20,872,928	\$	12,393,249	\$	-
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand	TPIS TPIS TPIS TPIS	PLDPLS PLDPLD PLDPLC PLDSLD	NCPP NCPP Cust08 SICD	\$	- 35,694,855 109,516 -	\$	21,193,731 286,507 -	\$	- - - -
Secondary Customer Total Distribution Primary & Secondary Lines	TPIS	PLDSLC PLDLT	Cust07	\$	- 35,804,371	\$	- 21,480,239	\$	-
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	TPIS TPIS	PLDLTD PLDLTC PLDLTT	SICDT Cust09	\$	-	\$ \$	6,433,268 47,866 6,481,134		-
Distribution Services Customer	TPIS	PLDSC	C02	\$	-	\$	152,750	\$	-
Distribution Meters Customer	TPIS	PLDMC	C03	\$	529,064	\$	245,966	\$	432,796
Distribution Street & Customer Lighting Customer	TPIS	PLDSCL	C04	\$	-	\$	-	\$	-
Customer Accounts Expense Customer	TPIS	PLCAE	C05	\$	-	\$	-	\$	-
Customer Service & Info. Customer	TPIS	PLCSI	C06	\$	-	\$	-	\$	-
Sales Expense Customer	TPIS	PLSEC	C06	\$	-	\$	-	\$	-
Total		PLT		\$	435,145,236	\$	260,167,064	\$	227,075,310

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1		Special Contract Customer #2		Street Lighting te RLS, LS, DSK		Street Lighting Rate LE		Traffic Street Lighting Rate TLE
Plant in Service													
Power Production Plant													
Production Demand - Base	TPIS	PLPPDB	PPBDA	\$	7,769,583	\$	4,104,643	\$	7,352,742	\$	239,672	\$	224,599
Production Demand - Winter Peak	TPIS TPIS	PLPPDI PLPPDP	PPWDA PPSDA		7,036,582		2,674,632		-		-		180,846
Production Demand - Summer Peak Production Energy	TPIS	PLPPDP	E01		5,585,173		2,260,914		-		-		101,354
Total Power Production Plant	TFIS	PLPPT	LUI	\$	20,391,338	\$	- 9,040,189	\$	7,352,742	\$	239,672	\$	506,799
Transmission Plant													
Transmission Demand	TPIS	PLTRB	NCPT	\$	3,464,524	\$	1,813,382	\$	3,572,282	\$	114,252	\$	52,046
Distribution Poles													
Specific	TPIS	PLDPS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Substation													
General	TPIS	PLDSG	NCPP	\$	1,294,041	\$	677,320	\$	1,334,290	\$	42,674	\$	19,440
Distribution Primary & Secondary Lines													
Primary Specific	TPIS	PLDPLS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Primary Demand	TPIS TPIS	PLDPLD PLDPLC	NCPP Cust08		2,212,943		1,158,286		2,281,773 9,965,698		72,978 19,031		33,244
Primary Customer Secondary Demand	TPIS	PLDPLC	SICD		1,038		1,038		9,965,698 522,542		16,712		104,384 7,613
Secondary Customer	TPIS	PLDSLD	Cust07		-		-		2.636.621		5.035		27.617
Total Distribution Primary & Secondary Lines		PLDLT	Gustor	\$	2,213,981	\$	1,159,324	\$	15,406,634	\$	113,756	\$	172,857
Distribution Line Transformers													
Demand	TPIS	PLDLTD	SICDT	\$	-	\$	-	\$	597,158	\$	19,099	\$	8,700
Customer	TPIS	PLDLTC	Cust09		-		-		1,664,946		3,180		17,439
Total Distribution Line Transformers		PLDLTT		\$	-	\$	-	\$	2,262,104	\$	22,278	\$	26,139
Distribution Services													
Customer	TPIS	PLDSC	C02	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Meters													
Customer	TPIS	PLDMC	C03	\$	5,015	\$	5,015	\$	-	\$	13,377	\$	73,373
Distribution Street & Customer Lighting													
Customer	TPIS	PLDSCL	C04	\$	-	\$	-	\$	115,567,185	\$	-	\$	-
Customer Accounts Expense				•									
Customer	TPIS	PLCAE	C05	\$	-	\$	-	\$	-	\$	-	\$	-
Customer Service & Info.	TDIC		C06	¢		¢		¢		¢		¢	
Customer	TPIS	PLCSI	C06	\$	-	\$	-	\$	-	\$	-	\$	-
Sales Expense Customer	TPIS	PLSEC	C06	\$		\$		\$		\$		\$	
Customer	1713	PLOE6	000	φ	-	φ	-	φ	-	φ	-	Φ	-
Total		PLT		\$	27,368,898	\$	12,695,230	\$	145,495,237	\$	546,010	\$	850,654

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector	Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Net Utility Plant								
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Total Power Production Plant	NTPLANT NTPLANT NTPLANT NTPLANT	UPPPDB UPPPDI UPPPDP UPPPEB UPPPT	PPBDA PPWDA PPSDA E01	\$ 529,045,729 554,208,886 455,557,836 - 1,538,812,451	191,397,123 236,823,535 178,145,898 - 606,366,555	62,197,214 77,493,977 64,377,515 - 204,068,706	7,407,794 6,026,249 5,309,331 - 18,743,374	85,828,899 81,090,070 74,942,480 - 241,861,449
Transmission Plant Transmission Demand	NTPLANT	UPTRB	NCPT	\$ 302,524,467	\$ 134,438,214	\$ 38,697,666	\$ 3,438,321	\$ 39,907,250
Distribution Poles Specific	NTPLANT	UPDPS	NCPP	\$ -	\$ -	\$ -	\$ -	\$
Distribution Substation General	NTPLANT	UPDSG	NCPP	\$ 104,174,581	\$ 49,982,788	\$ 14,387,406	\$ 1,278,334	\$ 14,837,118
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	NTPLANT NTPLANT NTPLANT NTPLANT NTPLANT	UPDPLS UPDPLD UPDPLC UPDSLD UPDSLC UPDLT	NCPP NCPP Cust08 SICD Cust07	\$ 178,149,250 283,501,669 48,973,898 74,423,481 585,048,298	\$ 85,475,708 244,410,541 41,099,288 64,663,606 435,649,143	\$ 24,603,945 30,365,617 7,520,984 8,033,820 70,524,366	\$ 2,186,082 48,330 - 2,234,412	\$ 25,372,998 1,895,739 - - 27,268,737
Distribution Line Transformers Demand Customer Total Distribution Line Transformers	NTPLANT NTPLANT	UPDLTD UPDLTC UPDLTT	SICDT Cust09	\$ 67,696,703 47,343,849 115,040,552	\$ 46,968,022 40,833,113 87,801,135	\$ 8,594,936 5,073,115 13,668,051	\$ _, , , _ _	\$ 7,569,621 316,717 7,886,338
Distribution Services Customer	NTPLANT	UPDSC	C02	\$ 23,511,840	18,071,586	4,548,045	-	\$ 793,436
Distribution Meters Customer	NTPLANT	UPDMC	C03	\$ 27,273,078	\$ 19,088,972	\$ 5,612,267	\$ 218,476	\$ 1,509,753
Distribution Street & Customer Lighting Customer	NTPLANT	UPDSCL	C04	\$ 74,730,249	\$ -	\$ -	\$ -	\$ -
Customer Accounts Expense Customer	NTPLANT	UPCAE	C05	\$ -	\$ -	\$ -	\$ -	\$ -
Customer Service & Info. Customer	NTPLANT	UPCSI	C06	\$ -	\$ -	\$ -	\$ -	\$ -
Sales Expense Customer	NTPLANT	UPSEC	C06	\$ -	\$ -	\$ -	\$ -	\$ -
Total		UPT		\$ 2,771,115,517	\$ 1,351,398,393	\$ 351,506,507	\$ 25,912,918	\$ 334,064,081

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Net Utility Plant									
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Total Power Production Plant	NTPLANT NTPLANT NTPLANT NTPLANT	UPPPDB UPPPDI UPPPDP UPPPEB UPPPT	PPBDA PPWDA PPSDA E01	\$	82,848,717 64,575,673 56,680,935 - 204,105,325		36,437,991 43,305,356 38,283,426 - 118,026,773		50,448,524 38,624,861 32,781,502 - 121,854,887
Transmission Plant		0.111		Ŷ	201,100,020	Ŷ	110,020,110	÷	121,001,001
Transmission Demand	NTPLANT	UPTRB	NCPT	\$	36,303,420	\$	21,555,065	\$	22,327,118
Distribution Poles Specific	NTPLANT	UPDPS	NCPP	\$	-	\$	-	\$	-
Distribution Substation General	NTPLANT	UPDSG	NCPP	\$	13,497,250	\$	8,013,958	\$	-
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	NTPLANT NTPLANT NTPLANT NTPLANT NTPLANT	UPDPLS UPDPLD UPDPLC UPDSLD UPDSLC UPDLT	NCPP NCPP Cust08 SICD Cust07	\$	- 23,081,685 70,818 - - 23,152,503	\$	- 13,704,693 185,267 - - 13,889,960	\$	- - - -
Distribution Line Transformers Demand Customer Total Distribution Line Transformers	NTPLANT NTPLANT	UPDLTD UPDLTC UPDLTT	SICDT Cust09	\$	-	\$ \$	4,160,002 30,952 4,190,954		
Distribution Services Customer	NTPLANT	UPDSC	C02	\$	-	\$	98,774	\$	
Distribution Meters Customer	NTPLANT	UPDMC	C03	\$	342,113	\$	159,051	\$	279,863
Distribution Street & Customer Lighting Customer	NTPLANT	UPDSCL	C04	\$	-	\$	-	\$	-
Customer Accounts Expense Customer	NTPLANT	UPCAE	C05	\$	-	\$	-	\$	-
Customer Service & Info. Customer	NTPLANT	UPCSI	C06	\$	-	\$	-	\$	-
Sales Expense Customer	NTPLANT	UPSEC	C06	\$	-	\$	-	\$	-
Total		UPT		\$	277,400,611	\$	165,934,537	\$	144,461,867

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1		Special Contract Customer #2			Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Net Utility Plant											
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy	NTPLANT NTPLANT NTPLANT NTPLANT	UPPPDB UPPPDI UPPPDP UPPPEB	PPBDA PPWDA PPSDA E01	\$	4,924,030 4,459,485 3,539,644	\$	2,601,348 1,695,068 1,432,871	\$ 4,659,8	54 \$	151,894 - -	\$ 142,341 114,613 64,234
Total Power Production Plant		UPPPT	Lon	\$	12,923,159	\$	5,729,286	\$ 4,659,8	54 \$	151,894	\$ 321,188
Transmission Plant Transmission Demand	NTPLANT	UPTRB	NCPT	\$	2,250,672	\$	1,178,034	\$ 2,320,6	75 \$	74,222	\$ 33,811
Distribution Poles Specific	NTPLANT	UPDPS	NCPP	\$	-	\$	-	\$	\$	-	\$ -
Distribution Substation General	NTPLANT	UPDSG	NCPP	\$	836,777	\$	437,981	\$ 862,8	04 \$	27,595	\$ 12,570
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	NTPLANT NTPLANT NTPLANT NTPLANT NTPLANT	UPDPLS UPDPLD UPDPLC UPDSLD UPDSLC UPDLT	NCPP NCPP Cust08 SICD Cust07	\$	- 1,430,975 671 - 1,431,647	\$	- 748,993 671 - - 749,664	\$ 1,475,4 6,444,2 337,5 1,704,5 \$ 9,962,5	83 09 96 42	- 47,190 12,306 10,807 3,256 73,559	\$ - 21,497 67,499 4,923 17,858 111,776
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	NTPLANT NTPLANT	UPDLTD UPDLTC UPDLTT	SICDT Cust09	\$ \$	- -	\$ \$	- -	\$ 386,1 1,076,6 \$ 1,462,7		12,350 2,056 14,406	5,626 11,277 16,903
Distribution Services Customer	NTPLANT	UPDSC	C02	\$	-	\$	-	\$	\$	-	\$ -
Distribution Meters Customer	NTPLANT	UPDMC	C03	\$	3,243	\$	3,243	\$	\$	8,650	\$ 47,446
Distribution Street & Customer Lighting Customer	NTPLANT	UPDSCL	C04	\$	-	\$	-	\$ 74,730,2	49 \$	-	\$ -
Customer Accounts Expense Customer	NTPLANT	UPCAE	C05	\$	-	\$	-	\$	\$	-	\$ -
Customer Service & Info. Customer	NTPLANT	UPCSI	C06	\$	-	\$	-	\$	\$		\$ -
Sales Expense Customer	NTPLANT	UPSEC	C06	\$	-	\$	-	\$	\$	-	\$ -
Total		UPT		\$	17,445,498	\$	8,098,208	\$ 93,998,8	77 \$	350,326	\$ 543,694

Description	Ref	Name	Allocation Vector		Total System		Residential Rate RS		General Service Rate GS		Rate PS Primary		Rate PS Secondary
Net Cost Rate Base													
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak	RB RB RB	RBPPDB RBPPDI RBPPDP	PPBDA PPWDA PPSDA	\$	449,333,293 470,705,064 386,917,976	\$	162,558,915 201,140,833 151,304,279	\$	52,825,828 65,817,796 54,677,619	\$	6,291,646 5,118,262 4,509,362	\$	72,896,878 68,872,058 63,650,739
Production Energy Total Power Production Plant	RB	RBPPEB RBPPT	E01	\$	51,365,920 1,358,322,253	\$	18,583,062 533,587,089	\$	6,038,830 179,360,073	\$	719,235 16,638,505	\$	8,333,269 213,752,944
Transmission Plant Transmission Demand	RB	RBTRB	NCPT	\$	251,904,274	\$	111,943,212	\$	32,222,542	\$	2,863,001	\$	33,229,732
Distribution Poles Specific	RB	RBDPS	NCPP	\$		\$		\$		\$		\$	
Distribution Substation	ne -	NBBI C		Ŷ		Ŷ		Ŷ		Ψ		Ψ	
General	RB	RBDSG	NCPP	\$	86,725,894	\$	41,610,937	\$	11,977,592	\$	1,064,220	\$	12,351,980
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer	RB RB RB	RBDPLS RBDPLD RBDPLC	NCPP NCPP Cust08	\$	- 146,289,690 232,639,811	\$	- 70,189,545 200,561,860	\$	- 20,203,865 24,917,848	\$	- 1,795,131 39,660	\$	- 20,835,384 1,555,633
Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	RB RB	RBDSLD RBDSLC RBDLT	SICD Cust07	\$	40,320,470 61,244,172 480,494,142	\$	33,837,261 53,212,627 357,801,294	\$	6,192,066 6,611,148 57,924,928	\$	- - 1,834,791	\$	- - 22,391,016
Distribution Line Transformers												•	
Demand Customer Total Distribution Line Transformers	RB RB	RBDLTD RBDLTC RBDLTT	SICDT Cust09	\$ \$	55,853,391 39,061,200 94,914,591		38,751,123 33,689,496 72,440,620	·	7,091,281 4,185,590 11,276,871	·	-	\$ \$	6,245,341 261,308 6,506,650
Distribution Services Customer	RB	RBDSC	C02	\$	19,387,335	\$	14,901,424	\$	3,750,215	\$	-	\$	654,249
Distribution Meters Customer	RB	RBDMC	C03	\$	24,509,219	\$	17,154,491	\$	5,043,519	\$	196,336	\$	1,356,755
Distribution Street & Customer Lighting Customer	RB	RBDSCL	C04	\$	61,664,820	\$	-	\$	-	\$	-	\$	-
Customer Accounts Expense Customer	RB	RBCAE	C05	\$	2,471,536	\$	1,841,601	\$	457,602	\$	1,821	\$	71,421
Customer Service & Info. Customer	RB	RBCSI	C06	\$	539,863	\$	465,409	\$	57,823	\$	92	\$	3,610
Sales Expense Customer	RB	RBSEC	C06	\$	-	\$	-	\$	-	\$	-	\$	-
Total		RBT		\$	2,380,933,927	\$	1,151,746,077	\$	302,071,165	\$	22,598,765	\$	290,318,355

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Net Cost Rate Base									
Power Production Plant									
Production Demand - Base	RB	RBPPDB	PPBDA	\$	70,365,726	\$	30,947,802	\$	42,847,338
Production Demand - Winter Peak	RB	RBPPDI	PPWDA		54,845,920		36,780,447		32,805,172
Production Demand - Summer Peak	RB	RBPPDP	PPSDA		48,140,699		32,515,181		27,842,244
Production Energy	RB	RBPPEB	E01	•	8,043,918		3,537,825		4,898,130
Total Power Production Plant		RBPPT		\$	181,396,264	\$	103,781,255	\$	108,392,884
Transmission Plant									
Transmission Demand	RB	RBTRB	NCPT	\$	30,228,916	\$	17,948,344	\$	18,591,212
Distribution Poles									
Specific	RB	RBDPS	NCPP	\$	-	\$	-	\$	-
Distribution Substation									
General	RB	RBDSG	NCPP	\$	11,236,532	\$	6,671,663	\$	-
Distribution Primary & Secondary Lines									
Primary Specific	RB	RBDPLS	NCPP	\$		\$		\$	-
Primary Demand	RB	RBDPLD	NCPP		18,953,841		11,253,796		-
Primary Customer	RB	RBDPLC	Cust08		58,112		152,029		-
Secondary Demand	RB	RBDSLD	SICD		-		-		-
Secondary Customer	RB	RBDSLC	Cust07	¢	-	¢	-	¢	-
Total Distribution Primary & Secondary Lines		RBDLT		\$	19,011,954	ъ	11,405,825	ъ	-
Distribution Line Transformers	DD		CIODT	¢		¢	0 400 004	¢	
Demand Customer	RB RB	RBDLTD RBDLTC	SICDT Cust09	\$	-	\$	3,432,224 25,537	Ф	-
Total Distribution Line Transformers	RD	RBDLTC	Cusios	\$	-	\$	3,457,761	¢	-
		RBULTI		φ	-	φ	3,437,701	φ	-
Distribution Services									
Customer	RB	RBDSC	C02	\$	-	\$	81,447	\$	-
Distribution Meters									
Customer	RB	RBDMC	C03	\$	307,443	\$	142,933	\$	251,501
Distribution Street & Customer Lighting									
Customer	RB	RBDSCL	C04	\$	-	\$	-	\$	-
Customer Accounts Expense									
Customer	RB	RBCAE	C05	\$	13,340	\$	34,899	\$	1,644
Customer Service & Info.									
Customer	RB	RBCSI	C06	\$	135	\$	353	\$	17
Sales Expense									
Customer	RB	RBSEC	C06	\$	-	\$	-	\$	-
Total		RBT		\$	242,194,584	\$	143,524,479	\$	127,237,257

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1		Special Contract Customer #2		Street Lighting ate RLS, LS, DSK		Street Lighting Rate LE		Traffic Street Lighting Rate TLE
Net Cost Rate Base													
Power Production Plant													
Production Demand - Base	RB	RBPPDB	PPBDA	\$	4,182,116	\$	2,209,397	\$	3,957,744	\$	129,008	\$	120,894
Production Demand - Winter Peak	RB	RBPPDI	PPWDA		3,787,565		1,439,668		-		-		97,344
Production Demand - Summer Peak	RB	RBPPDP	PPSDA		3,006,318		1,216,977		-		-		54,556
Production Energy	RB	RBPPEB	E01		478,082		252,569		452,433		14,748		13,820
Total Power Production Plant		RBPPT		\$	11,454,082	\$	5,118,612	\$	4,410,177	\$	143,755	\$	286,614
Transmission Plant													
Transmission Demand	RB	RBTRB	NCPT	\$	1,874,076	\$	980,918	\$	1,932,366	\$	61,803	\$	28,153
Distribution Poles													
Specific	RB	RBDPS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Substation													
General	RB	RBDSG	NCPP	\$	696,622	\$	364,622	\$	718,289	\$	22,973	\$	10,465
Distribution Primary & Secondary Lines													
Primary Specific	RB	RBDPLS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Primary Demand	RB	RBDPLD	NCPP		1,175,065		615,046		1,211,613		38,751		17,652
Primary Customer	RB	RBDPLC	Cust08		551		551		5,288,080		10,099		55,389
Secondary Demand	RB	RBDSLD	SICD		-		-		278,192		8,897		4,053
Secondary Customer	RB	RBDSLC	Cust07		-		-		1,403,022		2,679		14,696
Total Distribution Primary & Secondary Lines		RBDLT		\$	1,175,616	\$	615,597	\$	8,180,907	\$	60,426	\$	91,790
Distribution Line Transformers													
Demand	RB	RBDLTD	SICDT	\$	-	\$	-	\$	318,591	\$	10,189	\$	4,642
Customer	RB	RBDLTC	Cust09		-		-		888,268		1,696		9,304
Total Distribution Line Transformers		RBDLTT		\$	-	\$	-	\$	1,206,859	\$	11,886	\$	13,946
Distribution Services													
Customer	RB	RBDSC	C02	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Meters													
Customer	RB	RBDMC	C03	\$	2,914	\$	2,914	\$	-	\$	7,774	\$	42,638
Distribution Street & Customer Lighting													
Customer	RB	RBDSCL	C04	\$	-	\$	-	\$	61,664,820	\$	-	\$	-
Customer Accounts Expense													
Customer	RB	RBCAE	C05	\$	25	\$	25	\$	48,556	\$	93	\$	509
Customer Service & Info.													
Customer	RB	RBCSI	C06	\$	1	\$	1	\$	12,271	\$	23	\$	129
Sales Expense													
Customer	RB	RBSEC	C06	\$	-	\$	-	\$	-	\$	-	\$	-
Total		RBT		\$	15,203,336	\$	7,082,689	\$	78,174,245	\$	308,733	\$	474,243
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Description	Ref	Name	Allocation Vector		Total System		Residential Rate RS		General Service Rate GS		Rate PS Primary		Rate PS Secondary
Operation and Maintenance Expenses													
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Total Power Production Plant	ТОМ ТОМ ТОМ ТОМ	omppdb omppdi omppdp omppeb omppt	PPBDA PPWDA PPSDA E01	\$	33,223,400 34,803,614 28,608,453 465,540,988 562,176,455		12,019,496 14,872,217 11,187,336 168,422,502 206,501,552		3,905,906 4,866,523 4,042,826 54,731,284 67,546,539		465,200 378,441 333,419 6,518,588 7,695,648		5,389,946 5,092,353 4,706,293 75,526,309 90,714,900
Transmission Plant				Ŧ	,,	•		Ť		Ť	.,,	Ŧ	,,
Transmission Demand	ТОМ	OMTRB	NCPT	\$	22,151,695	\$	9,843,945	\$	2,833,552	\$	251,764	\$	2,922,121
Distribution Poles Specific	ТОМ	OMDPS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Substation General	ТОМ	OMDSG	NCPP	\$	8,189,264	\$	3,929,195	\$	1,131,008	\$	100,491	\$	1,166,360
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer	ТОМ ТОМ ТОМ ТОМ ТОМ	OMDPLS OMDPLD OMDPLC OMDSLD OMDSLC	NCPP NCPP Cust08 SICD Cust07	\$	- 14,230,158 21,300,716 4,785,490 7,030,141	\$	6,827,606 18,363,629 4,016,022 6,108,210	\$	- 1,965,307 2,281,501 734,914 758,885	\$	- 174,619 3,631 -	\$	2,026,737 142,435 -
Total Distribution Primary & Secondary Lines		OMDLT		\$	47,346,505	\$	35,315,466	\$	5,740,608	\$	178,251	\$	2,169,173
Distribution Line Transformers Demand Customer Total Distribution Line Transformers	ТОМ ТОМ	OMDLTD OMDLTC OMDLTT	SICDT Cust09	\$ \$	1,119,996 783,272 1,903,268		777,054 675,556 1,452,610		142,197 83,931 226,129	·	- -	\$ \$	125,234 5,240 130,474
Distribution Services Customer	ТОМ	OMDSC	C02	\$	295,809	\$	227,363	\$	57,220	\$	-	\$	9,982
Distribution Meters Customer	ТОМ	OMDMC	C03	\$	17,171,209	\$	12,018,472	\$	3,533,500	\$	137,553	\$	950,545
Distribution Street & Customer Lighting Customer	ТОМ	OMDSCL	C04	\$	1,306,145	\$	-	\$	-	\$	-	\$	-
Customer Accounts Expense Customer	ТОМ	OMCAE	C05	\$	20,585,101	\$	15,338,459	\$	3,811,307	\$	15,165	\$	594,854
Customer Service & Info. Customer	ТОМ	OMCSI	C05	\$	4,496,452	\$	3,350,416	\$	832,513	\$	3,313	\$	129,935
Sales Expense Customer	ТОМ	OMSEC	C06	\$	-	\$	-	\$	-	\$	-	\$	-
Total		OMT		\$	685,621,903	\$	287,977,479	\$	85,712,375	\$	8,382,184	\$	98,788,346

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Operation and Maintenance Expenses									
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Total Power Production Plant	ТОМ ТОМ ТОМ ТОМ	omppdb omppdi omppdp omppeb omppt	PPBDA PPWDA PPSDA E01	\$	5,202,794 4,055,270 3,559,491 72,903,855 85,721,410		2,288,260 2,719,521 2,404,150 32,064,108 39,476,039		3,168,103 2,425,592 2,058,637 44,392,865 52,045,197
		ONIFFI		φ	03,721,410	φ	39,470,039	φ	52,045,197
Transmission Plant Transmission Demand	ТОМ	OMTRB	NCPT	\$	2,658,239	\$	1,578,323	\$	1,634,855
Distribution Poles Specific	ТОМ	OMDPS	NCPP	\$	-	\$	-	\$	-
Distribution Substation General	ТОМ	OMDSG	NCPP	\$	1,061,032	\$	629,985	\$	-
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand	TOM TOM TOM TOM	OMDPLS OMDPLD OMDPLC OMDSLD	NCPP NCPP Cust08 SICD	\$	- 1,843,713 5,321 -	\$	- 1,094,700 13,920 -	\$	- - -
Secondary Customer Total Distribution Primary & Secondary Lines	ТОМ	OMDSLC OMDLT	Cust07	\$	- 1,849,033	\$	- 1,108,620	\$	-
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	ТОМ ТОМ	OMDLTD OMDLTC OMDLTT	SICDT Cust09	\$ \$	- -	\$ \$	68,824 512 69,337		- -
Distribution Services Customer	ТОМ	OMDSC	C02	\$	-	\$	1,243	\$	-
Distribution Meters Customer	ТОМ	OMDMC	C03	\$	215,396	\$	100,139	\$	176,202
Distribution Street & Customer Lighting Customer	ТОМ	OMDSCL	C04	\$	-	\$	-	\$	-
Customer Accounts Expense Customer	ТОМ	OMCAE	C05	\$	111,107	\$	290,669	\$	13,691
Customer Service & Info. Customer	ТОМ	OMCSI	C05	\$	24,269	\$	63,492	\$	2,991
Sales Expense Customer	ТОМ	OMSEC	C06	\$	-	\$	-	\$	-
Total		OMT		\$	91,640,486	\$	43,317,846	\$	53,872,936

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1		Special Contract Customer #2		Street Lighting te RLS, LS, DSK		Street Lighting Rate LE		Traffic Street Lighting Rate TLE
Operation and Maintenance Expenses													
Power Production Plant													
Production Demand - Base Production Demand - Winter Peak	TOM TOM	OMPPDB OMPPDI	PPBDA PPWDA	\$	309,223 280.050	\$	163,361 106,448	\$	292,633	\$	9,539	\$	8,939 7,198
Production Demand - Summer Peak	TOM	OMPPDP	PPSDA		222,285		89,982		-		-		4,034
Production Energy Total Power Production Plant	ТОМ	OMPPEB OMPPT	E01	\$	4,332,969 5,144,527	¢	2,289,091 2,648,883	¢	4,100,500 4,393,133	¢	133,662 143,201	¢	125,255 145,425
		OWIFFT		Ψ	5,144,527	φ	2,040,003	φ	4,090,100	φ	143,201	φ	145,425
Transmission Plant	том	ONTOD	NORT	¢	404.004	¢	00.050	¢	100.000	•	5 405	¢	0.470
Transmission Demand	ТОМ	OMTRB	NCPT	\$	164,801	Ф	86,259	Þ	169,926	ф	5,435	φ	2,476
Distribution Poles	7014	011000	NORR	<u>_</u>		•		•		•		•	
Specific	ТОМ	OMDPS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Substation													
General	ТОМ	OMDSG	NCPP	\$	65,780	\$	34,430	\$	67,826	\$	2,169	\$	988
Distribution Primary & Secondary Lines													
Primary Specific	TOM	OMDPLS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Primary Demand	ТОМ	OMDPLD	NCPP		114,303		59,828		117,858		3,769		1,717
Primary Customer	TOM	OMDPLC	Cust08		50		50		484,182		925		5,071
Secondary Demand	TOM	OMDSLD	SICD		-		-		33,018		1,056		481
Secondary Customer	ТОМ	OMDSLC	Cust07	¢	-	¢	-	¢	161,051	¢	308	¢	1,687
Total Distribution Primary & Secondary Lines		OMDLT		\$	114,353	Ф	59,878	Þ	796,108	ф	6,058	φ	8,957
Distribution Line Transformers				•									
Demand	TOM	OMDLTD	SICDT	\$	-	\$	-	\$	6,389	\$		\$	93
Customer	TOM	OMDLTC	Cust09	•	-	•	-	•	17,812	•	34	•	187
Total Distribution Line Transformers		OMDLTT		\$	-	\$	-	\$	24,200	\$	238	\$	280
Distribution Services													
Customer	ТОМ	OMDSC	C02	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Meters													
Customer	TOM	OMDMC	C03	\$	2,042	\$	2,042	\$	-	\$	5,446	\$	29,872
Distribution Street & Customer Lighting													
Customer	TOM	OMDSCL	C04	\$	-	\$	-	\$	1,306,145	\$	-	\$	-
Customer Accounts Expense													
Customer	TOM	OMCAE	C05	\$	211	\$	211	\$	404,419	\$	772	\$	4,236
Customer Service & Info.													
Customer	ТОМ	OMCSI	C05	\$	46	\$	46	\$	88,338	\$	169	\$	925
Sales Expense													
Customer	ТОМ	OMSEC	C06	\$	-	\$	-	\$	-	\$	-	\$	-
Total		OMT		\$	5,491,759	\$	2,831,749	\$	7,250,096	\$	163,488	\$	193,159
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# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary		Rate PS Secondary
Labor Expenses					3.43%	4.01%				
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy	TLB TLB TLB TLB TLB	LBPPDB LBPPDI LBPPDP LBPPEB LBPPEI	PPBDA PPWDA PPSDA E01 E01	\$	8,354,904 8,752,290 7,194,353 17,970,758	\$ 3,022,621 3,740,013 2,813,352 6,501,425	\$ 982,243 1,223,816 1,016,676 2,112,730	\$ 116,987 95,169 83,847 251,630	\$	1,355,445 1,280,607 1,183,522 2,915,458
Production Energy - Not Used Production Energy - Not Used Total Power Production Plant	TLB	LBPPEP LBPPT	E01	\$	- - 42,272,305	\$ - - 16,077,411	\$ - - 5,335,466	\$ - - 547,633	\$	6,735,031
Transmission Plant Transmission Demand	TLB	LBTRB	NCPT	\$	4,308,731	\$ 1,914,748	\$ 551,155	\$ 48,971	\$	568,382
Distribution Poles Specific	TLB	LBDPS	NCPP	\$	-	\$ -	\$ -	\$ -	\$	-
Distribution Substation General	TLB	LBDSG	NCPP	\$	2,685,252	\$ 1,288,380	\$ 370,856	\$ 32,951	\$	382,448
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Customer Total Distribution Primary & Secondary Lines	TLB TLB TLB TLB TLB	LBDPLS LBDPLD LBDPLC LBDSLD LBDSLC LBDLT	NCPP NCPP Cust08 SICD Cust07	\$	2,551,847 3,857,080 833,939 1,230,591 8,473,457	\$ 1,224,372 3,325,240 699,849 1,069,212 6,318,672	\$ 352,432 413,129 128,069 132,839 1,026,469	\$ 31,314 658 - 31,971	\$	363,448 25,792 - 389,240
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	TLB TLB	LBDLTD LBDLTC LBDLTT	SICDT Cust09	\$ \$	240,841 168,432 409,273	167,095 145,270 312,365	30,578 18,048 48,626	-	\$ \$	26,930 1,127 28,057
Distribution Services Customer	TLB	LBDSC	C02	\$	62,054	\$ 47,696	\$ 12,003	\$ -	\$	2,094
Distribution Meters Customer	TLB	LBDMC	C03	\$	5,681,158	\$ 3,976,356	\$ 1,169,071	\$ 45,510	\$	314,491
Distribution Street & Customer Lighting Customer	TLB	LBDSCL	C04	\$	206,477	\$ -	\$ -	\$ -	\$	-
Customer Accounts Expense Customer	TLB	LBCAE	C05	\$	5,837,418	\$ 4,349,602	\$ 1,080,791	\$ 4,301	\$	168,686
Customer Service & Info. Customer	TLB	LBCSI	C05	\$	1,602,599	\$ 1,194,136	\$ 296,719	\$ 1,181	\$	46,311
Sales Expense Customer	TLB	LBSEC	C06	\$	-	\$ -	\$ -	\$ -	\$	-
Total		LBT		\$	71,538,724	\$ 35,479,364	\$ 9,891,157	\$ 712,517	\$	8,634,741

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Labor Expenses									
Power Production Plant									
Production Demand - Base	TLB	LBPPDB	PPBDA	\$	1,308,380	\$	575,443	\$	796,703
Production Demand - Winter Peak	TLB	LBPPDI	PPWDA		1,019,805		683,896		609,979
Production Demand - Summer Peak	TLB	LBPPDP	PPSDA		895,128		604,587		517,699
Production Energy	TLB	LBPPEB	E01		2,814,226		1,237,735		1,713,648
Production Energy - Not Used	TLB	LBPPEI	E01		-		-		-
Production Energy - Not Used	TLB	LBPPEP	E01						-
Total Power Production Plant	1LD	LBPPT	Lon	\$	6,037,540	\$	3,101,661	\$	3,638,030
Transmission Plant									
Transmission Demand	TLB	LBTRB	NCPT	\$	517,055	\$	307,000	\$	317,996
Distribution Poles									
Specific	TLB	LBDPS	NCPP	\$	-	\$	-	\$	-
Distribution Substation									
General	TLB	LBDSG	NCPP	\$	347,911	\$	206,572	\$	-
<b>Distribution Primary &amp; Secondary Lines</b>									
Primary Specific	TLB	LBDPLS	NCPP	\$	-	\$	-	\$	-
Primary Demand	TLB	LBDPLD	NCPP		330,627		196,309		-
Primary Customer	TLB	LBDPLC	Cust08		963		2,521		-
Secondary Demand	TLB	LBDSLD	SICD		-		-		-
Secondary Customer	TLB	LBDSLC	Cust07		-		-		-
Total Distribution Primary & Secondary Lines		LBDLT		\$	331,590	\$	198,829	\$	-
Distribution Line Transformers									
Demand	TLB	LBDLTD	SICDT	\$	-	\$	14,800	\$	-
Customer	TLB	LBDLTC	Cust09		-		110		-
Total Distribution Line Transformers		LBDLTT		\$	-	\$	14,910	\$	-
Distribution Services									
Customer	TLB	LBDSC	C02	\$	-	\$	261	\$	-
Distribution Meters				•		•			
Customer	TLB	LBDMC	C03	\$	71,264	\$	33,131	\$	58,297
Distribution Street & Customer Lighting	TID		004	•		•		•	
Customer	TLB	LBDSCL	C04	\$	-	\$	-	\$	-
Customer Accounts Expense	TID		005	¢	04 507	¢	00 (07	¢	0.000
Customer	TLB	LBCAE	C05	\$	31,507	\$	82,427	\$	3,882
Customer Service & Info.	TID	1 0001	0.05	•	0.0-0	•	00.000	•	1 000
Customer	TLB	LBCSI	C05	\$	8,650	\$	22,629	\$	1,066
Sales Expense Customer	TLB	LBSEC	C06	\$		\$		\$	
Cusiomer	ILD	LDOEU	000	Ф	-	Φ	-	à	-
Total		LBT		\$	7,345,518	\$	3,967,420	\$	4,019,271

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector	Special Contract Customer #1	Special Contract Customer #2		Street Lighting Rate LE	т	raffic Street Lighting Rate TLE
Labor Expenses									
Power Production Plant									
Production Demand - Base	TLB	LBPPDB	PPBDA	\$ 77,762	\$ 41,082	\$ 73,590	\$ 2,399	\$	2,248
Production Demand - Winter Peak	TLB	LBPPDI	PPWDA	70,426	26,769	-	-		1,810
Production Demand - Summer Peak	TLB	LBPPDP	PPSDA	55,899	22,628	-	-		1,014
Production Energy	TLB	LBPPEB	E01	167,261	88,363	158,287	5,160		4,835
Production Energy - Not Used	TLB	LBPPEI	E01	-	-	-	-		-
Production Energy - Not Used	TLB	LBPPEP	E01	-	-	-	-		-
Total Power Production Plant		LBPPT		\$ 371,348	\$ 178,842	\$ 231,877	\$ 7,558	\$	9,907
Transmission Plant									
Transmission Demand	TLB	LBTRB	NCPT	\$ 32,055	\$ 16,778	\$ 33,052	\$ 1,057	\$	482
Distribution Poles									
Specific	TLB	LBDPS	NCPP	\$ -	\$ -	\$ -	\$ -	\$	-
Distribution Substation									
General	TLB	LBDSG	NCPP	\$ 21,569	\$ 11,290	\$ 22,240	\$ 711	\$	324
Distribution Primary & Secondary Lines									
Primary Specific	TLB	LBDPLS	NCPP	\$	\$ -	\$-	\$	\$	-
Primary Demand	TLB	LBDPLD	NCPP	20,498	10,729	21,135	676		308
Primary Customer	TLB	LBDPLC	Cust08	9	9	87,674	167		918
Secondary Demand	TLB	LBDSLD	SICD	-	-	5,754	184		84
Secondary Customer	TLB	LBDSLC	Cust07	-	-	28,191	54		295
Total Distribution Primary & Secondary Lines		LBDLT		\$ 20,507	\$ 10,738	\$ 142,754	\$ 1,081	\$	1,605
Distribution Line Transformers									
Demand	TLB	LBDLTD	SICDT	\$ -	\$ -	\$ 1,374	\$ 44	\$	20
Customer	TLB	LBDLTC	Cust09	-	-	3,830	7		40
Total Distribution Line Transformers		LBDLTT		\$ -	\$ -	\$ 5,204	\$ 51	\$	60
Distribution Services									
Customer	TLB	LBDSC	C02	\$ -	\$ -	\$ -	\$ -	\$	-
Distribution Meters									
Customer	TLB	LBDMC	C03	\$ 675	\$ 675	\$ -	\$ 1,802	\$	9,883
Distribution Street & Customer Lighting									
Customer	TLB	LBDSCL	C04	\$ -	\$ -	\$ 206,477	\$ -	\$	-
Customer Accounts Expense									
Customer	TLB	LBCAE	C05	\$ 60	\$ 60	\$ 114,683	\$ 219	\$	1,201
Customer Service & Info.									
Customer	TLB	LBCSI	C05	\$ 16	\$ 16	\$ 31,485	\$ 60	\$	330
Sales Expense									
Customer	TLB	LBSEC	C06	\$ -	\$ -	\$ -	\$ -	\$	-
Total		LBT		\$ 446,231	\$ 218,400	\$ 787,773	\$ 12,540	\$	23,793

Description	Ref	Name	Allocation Vector		Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary		Rate PS Secondary
Depreciation Expenses										
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Production Energy - Not Used Production Energy - Not Used	TDEPR TDEPR TDEPR TDEPR TDEPR TDEPR	DEPPDB DEPPDI DEPPDP DEPPEB DEPPEI DEPPEP	PPBDA PPWDA PPSDA E01 E01 E01	\$	28,434,166 29,786,588 24,484,475 - -	\$ 10,286,857 12,728,351 9,574,654 - -	\$ 3,342,860 4,165,002 3,460,043 - -	\$ 398,140 323,888 285,356 - -	\$	4,612,972 4,358,278 4,027,869 - - -
Total Power Production Plant		DEPPT		\$	82,705,230	\$ 32,589,862	\$ 10,967,905	\$ 1,007,384	\$	12,999,119
Transmission Plant Transmission Demand	TDEPR	DETRB	NCPT	\$	11,770,778	\$ 5,230,792	\$ 1,505,669	\$ 133,780	\$	1,552,732
Distribution Poles Specific	TDEPR	DEDPS	NCPP	\$	-	\$ -	\$ -	\$ -	\$	-
Distribution Substation General	TDEPR	DEDSG	NCPP	\$	4,970,929	\$ 2,385,043	\$ 686,528	\$ 60,999	\$	707,987
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	TDEPR TDEPR TDEPR TDEPR TDEPR	DEDPLS DEDPLD DEDPLC DEDSLD DEDSLC DEDLT	NCPP NCPP Cust08 SICD Cust07	\$	8,500,800 13,527,932 2,336,902 3,551,287 27,916,921	\$ 4,078,669 11,662,610 1,961,147 3,085,572 20,787,998	\$ 1,174,034 1,448,965 358,881 383,352 3,365,232	\$ 104,314 2,306 - 106,620	\$	1,210,731 90,460 - - 1,301,190
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	TDEPR TDEPR	DEDLTD DEDLTC DEDLTT	SICDT Cust09	\$ \$	3,230,303 2,259,120 5,489,424	2,241,187 1,948,446 4,189,633	410,127 242,075 652,202	- -	\$ \$	361,202 15,113 376,315
Distribution Services Customer	TDEPR	DEDSC	C02	\$	1,121,921	\$ 862,327	\$ 217,020	\$ -	\$	37,861
Distribution Meters Customer	TDEPR	DEDMC	C03	\$	1,301,397	\$ 910,874	\$ 267,802	\$ 10,425	\$	72,041
Distribution Street & Customer Lighting Customer	TDEPR	DEDSCL	C04	\$	3,565,925	\$ -	\$ -	\$ -	\$	-
Customer Accounts Expense Customer	TDEPR	DECAE	C05	\$	-	\$ -	\$ -	\$ -	\$	-
Customer Service & Info. Customer	TDEPR	DECSI	C05	\$	-	\$ -	\$ -	\$ -	\$	-
Sales Expense Customer	TDEPR	DESEC	C06	\$	-	\$ -	\$ -	\$ -	\$	-
Total		DET		\$	138,842,527	\$ 66,956,529	\$ 17,662,359	\$ 1,319,208	\$	17,047,245

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary	Rate RTS Transmission
Depreciation Expenses								
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Denergy Production Energy - Not Used Production Energy - Not Used Total Power Production Plant	TDEPR TDEPR TDEPR TDEPR TDEPR TDEPR	DEPPDB DEPPDI DEPPDP DEPPEB DEPPEI DEPPEP DEPPT	PPBDA PPWDA PPSDA E01 E01 E01	\$ \$	4,452,799 3,470,693 3,046,381 - - 10,969,873		1,958,401 2,327,496 2,057,586 - - - 6,343,484	2,711,413 2,075,937 1,761,879 - - - - 6,549,230
Transmission Plant Transmission Demand	TDEPR	DETRB	NCPT	\$	1,412,512	\$	838,676	\$ 868,715
Distribution Poles Specific	TDEPR	DEDPS	NCPP	\$	-	\$	-	\$ -
Distribution Substation General	TDEPR	DEDSG	NCPP	\$	644,052	\$	382,404	\$ -
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	TDEPR TDEPR TDEPR TDEPR TDEPR	DEDPLS DEDPLD DEDPLC DEDSLD DEDSLC DEDLT	NCPP NCPP Cust08 SICD Cust07	\$	1,101,396 3,379 - 1,104,775	\$	653,951 8,840 - - 662,791	\$ 
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	TDEPR TDEPR	DEDLTD DEDLTC DEDLTT	SICDT Cust09	\$ \$	- -	\$ \$	198,504 1,477 199,981	- - -
Distribution Services Customer	TDEPR	DEDSC	C02	\$	-	\$	4,713	\$ -
Distribution Meters Customer	TDEPR	DEDMC	C03	\$	16,325	\$	7,590	\$ 13,354
Distribution Street & Customer Lighting Customer	TDEPR	DEDSCL	C04	\$	-	\$	-	\$ -
Customer Accounts Expense Customer	TDEPR	DECAE	C05	\$	-	\$	-	\$ -
Customer Service & Info. Customer	TDEPR	DECSI	C05	\$	-	\$	-	\$ -
Sales Expense Customer	TDEPR	DESEC	C06	\$	-	\$	-	\$ -
Total		DET		\$	14,147,537	\$	8,439,639	\$ 7,431,299

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1		Special Contract Customer #2			Street Lighting Rate LE		Traffic Street Lighting Rate TLE
Depreciation Expenses												
Power Production Plant												
Production Demand - Base	TDEPR	DEPPDB	PPBDA	\$	264,648	\$	139,812	\$ 250,449	\$	8,164	\$	7,650
Production Demand - Winter Peak	TDEPR	DEPPDI	PPWDA		239,680		91,103	-		-		6,160
Production Demand - Summer Peak	TDEPR	DEPPDP	PPSDA		190,242		77,011	-		-		3,452
Production Energy	TDEPR	DEPPEB	E01		-		-	-		-		-
Production Energy - Not Used	TDEPR	DEPPEI	E01		-		-	-		-		-
Production Energy - Not Used	TDEPR	DEPPEP	E01		-		-	-		-		-
Total Power Production Plant		DEPPT		\$	694,570	\$	307,927	\$ 250,449	\$	8,164	\$	17,263
Transmission Plant												
Transmission Demand	TDEPR	DETRB	NCPT	\$	87,570	\$	45,836	\$ 90,294	\$	2,888	\$	1,316
Distribution Poles												
Specific	TDEPR	DEDPS	NCPP	\$	-	\$	-	\$ -	\$	-	\$	-
Distribution Substation												
General	TDEPR	DEDSG	NCPP	\$	39,929	\$	20,899	\$ 41,171	\$	1,317	\$	600
Distribution Primary & Secondary Lines												
Primary Specific	TDEPR	DEDPLS	NCPP	\$		\$	-	\$-	\$		\$	-
Primary Demand	TDEPR	DEDPLD	NCPP		68,282		35,740	70,406		2,252		1,026
Primary Customer	TDEPR	DEDPLC	Cust08		32		32	307,500		587		3,221
Secondary Demand	TDEPR	DEDSLD	SICD		-		-	16,123		516		235
Secondary Customer	TDEPR	DEDSLC	Cust07		-		-	81,355		155		852
Total Distribution Primary & Secondary Lines		DEDLT		\$	68,314	\$	35,772	\$ 475,385	\$	3,510	\$	5,334
Distribution Line Transformers												
Demand	TDEPR	DEDLTD	SICDT	\$	-	\$	-	\$ 18,426			\$	268
Customer	TDEPR	DEDLTC	Cust09		-		-	51,373		98		538
Total Distribution Line Transformers		DEDLTT		\$	-	\$	-	\$ 69,799	\$	687	\$	807
Distribution Services												
Customer	TDEPR	DEDSC	C02	\$	-	\$	-	\$ -	\$	-	\$	-
Distribution Meters												
Customer	TDEPR	DEDMC	C03	\$	155	\$	155	\$ -	\$	413	\$	2,264
Distribution Street & Customer Lighting												
Customer	TDEPR	DEDSCL	C04	\$	-	\$	-	\$ 3,565,925	\$	-	\$	-
Customer Accounts Expense												
Customer	TDEPR	DECAE	C05	\$	-	\$	-	\$-	\$	-	\$	-
Customer Service & Info.												
Customer	TDEPR	DECSI	C05	\$	-	\$	-	\$ -	\$	-	\$	-
Sales Expense												
Customer	TDEPR	DESEC	C06	\$	-	\$	-	\$-	\$	-	\$	-
Total		DET		¢	000 500	¢	440 500	¢ 4 400 000	¢	40.070	¢	07 500
Total		DET		\$	890,538	\$	410,589	\$ 4,493,023	\$	16,979	\$	27,582

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System		Residential Rate RS		General Service Rate GS		Rate PS Primary		Rate PS Secondary
Regulatory Credits													
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Production Energy - Not Used Production Energy - Not Used Total Power Production Plant	TRCTN TRCTN TRCTN TRCTN TRCTN TRCTN	RCPDB RCPDI RCPDP RCPEB RCPEI RCPEP RCPT	PPBDA PPWDA PPSDA E01 E01 E01	\$	- - - - -	\$		\$		\$	- - - - -	\$	
Transmission Plant Transmission Demand	TRCTN	RCRB	NCPT	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Poles Specific	TRCTN	RCPS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Substation General	TRCTN	RCSG	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	TRCTN TRCTN TRCTN TRCTN TRCTN TRCTN	RCPLS RCPLD RCPLC RCSLD RCSLC RCLT	NCPP NCPP Cust08 SICD Cust07	\$	- - - - -	\$	- - - -	\$ \$	- - - -	\$ \$		\$	- - - -
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	TRCTN TRCTN	RCLTD RCLTC RCLTT	SICDT Cust09	\$ \$	- -	\$ \$	- -	\$ \$	- -	\$ \$	- -	\$ \$	-
Distribution Services Customer	TRCTN	RCSC	C02	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Meters Customer	TRCTN	RCMC	C03	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Street & Customer Lighting Customer	TRCTN	RCSCL	C04	\$	-	\$	-	\$	-	\$	-	\$	-
Customer Accounts Expense Customer	TRCTN	RCCAE	C05	\$	-	\$	-	\$	-	\$	-	\$	-
Customer Service & Info. Customer	TRCTN	RCCSI	C05	\$	-	\$	-	\$	-	\$	-	\$	-
Sales Expense Customer	TRCTN	RCSEC	C06	\$	-	\$	-	\$	-	\$	-	\$	-
Total		RCT		\$	-	\$	-	\$	-	\$	-	\$	-

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Regulatory Credits							
Power Production Plant							
Production Demand - Base	TRCTN	RCPDB	PPBDA	\$	- \$	- \$	-
Production Demand - Winter Peak	TRCTN	RCPDI	PPWDA		-	_	-
Production Demand - Summer Peak	TRCTN	RCPDP	PPSDA		-	-	-
Production Energy	TRCTN	RCPEB	E01		-	-	-
Production Energy - Not Used	TRCTN	RCPEI	E01		-	-	-
Production Energy - Not Used	TRCTN	RCPEP	E01		-	-	-
Total Power Production Plant		RCPT		\$	- \$	- \$	-
Transmission Plant							
Transmission Demand	TRCTN	RCRB	NCPT	\$	- \$	- \$	-
Distribution Poles							
Specific	TRCTN	RCPS	NCPP	\$	- \$	- \$	-
Distribution Substation							
General	TRCTN	RCSG	NCPP	\$	- \$	- \$	-
Distribution Primary & Secondary Lines							
Primary Specific	TRCTN	RCPLS	NCPP	\$	- \$	- \$	-
Primary Demand	TRCTN	RCPLD	NCPP		-	-	-
Primary Customer	TRCTN	RCPLC	Cust08		-	-	-
Secondary Demand	TRCTN	RCSLD	SICD		-	-	-
Secondary Customer	TRCTN	RCSLC	Cust07		-	-	-
Total Distribution Primary & Secondary Lines		RCLT		\$	- \$	- \$	-
Distribution Line Transformers							
Demand	TRCTN	RCLTD	SICDT	\$	- \$	- \$	-
Customer	TRCTN	RCLTC	Cust09				-
Total Distribution Line Transformers		RCLTT		\$	- \$	- \$	-
Distribution Services							
Customer	TRCTN	RCSC	C02	\$	- \$	- \$	-
Distribution Meters				•			
Customer	TRCTN	RCMC	C03	\$	- \$	- \$	-
Distribution Street & Customer Lighting							
Customer	TRCTN	RCSCL	C04	\$	- \$	- \$	-
Customer Accounts Expense							
Customer	TRCTN	RCCAE	C05	\$	- \$	- \$	-
Customer Service & Info.							
Customer	TRCTN	RCCSI	C05	\$	- \$	- \$	-
Sales Expense							
Customer	TRCTN	RCSEC	C06	\$	- \$	- \$	-
Total		RCT		\$	- \$	- \$	-

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector	Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Regulatory Credits								
Power Production Plant								
Production Demand - Base	TRCTN	RCPDB	PPBDA	\$ - \$	-	\$-\$	- \$	-
Production Demand - Winter Peak	TRCTN	RCPDI	PPWDA	-	-	-	-	-
Production Demand - Summer Peak	TRCTN	RCPDP	PPSDA	-	-	-	-	-
Production Energy	TRCTN	RCPEB	E01	-	-	-	-	-
Production Energy - Not Used	TRCTN	RCPEI	E01	-	-	-	-	-
Production Energy - Not Used	TRCTN	RCPEP	E01	-	-	-	-	-
Total Power Production Plant		RCPT		\$ - \$	-	\$-\$	- \$	-
Transmission Plant								
Transmission Demand	TRCTN	RCRB	NCPT	\$ - \$	-	\$-\$	- \$	-
Distribution Poles								
Specific	TRCTN	RCPS	NCPP	\$ - \$	-	\$-\$	- \$	-
Distribution Substation								
General	TRCTN	RCSG	NCPP	\$ - \$	-	\$-\$	- \$	-
Distribution Primary & Secondary Lines								
Primary Specific	TRCTN	RCPLS	NCPP	\$ - \$	-	\$-\$	- \$	-
Primary Demand	TRCTN	RCPLD	NCPP	-	-	-	-	-
Primary Customer	TRCTN	RCPLC	Cust08	-	-	-	-	-
Secondary Demand	TRCTN	RCSLD	SICD	-	-	-	-	-
Secondary Customer	TRCTN	RCSLC	Cust07	-	-	-	-	-
Total Distribution Primary & Secondary Lines		RCLT		\$ - \$	-	\$-\$	- \$	-
Distribution Line Transformers								
Demand	TRCTN	RCLTD	SICDT	\$ - \$	-	\$-\$	- \$	-
Customer	TRCTN	RCLTC	Cust09	-	-	-	-	-
Total Distribution Line Transformers		RCLTT		\$ - \$	-	\$-\$	- \$	-
Distribution Services								
Customer	TRCTN	RCSC	C02	\$ - \$	-	\$-\$	- \$	-
Distribution Meters								
Customer	TRCTN	RCMC	C03	\$ - \$	-	\$-\$	- \$	-
Distribution Street & Customer Lighting								
Customer	TRCTN	RCSCL	C04	\$ - \$	-	\$-\$	- \$	-
Customer Accounts Expense								
Customer	TRCTN	RCCAE	C05	\$ - \$	-	\$-\$	- \$	-
Customer Service & Info.								
Customer	TRCTN	RCCSI	C05	\$ - \$	-	\$-\$	- \$	-
Sales Expense								
Customer	TRCTN	RCSEC	C06	\$ - \$	-	\$-\$	- \$	-
Total		RCT		\$ - \$	-	\$-\$	- \$	-

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector	Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Accretion Expenses								
Power Production Plant Production Demand - Base Production Demand - Winter Peak	TACRTN TACRTN	ACRPDB ACRPDI	PPBDA PPWDA	\$ - \$	\$ -	\$ -	\$ -	\$ -
Production Demand - Summer Peak Production Energy Production Energy - Not Used	TACRTN TACRTN TACRTN	ACRPDP ACRPEB ACRPEI ACRPEP	PPSDA E01 E01	-		-	-	-
Production Energy - Not Used Total Power Production Plant	TACRTN	ACRPEP	E01	\$ - 9	\$ -	\$ -	\$ -	\$ -
Transmission Plant Transmission Demand	TACRTN	ACRRB	NCPT	\$ - \$	\$ -	\$ -	\$ -	\$ -
Distribution Poles Specific	TACRTN	ACRPS	NCPP	\$ - 9	\$ -	\$ -	\$ -	\$ -
Distribution Substation General	TACRTN	ACRSG	NCPP	\$ - 5	\$ -	\$ -	\$ -	\$ -
Distribution Primary & Secondary Lines Primary Specific Primary Demand	TACRTN TACRTN	ACRPLS ACRPLD	NCPP NCPP	\$ - \$	\$ -	\$ -	\$ -	\$ -
Primary Customer Secondary Demand Secondary Customer	TACRTN TACRTN TACRTN	ACRPLC ACRSLD ACRSLC	Cust08 SICD Cust07	- -	- -	-	-	-
Total Distribution Primary & Secondary Lines		ACRLT		\$ - 5	\$ -	\$ -	\$ -	\$ -
Distribution Line Transformers Demand Customer	TACRTN TACRTN	ACRLTD ACRLTC	SICDT Cust09	\$ -	\$ -	\$ -	\$ -	\$ -
Total Distribution Line Transformers Distribution Services		ACRLTT		\$ - 3	\$ -	\$ -	\$ -	\$ -
Customer Distribution Meters	TACRTN	ACRSC	C02	\$ - 5	\$ -	\$ -	\$ -	\$ -
Customer	TACRTN	ACRMC	C03	\$ - 5	\$ -	\$ -	\$ -	\$ -
Distribution Street & Customer Lighting Customer	TACRTN	ACRSCL	C04	\$ - 9	\$ -	\$ -	\$ -	\$ -
Customer Accounts Expense Customer	TACRTN	ACRCAE	C05	\$ - \$	\$ -	\$ -	\$ -	\$ -
Customer Service & Info. Customer	TACRTN	ACRCSI	C05	\$ - 9	\$ -	\$ -	\$ -	\$ -
Sales Expense Customer	TACRTN	ACRSEC	C06	\$ - 5	\$ -	\$ -	\$ -	\$ -
Total		ACRT		\$ - 9	\$ -	\$ -	\$ -	\$ -

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector	Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Accretion Expenses						
Power Production Plant						
Production Demand - Base	TACRTN	ACRPDB	PPBDA	\$ - \$	- \$	-
Production Demand - Winter Peak	TACRTN	ACRPDI	PPWDA	-	-	-
Production Demand - Summer Peak	TACRTN	ACRPDP	PPSDA	-	-	-
Production Energy	TACRTN	ACRPEB	E01		-	-
Production Energy - Not Used	TACRTN	ACRPEI	E01	_	_	_
Production Energy - Not Used	TACRTN	ACRPEP	E01			
Total Power Production Plant	IACIAIN	ACRPT	LUI	\$ - \$	- \$	-
Transmission Plant						
Transmission Demand	TACRTN	ACRRB	NCPT	\$ - \$	- \$	-
Distribution Poles						
Specific	TACRTN	ACRPS	NCPP	\$ - \$	- \$	-
Distribution Substation						
General	TACRTN	ACRSG	NCPP	\$ - \$	- \$	-
Distribution Primary & Secondary Lines						
Primary Specific	TACRTN	ACRPLS	NCPP	\$ - \$	- \$	-
Primary Demand	TACRTN	ACRPLD	NCPP	-	-	-
Primary Customer	TACRTN	ACRPLC	Cust08	-	-	-
Secondary Demand	TACRTN	ACRSLD	SICD	-	-	-
Secondary Customer	TACRTN	ACRSLC	Cust07	-	-	-
Total Distribution Primary & Secondary Lines		ACRLT		\$ - \$	- \$	-
Distribution Line Transformers						
Demand	TACRTN	ACRLTD	SICDT	\$ - \$	- \$	-
Customer	TACRTN	ACRLTC	Cust09	-	-	-
Total Distribution Line Transformers		ACRLTT		\$ - \$	- \$	-
Distribution Services						
Customer	TACRTN	ACRSC	C02	\$ - \$	- \$	-
Distribution Meters						
Customer	TACRTN	ACRMC	C03	\$ - \$	- \$	-
Distribution Street & Customer Lighting						
Customer	TACRTN	ACRSCL	C04	\$ - \$	- \$	-
Customer Accounts Expense						
Customer	TACRTN	ACRCAE	C05	\$ - \$	- \$	-
Customer Service & Info.						
Customer	TACRTN	ACRCSI	C05	\$ - \$	- \$	-
Sales Expense						
Customer	TACRTN	ACRSEC	C06	\$ - \$	- \$	-
Total		ACRT		\$ - \$	- \$	-

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Accretion Expenses									
Power Production Plant									
Production Demand - Base	TACRTN	ACRPDB	PPBDA	\$	- \$	-	\$ - :	\$-\$	-
Production Demand - Winter Peak	TACRTN	ACRPDI	PPWDA		-	-	-	-	-
Production Demand - Summer Peak	TACRTN	ACRPDP	PPSDA		-	-	-	-	-
Production Energy	TACRTN	ACRPEB	E01		-	-	-	-	-
Production Energy - Not Used	TACRTN	ACRPEI	E01		-	-	-	-	-
Production Energy - Not Used Total Power Production Plant	TACRTN	ACRPEP ACRPT	E01	\$	- \$	-	\$ -	- \$-\$	-
Transmission Plant									
Transmission Demand	TACRTN	ACRRB	NCPT	\$	- \$	-	\$ -	\$ - \$	-
Distribution Poles									
Specific	TACRTN	ACRPS	NCPP	\$	- \$	-	\$ -	\$-\$	-
Distribution Substation									
General	TACRTN	ACRSG	NCPP	\$	- \$	-	\$ -	\$-\$	-
Distribution Primary & Secondary Lines									
Primary Specific	TACRTN	ACRPLS	NCPP	\$	- \$	-	\$ - 3	\$-\$	-
Primary Demand	TACRTN	ACRPLD	NCPP		-	-	-	-	-
Primary Customer	TACRTN	ACRPLC	Cust08		-	-	-	-	-
Secondary Demand	TACRTN	ACRSLD	SICD		-	-	-	-	-
Secondary Customer	TACRTN	ACRSLC	Cust07			-	-		-
Total Distribution Primary & Secondary Lines		ACRLT		\$	- \$	-	\$ -	\$-\$	-
Distribution Line Transformers									
Demand	TACRTN	ACRLTD	SICDT	\$	- \$	-	\$ - :	\$-\$	-
Customer	TACRTN	ACRLTC	Cust09	•	-	-	-		-
Total Distribution Line Transformers		ACRLTT		\$	- \$	-	\$ -	\$-\$	-
Distribution Services	TACRTN	40000	C02	\$	- \$		¢	¢ ¢	
Customer	TACKIN	ACRSC	C02	φ	- Þ	-	\$ -	\$-\$	-
Distribution Meters	TAODTN	10010	000	¢	¢		<b>^</b>	¢ ¢	
Customer	TACRTN	ACRMC	C03	\$	- \$	-	\$ -	\$-\$	-
Distribution Street & Customer Lighting	TAODTH	10000		•	<u>^</u>		•	•	
Customer	TACRTN	ACRSCL	C04	\$	- \$	-	\$ -	\$-\$	-
Customer Accounts Expense	TACOTA		005	¢	٨		¢	¢ *	
Customer	TACRTN	ACRCAE	C05	\$	- \$	-	\$ -	\$-\$	-
Customer Service & Info.	TAODTN		005	¢	^		•	<b>^</b>	
Customer	TACRTN	ACRCSI	C05	\$	- \$	-	\$ -	\$-\$	-
Sales Expense	TAODTH	400055		•			•	•	
Customer	TACRTN	ACRSEC	C06	\$	- \$	-	\$ -	\$-\$	-
Total		ACRT		\$	- \$	-	\$ -	\$-\$	-

Description	Ref	Name	Allocation Vector		Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary		Rate PS Secondary
Property and Other Taxes										
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy	PTAX PTAX PTAX PTAX	PTPPDB PTPPDI PTPPDP PTPPEB	PPBDA PPWDA PPSDA E01	\$	6,289,767 6,588,929 5,416,077	\$ 2,275,499 2,815,569 2,117,957	\$ 739,456 921,317 765,377	\$ 88,070 71,645 63,122	\$	1,020,410 964,071 890,983
Production Energy - Not Used Production Energy - Not Used Total Power Production Plant	PTAX PTAX PTAX	PTPPEI PTPPEP PTPPT	E01 E01	\$	- - 18,294,773	\$ - - 7,209,026	\$ - - 2,426,151	\$ - - 222,838	\$	- - 2,875,464
Transmission Plant Transmission Demand	ΡΤΑΧ	PTTRB	NCPT	\$	3,464,937	\$ 1,539,776	\$ 443,220	\$ 39,381	\$	457,074
Distribution Poles Specific	ΡΤΑΧ	PTDPS	NCPP	\$	-	\$ -	\$ -	\$ -	\$	-
Distribution Substation General	ΡΤΑΧ	PTDSG	NCPP	\$	1,206,640	\$ 578,944	\$ 166,647	\$ 14,807	\$	171,856
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	PTAX PTAX PTAX PTAX PTAX	PTDPLS PTDPLD PTDPLC PTDSLD PTDSLC PTDLT	NCPP NCPP Cust08 SICD Cust07	\$	2,063,479 3,283,761 567,258 862,037 6,776,535	\$ 990,054 2,830,974 476,047 748,990 5,046,065	\$ 284,984 351,721 87,115 93,055 816,874	\$ 25,321 560 - 25,881	\$	293,892 21,958 - 315,850
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	PTAX PTAX	PTDLTD PTDLTC PTDLTT	SICDT Cust09	\$ \$	784,122 548,377 1,332,499	544,024 472,964 1,016,989	99,554 58,761 158,315	-	\$ \$	87,678 3,668 91,346
Distribution Services Customer	ΡΤΑΧ	PTDSC	C02	\$	272,334	\$ 209,321	\$ 52,679	\$ -	\$	9,190
Distribution Meters Customer	ΡΤΑΧ	PTDMC	C03	\$	315,900	\$ 221,105	\$ 65,006	\$ 2,531	\$	17,487
Distribution Street & Customer Lighting Customer	PTAX	PTDSCL	C04	\$	865,590	\$ -	\$ -	\$ -	\$	-
Customer Accounts Expense Customer	PTAX	PTCAE	C05	\$	-	\$ -	\$ -	\$ -	\$	-
Customer Service & Info. Customer	ΡΤΑΧ	PTCSI	C05	\$	-	\$ -	\$ -	\$ -	\$	-
Sales Expense Customer	PTAX	PTSEC	C06	\$	-	\$ -	\$ -	\$ -	\$	-
Total		PTT		\$	32,529,209	\$ 15,821,225	\$ 4,128,893	\$ 305,437	\$	3,938,269

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Property and Other Taxes									
Power Production Plant									
Production Demand - Base	PTAX	PTPPDB	PPBDA	\$	984,979	\$	433,207	\$	599,777
Production Demand - Winter Peak	PTAX	PTPPDI	PPWDA		767,733		514,853		459,207
Production Demand - Summer Peak	PTAX	PTPPDP	PPSDA		673,873		455,147		389,736
Production Energy	PTAX	PTPPEB	E01		-		-		-
Production Energy - Not Used	PTAX	PTPPEI	E01		-		-		-
Production Energy - Not Used	PTAX	PTPPEP	E01		-		-		-
Total Power Production Plant	1 1700	PTPPT	Lon	\$	2,426,586	\$	1,403,207	\$	1,448,719
Transmission Plant									
Transmission Demand	PTAX	PTTRB	NCPT	\$	415,798	\$	246,879	\$	255,722
Distribution Poles									
Specific	PTAX	PTDPS	NCPP	\$	-	\$	-	\$	-
Distribution Substation				•					
General	PTAX	PTDSG	NCPP	\$	156,337	\$	92,825	\$	-
Distribution Primary & Secondary Lines									
Primary Specific	PTAX	PTDPLS	NCPP	\$	-	\$	-	\$	-
Primary Demand	PTAX	PTDPLD	NCPP		267,352		158,740		-
Primary Customer	PTAX	PTDPLC	Cust08		820		2,146		-
Secondary Demand	PTAX	PTDSLD	SICD		-		-		-
Secondary Customer	PTAX	PTDSLC	Cust07		-		-		-
Total Distribution Primary & Secondary Lines		PTDLT		\$	268,172	\$	160,886	\$	-
Distribution Line Transformers									
Demand	PTAX	PTDLTD	SICDT	\$	-	\$	48,185	\$	-
Customer	PTAX	PTDLTC	Cust09		-		359		-
Total Distribution Line Transformers		PTDLTT		\$	-	\$	48,543	\$	-
Distribution Services									
Customer	PTAX	PTDSC	C02	\$	-	\$	1,144	\$	-
Distribution Meters	DTAY	DTDMO	000	¢	0.000	•	4.040	¢	2 0 4 0
Customer	PTAX	PTDMC	C03	\$	3,963	\$	1,842	Ф	3,242
Distribution Street & Customer Lighting	DTAY	DTDOOL	004	¢		¢		•	
Customer	PTAX	PTDSCL	C04	\$	-	\$	-	\$	-
Customer Accounts Expense	ΡΤΑΧ	DTCAF	C05	¢		¢		¢	
Customer	PTAX	PTCAE	005	\$	-	\$	-	\$	-
Customer Service & Info. Customer	PTAX	PTCSI	C05	\$	_	\$		\$	-
	F 1774	FIGS	000	φ	-	φ	-	ψ	-
Sales Expense Customer	PTAX	PTSEC	C06	\$	_	\$	_	\$	-
		. 1020		Ψ		Ψ		Ψ	
Total		PTT		\$	3,270,856	\$	1,955,326	\$	1,707,683

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1		Special Contract Customer #2			Street Lighting Rate LE		Traffic Street Lighting Rate TLE
Property and Other Taxes												
Power Production Plant												
Production Demand - Base	PTAX	PTPPDB	PPBDA	\$	58,541	\$	30,927	\$ 55,400	\$	1,806	\$	1,692
Production Demand - Winter Peak	PTAX	PTPPDI	PPWDA		53,018		20,152	-		-		1,363
Production Demand - Summer Peak	PTAX	PTPPDP	PPSDA		42,082		17,035	-		-		764
Production Energy	PTAX	PTPPEB	E01		-		-	-		-		-
Production Energy - Not Used	PTAX	PTPPEI	E01		-		-	-		-		-
Production Energy - Not Used	PTAX	PTPPEP	E01		-		-	-		-		-
Total Power Production Plant		PTPPT		\$	153,642	\$	68,115	\$ 55,400	\$	1,806	\$	3,819
Transmission Plant												
Transmission Demand	PTAX	PTTRB	NCPT	\$	25,778	\$	13,493	\$ 26,580	\$	850	\$	387
Distribution Poles												
Specific	PTAX	PTDPS	NCPP	\$	-	\$	-	\$ -	\$	-	\$	-
Distribution Substation												
General	PTAX	PTDSG	NCPP	\$	9,692	\$	5,073	\$ 9,994	\$	320	\$	146
Distribution Primary & Secondary Lines												
Primary Specific	PTAX	PTDPLS	NCPP	\$	-	\$	-	\$ -	\$	-	\$	-
Primary Demand	PTAX	PTDPLD	NCPP		16,575		8,675	17,090		547		249
Primary Customer	PTAX	PTDPLC	Cust08		8		8	74,642		143		782
Secondary Demand	PTAX	PTDSLD	SICD		-		-	3,914		125		57
Secondary Customer	PTAX	PTDSLC	Cust07		-		-	19,748		38		207
Total Distribution Primary & Secondary Lines		PTDLT		\$	16,583	\$	8,683	\$ 115,395	\$	852	\$	1,295
Distribution Line Transformers												
Demand	PTAX	PTDLTD	SICDT	\$	-	\$	-	\$ 4,473	\$	143	\$	65
Customer	PTAX	PTDLTC	Cust09		-		-	12,470		24		131
Total Distribution Line Transformers		PTDLTT		\$	-	\$	-	\$ 16,943	\$	167	\$	196
Distribution Services												
Customer	PTAX	PTDSC	C02	\$	-	\$	-	\$ -	\$	-	\$	-
Distribution Meters												
Customer	PTAX	PTDMC	C03	\$	38	\$	38	\$ -	\$	100	\$	550
Distribution Street & Customer Lighting												
Customer	PTAX	PTDSCL	C04	\$	-	\$	-	\$ 865,590	\$	-	\$	-
Customer Accounts Expense												
Customer	PTAX	PTCAE	C05	\$	-	\$	-	\$ -	\$	-	\$	-
Customer Service & Info.												
Customer	PTAX	PTCSI	C05	\$	-	\$	-	\$-	\$	-	\$	-
Sales Expense												
Customer	PTAX	PTSEC	C06	\$	-	\$	-	\$-	\$	-	\$	-
			200	Ψ		Ŧ		Ŧ	Ť		*	
Total		PTT		\$	205,732	\$	95,401	\$ 1,089,902	\$	4,095	\$	6,391

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Amortization of ITC									
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Production Energy - Not Used Production Energy - Not Used	OTAX OTAX OTAX OTAX OTAX OTAX	OTPPDB OTPPDI OTPPDP OTPPEB OTPPEI OTPPEP	PPBDA PPWDA PPSDA E01 E01 E01	\$	(193,848) \$ (203,068) (166,921) - - -	(70,130) (86,775) (65,274) - -	\$ (22,790) (28,395) (23,589) - - -	\$ (2,714) (2,208) (1,945) - -	(29,712)
Total Power Production Plant		OTPPT		\$	(563,836) \$	(222,179)	\$ (74,773)	\$ (6,868)	\$ (88,620)
Transmission Plant Transmission Demand	ΟΤΑΧ	OTTRB	NCPT	\$	(106,788) \$	(47,455)	\$ (13,660)	\$ (1,214)	\$ (14,087)
Distribution Poles Specific	ΟΤΑΧ	OTDPS	NCPP	\$	- \$		\$-	\$-	\$-
Distribution Substation General	ΟΤΑΧ	OTDSG	NCPP	\$	(37,188) \$	(17,843)	\$ (5,136)	\$ (456)	\$ (5,297)
Distribution Primary & Secondary Lines Primary Specific Primary Demand	OTAX OTAX	OTDPLS OTDPLD	NCPP NCPP	\$	- \$ (63.595)	- (30,513)	\$- (8,783)	\$ - (780)	\$- (9,058)
Primary Denand Primary Customer Secondary Demand Secondary Customer	OTAX OTAX OTAX OTAX	OTDPLC OTDSLD OTDSLC	Cust08 SICD Cust07		(101,204) (17,483) (26,568)	(87,249) (14,672) (23,084)	(10,840) (2,685) (2,868)	(100) (17) - -	
Total Distribution Primary & Secondary Lines		OTDLT		\$	(208,850) \$	(155,517)	\$ (25,176)	\$ (798)	\$ (9,734)
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	OTAX OTAX	OTDLTD OTDLTC OTDLTT	SICDT Cust09	\$ \$	(24,166) \$ (16,901) (41,067) \$	(16,767) (14,577) (31,343)	(1,811)	-	\$ (2,702) (113) \$ (2,815)
Distribution Services Customer	ΟΤΑΧ	OTDSC	C02	\$	(8,393) \$	(6,451)	\$ (1,624)	\$-	\$ (283)
Distribution Meters Customer	ΟΤΑΧ	OTDMC	C03	\$	(9,736) \$	(6,814)	\$ (2,003)	\$ (78)	\$ (539)
Distribution Street & Customer Lighting Customer	ΟΤΑΧ	OTDSCL	C04	\$	(26,677) \$	-	\$-	\$-	\$-
Customer Accounts Expense Customer	ΟΤΑΧ	OTCAE	C05	\$	- \$	-	\$-	\$-	\$-
Customer Service & Info. Customer	ΟΤΑΧ	OTCSI	C05	\$	- \$	-	\$-	\$-	\$-
Sales Expense Customer	ΟΤΑΧ	OTSEC	C06	\$	- \$	-	\$-	\$-	\$-
Total		OTT		\$	(1,002,535) \$	(487,603)	\$ (127,251)	\$ (9,413)	\$ (121,376)

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Amortization of ITC									
Power Production Plant									
Production Demand - Base	OTAX	OTPPDB	PPBDA	\$	(30,357)	\$	(13,351)	\$	(18,485)
Production Demand - Winter Peak	OTAX	OTPPDI	PPWDA		(23,661)		(15,868)		(14,153)
Production Demand - Summer Peak	OTAX	OTPPDP	PPSDA		(20,768)		(14,027)		(12,011)
Production Energy	OTAX	OTPPEB	E01		-		-		-
Production Energy - Not Used	OTAX	OTPPEI	E01		-		-		-
Production Energy - Not Used	OTAX	OTPPEP	E01		-		-		
Total Power Production Plant	01101	OTPPT	201	\$	(74,786)	\$	(43,246)	\$	(44,649)
Transmission Plant									
Transmission Demand	OTAX	OTTRB	NCPT	\$	(12,815)	\$	(7,609)	\$	(7,881)
Distribution Poles									
Specific	ΟΤΑΧ	OTDPS	NCPP	\$	-	\$	-	\$	-
Distribution Substation	0 <b>7</b> 4¥	07000	NODD	<u>^</u>	(1.0.10)	•	(0.004)	•	
General	ΟΤΑΧ	OTDSG	NCPP	\$	(4,818)	\$	(2,861)	\$	-
Distribution Primary & Secondary Lines									
Primary Specific	OTAX	OTDPLS	NCPP	\$	-	\$	-	\$	-
Primary Demand	OTAX	OTDPLD	NCPP		(8,240)		(4,892)		-
Primary Customer	OTAX	OTDPLC	Cust08		(25)		(66)		-
Secondary Demand	OTAX	OTDSLD	SICD		-		-		-
Secondary Customer	OTAX	OTDSLC	Cust07		-		-		-
Total Distribution Primary & Secondary Lines		OTDLT		\$	(8,265)	\$	(4,958)	\$	-
Distribution Line Transformers									
Demand	OTAX	OTDLTD	SICDT	\$	-	\$	(1,485)	\$	-
Customer	OTAX	OTDLTC	Cust09		-		(11)		-
Total Distribution Line Transformers		OTDLTT		\$	-	\$	(1,496)	\$	-
Distribution Services									
Customer	ΟΤΑΧ	OTDSC	C02	\$	-	\$	(35)	\$	-
Distribution Meters	0 <b>7</b> 4¥	OTOMO	000	•	(100)	•	(	•	(100)
Customer	ΟΤΑΧ	OTDMC	C03	\$	(122)	\$	(57)	\$	(100)
Distribution Street & Customer Lighting									
Customer	ΟΤΑΧ	OTDSCL	C04	\$	-	\$	-	\$	-
Customer Accounts Expense	0 <b>7</b> 4¥	07045	0.05	•		•		•	
Customer	ΟΤΑΧ	OTCAE	C05	\$	-	\$	-	\$	-
Customer Service & Info.	OTAX	OTOOL	005	¢		¢		•	
Customer	ΟΤΑΧ	OTCSI	C05	\$	-	\$	-	\$	-
Sales Expense Customer	ΟΤΑΧ	OTSEC	C06	\$		\$		\$	
Cusioner	UTAX	UISEC	000	Φ	-	φ	-	φ	-
Total		OTT		\$	(100,806)	\$	(60,262)	\$	(52,630)

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Amortization of ITC									
Power Production Plant									
Production Demand - Base	OTAX	OTPPDB	PPBDA	\$	(1,804) \$	(953)	\$ (1,707) \$	(56) \$	(52)
Production Demand - Winter Peak	OTAX	OTPPDI	PPWDA		(1,634)	(621)	-	-	(42)
Production Demand - Summer Peak	OTAX	OTPPDP	PPSDA		(1,297)	(525)	-	-	(24)
Production Energy	OTAX	OTPPEB	E01		-	-	-	-	-
Production Energy - Not Used	ΟΤΑΧ	OTPPEI	E01		-	-	-	-	-
Production Energy - Not Used	OTAX	OTPPEP	E01		-		-	-	-
Total Power Production Plant		OTPPT		\$	(4,735) \$	(2,099)	\$ (1,707) \$	(56) \$	(118)
Transmission Plant									
Transmission Demand	ΟΤΑΧ	OTTRB	NCPT	\$	(794) \$	(416)	\$ (819) \$	(26) \$	(12)
Distribution Poles									
Specific	ΟΤΑΧ	OTDPS	NCPP	\$	- \$	-	\$-\$	- \$	-
Distribution Substation									
General	ΟΤΑΧ	OTDSG	NCPP	\$	(299) \$	(156)	\$ (308) \$	(10) \$	(4)
Distribution Primary & Secondary Lines									
Primary Specific	OTAX	OTDPLS	NCPP	\$	- \$		\$-\$		-
Primary Demand	OTAX	OTDPLD	NCPP		(511)	(267)	(527)	(17)	(8)
Primary Customer	OTAX	OTDPLC	Cust08		(0)	(0)	(2,300)	(4)	(24)
Secondary Demand	OTAX	OTDSLD	SICD		-	-	(121)	(4)	(2)
Secondary Customer	OTAX	OTDSLC	Cust07		-	-	(609)	(1)	(6)
Total Distribution Primary & Secondary Lines		OTDLT		\$	(511) \$	(268)	\$ (3,556) \$	(26) \$	(40)
Distribution Line Transformers									
Demand	OTAX	OTDLTD	SICDT	\$	- \$	-	\$ (138) \$		(2)
Customer	OTAX	OTDLTC	Cust09		-	-	(384)	(1)	(4)
Total Distribution Line Transformers		OTDLTT		\$	- \$	-	\$ (522) \$	(5) \$	(6)
Distribution Services									
Customer	ΟΤΑΧ	OTDSC	C02	\$	- \$	-	\$-\$	- \$	-
Distribution Meters	074	OTDMO	000	•	(1)				
Customer	ΟΤΑΧ	OTDMC	C03	\$	(1) \$	(1)	\$-\$	(3) \$	(17)
Distribution Street & Customer Lighting				•					
Customer	ΟΤΑΧ	OTDSCL	C04	\$	- \$	-	\$ (26,677) \$	- \$	-
Customer Accounts Expense				•					
Customer	ΟΤΑΧ	OTCAE	C05	\$	- \$	-	\$-\$	- \$	-
Customer Service & Info.									
Customer	ΟΤΑΧ	OTCSI	C05	\$	- \$	-	\$-\$	- \$	-
Sales Expense									
Customer	ΟΤΑΧ	OTSEC	C06	\$	- \$	-	\$-\$	- \$	-
Total		ОТТ		\$	(6,341) \$	(2,940)	\$ (33,590) \$	(126) \$	(197)

# BIP METHODOLOGY

Description	Ref	Name	Allocation Vector	Total System	Residentia Rate R	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Other Expenses								
Power Production Plant								
Production Demand - Base	OT	OTPPDB	PPBDA	\$ - \$	-	\$ -	\$ -	\$ -
Production Demand - Winter Peak	OT	OTPPDI	PPWDA	-	-	-	-	-
Production Demand - Summer Peak	OT	OTPPDP	PPSDA	-	-	-	-	-
Production Energy	OT	OTPPEB	E01	-	-	-	-	-
Production Energy - Not Used	OT	OTPPEI	E01	-	-	-	-	-
Production Energy - Not Used	ОТ	OTPPEP	E01	-	-	-	-	-
Total Power Production Plant		OTPPT		\$ - \$	-	\$ -	\$ -	\$ -
Transmission Plant								
Transmission Demand	OT	OTTRB	NCPT	\$ - \$	-	\$ -	\$ -	\$ -
Distribution Poles								
Specific	OT	OTDPS	NCPP	\$ - \$	-	\$ -	\$ -	\$ -
Distribution Substation								
General	ОТ	OTDSG	NCPP	\$ - \$	-	\$ -	\$ -	\$ -
Distribution Primary & Secondary Lines								
Primary Specific	OT	OTDPLS	NCPP	\$ - \$	-	\$ -	\$ -	\$ -
Primary Demand	OT	OTDPLD	NCPP	-	-	-	-	-
Primary Customer	OT	OTDPLC	Cust08	-	-	-	-	-
Secondary Demand	OT	OTDSLD	SICD	-	-	-	-	-
Secondary Customer	OT	OTDSLC	Cust07	-	-	-	-	-
Total Distribution Primary & Secondary Lines		OTDLT		\$ - \$	-	\$ -	\$ -	\$ -
Distribution Line Transformers								
Demand	OT	OTDLTD	SICDT	\$ - \$	-	\$ -	\$ -	\$ -
Customer	OT	OTDLTC	Cust09	-	-	-	-	-
Total Distribution Line Transformers		OTDLTT		\$ - \$	-	\$ -	\$ -	\$ -
Distribution Services								
Customer	ОТ	OTDSC	C02	\$ - \$	-	\$ -	\$ -	\$ -
Distribution Meters								
Customer	ОТ	OTDMC	C03	\$ - \$	-	\$ -	\$ -	\$ -
Distribution Street & Customer Lighting								
Customer	ОТ	OTDSCL	C04	\$ - \$	-	\$ -	\$ -	\$ -
Customer Accounts Expense								
Customer	OT	OTCAE	C05	\$ - \$	-	\$ -	\$ -	\$ -
Customer Service & Info.								
Customer	ОТ	OTCSI	C05	\$ - \$	-	\$ -	\$ -	\$ -
Sales Expense								
Customer	OT	OTSEC	C06	\$ - \$	-	\$ -	\$ -	\$ -
Total		OTT		\$ - \$	-	\$ -	\$ -	\$ -

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Other Expenses							
Power Production Plant							
Production Demand - Base	OT	OTPPDB	PPBDA	\$	- \$	- \$	-
Production Demand - Winter Peak	OT	OTPPDI	PPWDA		-	-	-
Production Demand - Summer Peak	OT	OTPPDP	PPSDA		-	-	-
Production Energy	OT	OTPPEB	E01		-	-	-
Production Energy - Not Used	OT	OTPPEI	E01		-	-	-
Production Energy - Not Used	ОТ	OTPPEP	E01		-	-	-
Total Power Production Plant		OTPPT		\$	- \$	- \$	-
Transmission Plant							
Transmission Demand	OT	OTTRB	NCPT	\$	- \$	- \$	-
Distribution Poles							
Specific	OT	OTDPS	NCPP	\$	- \$	- \$	-
Distribution Substation							
General	ОТ	OTDSG	NCPP	\$	- \$	- \$	-
Distribution Primary & Secondary Lines							
Primary Specific	OT	OTDPLS	NCPP	\$	- \$	- \$	-
Primary Demand	OT	OTDPLD	NCPP		-	-	-
Primary Customer	OT	OTDPLC	Cust08		-	-	-
Secondary Demand	OT	OTDSLD	SICD		-	-	-
Secondary Customer	OT	OTDSLC	Cust07		-	-	-
Total Distribution Primary & Secondary Lines		OTDLT		\$	- \$	- \$	-
Distribution Line Transformers							
Demand	OT	OTDLTD	SICDT	\$	- \$	- \$	-
Customer	OT	OTDLTC	Cust09		-	-	-
Total Distribution Line Transformers		OTDLTT		\$	- \$	- \$	-
Distribution Services	oT	07000	000	•	•	•	
Customer	ОТ	OTDSC	C02	\$	- \$	- \$	-
Distribution Meters	OT	OTDMC	<u> </u>	¢	¢	¢	
Customer	ОТ	OTDMC	C03	\$	- \$	- \$	-
Distribution Street & Customer Lighting							
Customer	ОТ	OTDSCL	C04	\$	- \$	- \$	-
Customer Accounts Expense							
Customer	ОТ	OTCAE	C05	\$	- \$	- \$	-
Customer Service & Info.							
Customer	OT	OTCSI	C05	\$	- \$	- \$	-
Sales Expense							
Customer	ОТ	OTSEC	C06	\$	- \$	- \$	-
Total		OTT		\$	- \$	- \$	-

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Other Expenses									
Power Production Plant									
Production Demand - Base	OT	OTPPDB	PPBDA	\$	- \$	-	\$ - \$	- \$	-
Production Demand - Winter Peak	OT	OTPPDI	PPWDA		-	-	-	-	-
Production Demand - Summer Peak	OT	OTPPDP	PPSDA		-	-	-	-	-
Production Energy	OT	OTPPEB	E01		-	-	-	-	-
Production Energy - Not Used	ОТ	OTPPEI	E01		-	-	-	-	-
Production Energy - Not Used Total Power Production Plant	ОТ	OTPPEP OTPPT	E01	\$	- - \$	-	- \$ - \$	- - \$	-
Transmission Plant									
Transmission Demand	OT	OTTRB	NCPT	\$	- \$	-	\$-\$	- \$	-
Distribution Poles									
Specific	ОТ	OTDPS	NCPP	\$	- \$	-	\$ - \$	- \$	-
Distribution Substation									
General	ОТ	OTDSG	NCPP	\$	- \$	-	\$-\$	- \$	-
Distribution Primary & Secondary Lines									
Primary Specific	OT	OTDPLS	NCPP	\$	- \$	-	\$-\$	- \$	-
Primary Demand	ОТ	OTDPLD	NCPP		-	-	-	-	-
Primary Customer	OT	OTDPLC	Cust08		-	-	-	-	-
Secondary Demand	OT	OTDSLD	SICD		-	-	-	-	-
Secondary Customer	OT	OTDSLC	Cust07		-	-		-	-
Total Distribution Primary & Secondary Lines		OTDLT		\$	- \$	-	\$-\$	- \$	-
Distribution Line Transformers									
Demand	OT	OTDLTD	SICDT	\$	- \$	-	\$-\$	- \$	-
Customer	OT	OTDLTC	Cust09		-	-	-	-	-
Total Distribution Line Transformers		OTDLTT		\$	- \$	-	\$ - \$	- \$	-
Distribution Services									
Customer	OT	OTDSC	C02	\$	- \$	-	\$-\$	- \$	-
Distribution Meters				•					
Customer	OT	OTDMC	C03	\$	- \$	-	\$-\$	- \$	-
Distribution Street & Customer Lighting Customer	от	OTDSCL	C04	\$	- \$		\$-\$	- \$	
	01	UIDSCL	004	φ	- ⊅	-	ə - ə	- ⊅	-
Customer Accounts Expense Customer	от	OTCAE	C05	\$	- \$	-	\$ - \$	- \$	-
				•	Ť		•	Ť	
Customer Service & Info. Customer	от	OTCSI	C05	\$	- \$	-	\$ - \$	- \$	
Ousionel	01	01001	000	Ψ	- <b>Φ</b>	-	φ - φ	- \$	-
Sales Expense	OT	07050	000	•	-		• •	-	
Customer	ОТ	OTSEC	C06	\$	- \$	-	\$ - \$	- \$	-
Total		OTT		\$	- \$	-	\$-\$	- \$	-

Description	Ref	Name	Allocation Vector		Total System		Residential Rate RS	General Service Rate GS	Rate PS Primary		Rate PS Secondary
Interest Expenses											
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy	INTLTD INTLTD INTLTD INTLTD	INTPDB INTPDI INTPDP INTPEB	PPBDA PPWDA PPSDA E01	\$	12,024,044 12,595,947 10,353,826	\$	4,350,035 5,382,477 4,048,864 -	\$ 1,413,606 1,761,267 1,463,159 -	\$ 168,363 136,963 120,669 -	\$	1,950,702 1,842,999 1,703,277
Production Energy - Not Used Production Energy - Not Used Total Power Production Plant	INTLTD INTLTD	INTPEI INTPEP INTPT	E01 E01	\$	- - 34,973,817	\$	- - 13,781,376	\$ - - 4,638,032	\$ - - 425,996	\$	- - 5,496,978
Transmission Plant Transmission Demand	INTLTD	INTTRB	NCPT	\$	6,623,863	\$	2,943,564	\$ 847,297	\$ 75,283	\$	873,781
Distribution Poles Specific	INTLTD	INTDPS	NCPP	\$	-	\$	-	\$ -	\$ -	\$	-
Distribution Substation General	INTLTD	INTDSG	NCPP	\$	2,306,714	\$	1,106,757	\$ 318,577	\$ 28,306	\$	328,535
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	INTLTD INTLTD INTLTD INTLTD INTLTD	INDPLS INDPLD INDPLC INDSLD INDSLC INDLT	NCPP NCPP Cust08 SICD Cust07	\$	3,944,718 6,277,512 1,084,418 1,647,942 12,954,590	\$	1,892,669 5,411,927 910,052 1,431,831 9,646,479	\$ 544,800 672,379 166,535 177,891 1,561,605	\$ 48,406 1,070 - 49,476	\$	- 561,828 41,977 - - 603,805
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	INTLTD INTLTD	INDLTD INDLTC INDLTT	SICDT Cust09	\$ \$	1,498,993 1,048,324 2,547,317	•	1,040,002 904,158 1,944,160	190,316 112,333 302,649	-	\$ \$	167,612 7,013 174,625
Distribution Services Customer	INTLTD	INDSC	C02	\$	520,617	\$	400,155	\$ 100,706	\$ -	\$	17,569
Distribution Meters Customer	INTLTD	INDMC	C03	\$	603,902	\$	422,683	\$ 124,271	\$ 4,838	\$	33,430
Distribution Street & Customer Lighting Customer	INTLTD	INDSCL	C04	\$	1,654,735	\$	-	\$ -	\$ -	\$	-
Customer Accounts Expense Customer	INTLTD	INCAE	C05	\$	-	\$	-	\$ -	\$ -	\$	-
Customer Service & Info. Customer	INTLTD	INCSI	C05	\$	-	\$	-	\$ -	\$ -	\$	-
Sales Expense Customer	INTLTD	INSEC	C06	\$	-	\$	-	\$ -	\$ -	\$	-
Total		INTT		\$	62,185,554	\$	30,245,175	\$ 7,893,137	\$ 583,898	\$	7,528,724

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Interest Expenses									
Power Production Plant									
Production Demand - Base	INTLTD	INTPDB	PPBDA	\$	1,882,969	\$	828,155	\$	1,146,584
Production Demand - Winter Peak	INTLTD	INTPDI	PPWDA		1,467,663		984,235		877,858
Production Demand - Summer Peak	INTLTD	INTPDP	PPSDA		1,288,233		870,098		745,051
Production Energy	INTLTD	INTPEB	E01		-		-		-
Production Energy - Not Used	INTLTD	INTPEI	E01		-		_		
Production Energy - Not Used	INTLTD	INTPEP	E01		_		_		_
Total Power Production Plant		INTPT	LUI	\$	4,638,864	\$	2,682,489	\$	2,769,493
Transmission Plant									
Transmission Demand	INTLTD	INTTRB	NCPT	\$	794,874	\$	471,955	\$	488,859
Distribution Poles									
Specific	INTLTD	INTDPS	NCPP	\$	-	\$	-	\$	-
Distribution Substation									
General	INTLTD	INTDSG	NCPP	\$	298,867	\$	177,451	\$	-
Distribution Primary & Secondary Lines									
Primary Specific	INTLTD	INDPLS	NCPP	\$	-	\$	-	\$	-
Primary Demand	INTLTD	INDPLD	NCPP		511,092		303,460		-
Primary Customer	INTLTD	INDPLC	Cust08		1,568		4,102		-
Secondary Demand	INTLTD	INDSLD	SICD		-		-		-
Secondary Customer	INTLTD	INDSLC	Cust07		-		-		-
Total Distribution Primary & Secondary Lines		INDLT		\$	512,661	\$	307,562	\$	-
Distribution Line Transformers									
Demand	INTLTD	INDLTD	SICDT	\$	-	\$	92,114	\$	-
Customer	INTLTD	INDLTC	Cust09		-		685		-
Total Distribution Line Transformers		INDLTT		\$	-	\$	92,799	\$	-
Distribution Services									
Customer	INTLTD	INDSC	C02	\$	-	\$	2,187	\$	-
Distribution Meters Customer	INTLTD	INDMC	C03	¢	7 575	¢	2 500	¢	0.407
Customer	INTLID	INDMC	003	\$	7,575	\$	3,522	ф	6,197
Distribution Street & Customer Lighting	INTLTD	INDSCL	C04	\$		\$		\$	
Customer	INTLID	INDSCL	C04	φ	-	Þ	-	¢	-
Customer Accounts Expense Customer	INTLTD	INCAE	C05	\$		\$		\$	
Customer	INTLID	INCAE	005	φ	-	φ	-	φ	-
Customer Service & Info.									
Customer	INTLTD	INCSI	C05	\$	-	\$	-	\$	-
Sales Expense									
Customer	INTLTD	INSEC	C06	\$	-	\$	-	\$	-
Total		INTT		\$	6,252,841	\$	3,737,965	\$	3,264,549

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1		Special Contract Customer #2			Street Lighting Rate LE		Traffic Street Lighting Rate TLE
Interest Expenses												
Power Production Plant												
Production Demand - Base	INTLTD	INTPDB INTPDI	PPBDA	\$	111,912	\$	59,123	\$ 105,908	\$	3,452	\$	3,235
Production Demand - Winter Peak Production Demand - Summer Peak	INTLTD INTLTD	INTPDI	PPWDA PPSDA		101,354 80,448		38,525 32,566	-		-		2,605 1,460
Production Energy	INTLTD	INTPEB	E01		-		52,500					1,400
Production Energy - Not Used	INTLTD	INTPEI	E01		-		-	-		-		-
Production Energy - Not Used	INTLTD	INTPEP	E01		-		-	-		-		-
Total Power Production Plant		INTPT		\$	293,715	\$	130,214	\$ 105,908	\$	3,452	\$	7,300
Transmission Plant												
Transmission Demand	INTLTD	INTTRB	NCPT	\$	49,279	\$	25,793	\$ 50,812	\$	1,625	\$	740
Distribution Poles												
Specific	INTLTD	INTDPS	NCPP	\$	-	\$	-	\$ -	\$	-	\$	-
Distribution Substation												
General	INTLTD	INTDSG	NCPP	\$	18,529	\$	9,698	\$ 19,105	\$	611	\$	278
Distribution Primary & Secondary Lines												
Primary Specific	INTLTD	INDPLS	NCPP	\$	-	\$	-	\$-	\$		\$	-
Primary Demand	INTLTD	INDPLD	NCPP		31,686		16,585	32,671		1,045		476
Primary Customer	INTLTD	INDPLC	Cust08		15		15	142,693		272		1,495
Secondary Demand	INTLTD INTLTD	INDSLD INDSLC	SICD Cust07		-		-	7,482 37,752		239 72		109 395
Secondary Customer Total Distribution Primary & Secondary Lines	INTLID	INDLT	Custor	\$	- 31,701	\$	- 16,600			1,629	\$	2,475
Distribution Line Transformers												
Demand	INTLTD	INDLTD	SICDT	\$	-	\$	-	\$ 8,550	\$	273	\$	125
Customer	INTLTD	INDLTC	Cust09		-		-	23,839		46		250
Total Distribution Line Transformers		INDLTT		\$	-	\$	-	\$ 32,390	\$	319	\$	374
Distribution Services												
Customer	INTLTD	INDSC	C02	\$	-	\$	-	\$ -	\$	-	\$	-
Distribution Meters Customer	INTLTD	INDMC	C03	\$	72	¢	72	¢	\$	192	¢	1,051
	INTLID	INDIVIC	003	φ	12	φ	12	<b>Ф</b> -	¢	192	φ	1,051
Distribution Street & Customer Lighting Customer	INTLTD	INDSCL	C04	\$		\$		\$ 1,654,735	\$		\$	
	INTELD	NDOOL	004	Ψ	-	Ψ	-	φ 1,004,700	Ψ	-	Ψ	-
Customer Accounts Expense Customer	INTLTD	INCAE	C05	\$	-	\$	-	\$ -	\$	-	\$	-
				Ŧ					Ŧ			
Customer Service & Info. Customer	INTLTD	INCSI	C05	\$	-	\$	-	\$ -	\$	-	\$	-
				Ŧ		Ŧ			Ŧ			
Sales Expense Customer	INTLTD	INSEC	C06	\$	_	\$	-	\$ -	\$	-	\$	_
odotomol		INCLO	000	Ψ	-	Ψ	-	Ψ -	Ψ	-	Ψ	-
Total		INTT		\$	393,295	\$	182,377	\$ 2,083,547	\$	7,828	\$	12,218

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector	Total System		Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Cost of Service Summary Unadjusted									
Operating Revenues									
Sales to Ultimate Consumers		REVUC	R01	\$ 965,204,065	\$	379,200,073 \$	135,825,835 \$	11,517,853 \$	151,571,212
Sales for Resale			Energy	42,971,045		15,545,980	5,051,887	601,688	6,971,340
Curtailable Service Rider		CSR	INTCRE	(4,334,522)		(1,781,297)	(608,997)	(48,659)	(669,785)
Forfeited Discounts		FORDIS	FDIS	2,623,527		2,068,557	375,660	4,867	83,927
Misc Service Revenues		REVMISC	MISCR	3,775,989		3,513,478	227,290	848	33,247
Rent From Electric Property			RBT	3,785,840		1,831,351	480,313	35,934	461,625
Other Electric Revenue			RBT	11,598,968		5,610,851	1,471,571	110,092	1,414,316
Unbilled Revenue		UNBREV	R01	 -		-	-	-	-
Total Operating Revenues		TOR		\$ 1,025,624,912	\$	405,988,994 \$	142,823,559 \$	12,222,623 \$	159,865,882
Operating Expenses									
Operation and Maintenance Expenses				\$ 685,621,903	\$	287,977,479 \$	85,712,375 \$	8,382,184 \$	98,788,346
Depreciation Expenses				138,842,527		66,956,529	17,662,359	1,319,208	17,047,245
Regulatory Credits				-		-	-	-	-
Accretion Expense				-		-	-	-	-
Depreciation for Asset Retirement Costs			DET	-		-	-	-	-
Amortization Expense			DET	-		-	-	-	-
Property and Other Taxes			NPT	32,529,209		15,821,225	4,128,893	305,437	3,938,269
Amortization of Investment Tax Credit				(1,002,535)		(487,603)	(127,251)	(9,413)	(121,376)
Other Expenses				-		-	-	-	-
State and Federal Income Taxes			TAXINC	 48,157,086		2,454,366	12,349,410	735,616	14,648,899
Total Operating Expenses		TOE		\$ 904,148,189	\$	372,721,995 \$	119,725,786 \$	10,733,031 \$	134,301,383
Utility Operating Income		ТОМ		\$ 121,476,723	\$	33,266,999 \$	23,097,773 \$	1,489,591 \$	25,564,498
Net Cost Rate Base				\$ 2,380,933,927	\$1	1,151,746,077 \$	302,071,165 \$	22,598,765 \$	290,318,355

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector	Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Cost of Service Summary Unadjusted						
Operating Revenues						
Sales to Ultimate Consumers		REVUC	R01	\$ 116,918,595 \$	77,629,237 \$	64,284,636
Sales for Resale			Energy	6,729,278	2,959,628	4,097,615
Curtailable Service Rider		CSR	INTCRE	(520,506)	(350,228)	(306,519)
Forfeited Discounts		FORDIS	FDIS	29,247	50,540	10,395
Misc Service Revenues		REVMISC	MISCR	100	262	12
Rent From Electric Property			RBT	385,105	228,213	202,316
Other Electric Revenue			RBT	1,179,876	699,194	619,850
Unbilled Revenue		UNBREV	R01	 -	-	-
Total Operating Revenues		TOR		\$ 124,721,696 \$	81,216,847 \$	68,908,304
Operating Expenses						
Operation and Maintenance Expenses				\$ 91,640,486 \$	43,317,846 \$	53,872,936
Depreciation Expenses				14,147,537	8,439,639	7,431,299
Regulatory Credits				-	-	-
Accretion Expense				-	-	-
Depreciation for Asset Retirement Costs			DET	-	-	-
Amortization Expense			DET	-	-	-
Property and Other Taxes			NPT	3,270,856	1,955,326	1,707,683
Amortization of Investment Tax Credit				(100,806)	(60,262)	(52,630)
Other Expenses				-	-	-
State and Federal Income Taxes			TAXINC	 4,262,624	10,678,692	1,203,148
Total Operating Expenses		TOE		\$ 113,220,697 \$	64,331,240 \$	64,162,436
Utility Operating Income		ТОМ		\$ 11,500,999 \$	16,885,607 \$	4,745,869
Net Cost Rate Base				\$ 242,194,584 \$	143,524,479 \$	127,237,257

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector	Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Cost of Service Summary Unadjusted								
Operating Revenues								
Sales to Ultimate Consumers		REVUC	R01	\$ 6,341,748 \$	3,292,762			270,128
Sales for Resale			Energy	399,948	211,291	378,490	12,337	11,561
Curtailable Service Rider		CSR	INTCRE	(34,337)	(13,427)	-	-	(768)
Forfeited Discounts		FORDIS	FDIS	-	-	334	-	-
Misc Service Revenues		REVMISC	MISCR	-	-	751	-	-
Rent From Electric Property			RBT	24,174	11,262	124,302	491	754
Other Electric Revenue			RBT	74,065	34,504	380,834	1,504	2,310
Unbilled Revenue		UNBREV	R01	 -	-	-	-	-
Total Operating Revenues		TOR		\$ 6,805,598 \$	3,536,392	\$ 19,025,879 \$	225,151 \$	283,986
Operating Expenses								
Operation and Maintenance Expenses				\$ 5,491,759 \$	2,831,749	\$ 7,250,096 \$	163,488 \$	193,159
Depreciation Expenses				890,538	410,589	4,493,023	16,979	27,582
Regulatory Credits				-	-	-	-	-
Accretion Expense				-	-	-	-	-
Depreciation for Asset Retirement Costs			DET	-	-	-	-	-
Amortization Expense			DET	-	-	-	-	-
Property and Other Taxes			NPT	205,732	95,401	1,089,902	4,095	6,391
Amortization of Investment Tax Credit				(6,341)	(2,940)	(33,590)	(126)	(197)
Other Expenses				-	-	-	-	-
State and Federal Income Taxes			TAXINC	 (75,917)	8,613	1,856,801	14,740	20,093
Total Operating Expenses		TOE		\$ 6,505,772 \$	3,343,411	\$ 14,656,232 \$	199,176 \$	247,029
Utility Operating Income		том		\$ 299,826 \$	192,981	\$ 4,369,647 \$	25,976 \$	36,957
Net Cost Rate Base				\$ 15,203,336 \$	7,082,689	\$ 78,174,245 \$	308,733 \$	474,243

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector	Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Taxable Income Unadjusted								
Total Operating Revenue				\$ 1,025,624,912	\$ 405,988,994	\$ 142,823,559	\$ 12,222,623	\$ 159,865,882
Operating Expenses				\$ 855,991,103	\$ 370,267,630	\$ 107,376,376	\$ 9,997,415	\$ 119,652,484
Interest Expense		INTEXP		\$ 62,185,554	\$ 30,245,175	\$ 7,893,137	\$ 583,898	\$ 7,528,724
Taxable Income		TAXINC		\$ 107,448,255	\$ 5,476,189	\$ 27,554,046	\$ 1,641,309	\$ 32,684,674

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector	Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Taxable Income Unadjusted						
Total Operating Revenue				\$ 124,721,696	\$ 81,216,847	\$ 68,908,304
Operating Expenses				\$ 108,958,073	\$ 53,652,548	\$ 62,959,288
Interest Expense		INTEXP		\$ 6,252,841	\$ 3,737,965	\$ 3,264,549
Taxable Income		TAXINC		\$ 9,510,782	\$ 23,826,334	\$ 2,684,468

## BIP METHODOLOGY

Description	Ref	Alloca Name Vector	Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Taxable Income Unadjusted							
Total Operating Revenue			\$ 6,805,598 \$	3,536,392	\$ 19,025,879	\$ 225,151 \$	283,986
Operating Expenses			\$ 6,581,689 \$	3,334,798	\$ 12,799,431	\$ 184,435 \$	226,935
Interest Expense		INTEXP	\$ 393,295 \$	182,377	\$ 2,083,547	\$ 7,828 \$	12,218
Taxable Income		TAXINC	\$ (169,386) \$	19,217	\$ 4,142,901	\$ 32,888 \$	44,832

## BIP METHODOLOGY

Description R	ef Nan	Allocation ne Vector	Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Cost of Service Summary Pro-Forma							
Operating Revenues							
Total Operating Revenue Actual			\$ 1,025,624,912 \$	405,988,994	\$ 142,823,559	\$ 12,222,623	159,865,882
Pro-Forma Adjustments: Remove Off-System ECR revenues Customer Account Changes		ECRREV	(8,423,260)	(3,297,837)	(1,848,542)	(80,619)	(1,002,890)
Total Pro-Forma Operating Revenue			\$ 1,017,201,652 \$	402,691,158	\$ 140,975,017	\$ 12,142,004	158,862,992
Operating Expenses							
Operation and Maintenance Expenses Depreciation and Amortization Expenses Property and Other Taxes Amortization of Investment Tax Credit State and Federal Income Taxes Specific Assignment of Interruptible Credit Allocation of Interruptible Credits		NPT TAXINC INTCRE	\$ 685,621,903 \$ 138,842,527 32,529,209 (1,002,535) 48,157,086 - -	287,977,479 66,956,529 15,821,225 (487,603) 2,454,366 -	\$ 85,712,375 17,662,359 4,128,893 (127,251) 12,349,410 -	\$ 8,382,184 5 1,319,208 305,437 (9,413) 735,616 - -	98,788,346 17,047,245 3,938,269 (121,376) 14,648,899 -
Adjustments to Operating Expenses: Eliminate advertising expenses Federal & State Income Tax Adjustment Federal & State Income Tax Interest Adjustm	ent	REVUC TAXINC TAXINC	 (984,863) (3,074,551) -	(386,924) (156,697)	-	(11,752) (46,965) -	(154,658) (935,247)
Total Expense Adjustments			 (4,059,414)	(543,621)	(927,031)	(58,717)	(1,089,906)
Total Operating Expenses	TOE	1	\$ 900,088,775 \$	372,178,375	\$ 118,798,756	\$ 10,674,314 \$	133,211,478
Net Operating Income Pro-Forma			\$ 117,112,877 \$	30,512,783	\$ 22,176,261	\$ 1,467,690 \$	25,651,514
Cost of Service Summary Pro-Forma							
Net Operating Income Pro-Forma			\$ 117,112,877 \$	30,512,783	\$ 22,176,261	\$ 1,467,690 \$	25,651,514
Net Cost Rate Base ECR Plan Eliminations Adjustment to Reflect Depreciation Reserve Cash Working Capital Adjusted Net Cost Rate Base		PLPPT DET OMLF	\$ 2,380,933,927 \$ - - 2,380,933,927 \$	-			
Rate of Return			4.92%	2.65%	7.34%	6.49%	8.84%

## BIP METHODOLOGY

Description Re	f Name	Allocation Vector		Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Cost of Service Summary Pro-Forma						
Operating Revenues						
Total Operating Revenue Actual			\$	124,721,696 \$	81,216,847 \$	68,908,304
Pro-Forma Adjustments: Remove Off-System ECR revenues Customer Account Changes		ECRREV		(833,194)	(537,754) -	(461,699)
Total Pro-Forma Operating Revenue			\$	123,888,502 \$	80,679,094 \$	68,446,605
Operating Expenses						
Operation and Maintenance Expenses Depreciation and Amortization Expenses Property and Other Taxes Amortization of Investment Tax Credit State and Federal Income Taxes Specific Assignment of Interruptible Credit Allocation of Interruptible Credits		NPT TAXINC INTCRE	\$	91,640,486 \$ 14,147,537 3,270,856 (100,806) 4,262,624 - -	43,317,846 \$ 8,439,639 1,955,326 (60,262) 10,678,692 - -	53,872,936 7,431,299 1,707,683 (52,630) 1,203,148 - -
Adjustments to Operating Expenses: Eliminate advertising expenses Federal & State Income Tax Adjustment Federal & State Income Tax Interest Adjustment Total Expense Adjustments	nt	REVUC TAXINC TAXINC		(119,300) (272,144) - (391,444)	(79,210) (681,773) - (760,983)	(65,594) (76,814) - (142,408)
Total Operating Expenses	TOE		\$	(391,444)	63,570,257 \$	(142,408)
Net Operating Income Pro-Forma	TOL		\$	11,059,249 \$	17,108,836 \$	4,426,578
Cost of Service Summary Pro-Forma						
Net Operating Income Pro-Forma			\$	11,059,249 \$	17,108,836 \$	4,426,578
Net Cost Rate Base ECR Plan Eliminations Adjustment to Reflect Depreciation Reserve Cash Working Capital Adjusted Net Cost Rate Base		PLPPT DET OMLF	\$ \$	242,194,584 \$ - - 242,194,584 \$	143,524,479 \$ - - 143,524,479 \$	127,237,257 - - 127,237,257
Rate of Return				4.57%	11.92%	3.48%

## BIP METHODOLOGY

Description Ref	Name	Allocation Vector	Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Cost of Service Summary Pro-Forma							
Operating Revenues							
Total Operating Revenue Actual			\$ 6,805,598 \$	3,536,392	\$ 19,025,879 \$	225,151 \$	283,986
Pro-Forma Adjustments: Remove Off-System ECR revenues Customer Account Changes		ECRREV	(42,712)	(23,117)	(290,133)	(2,399)	(2,365)
Total Pro-Forma Operating Revenue			\$ 6,762,886 \$	3,513,275	\$ 18,735,746 \$	222,752 \$	281,621
Operating Expenses							
Operation and Maintenance Expenses Depreciation and Amortization Expenses Property and Other Taxes Amortization of Investment Tax Credit State and Federal Income Taxes Specific Assignment of Interruptible Credit		NPT TAXINC	\$ 5,491,759 \$ 890,538 205,732 (6,341) (75,917)	2,831,749 410,589 95,401 (2,940) 8,613	\$ 7,250,096 \$ 4,493,023 1,089,902 (33,590) 1,856,801	163,488 \$ 16,979 4,095 (126) 14,740	193,159 27,582 6,391 (197) 20,093
Allocation of Interruptible Credits		INTCRE	-	-	-	-	-
Adjustments to Operating Expenses: Eliminate advertising expenses Federal & State Income Tax Adjustment Federal & State Income Tax Interest Adjustmer Total Expense Adjustments	t	REVUC TAXINC TAXINC	 (6,471) 4,847 - (1,624)	(3,360) (550) - (3,910)	(18,511) (118,546) - (137,057)	(215) (941) - (1,156)	(276) (1,283) - (1,558)
. ,	TOE		\$ 6,504,148 \$	3,339,501		198,019 \$	245.470
Total Operating Expenses	IUE						-, -
Net Operating Income Pro-Forma			\$ 258,738 \$	173,774	\$ 4,216,571 \$	24,733 \$	36,151
Cost of Service Summary Pro-Forma							
Net Operating Income Pro-Forma			\$ 258,738 \$	173,774	\$ 4,216,571 \$	24,733 \$	36,151
Net Cost Rate Base ECR Plan Eliminations Adjustment to Reflect Depreciation Reserve		PLPPT DET	\$ 15,203,336 \$ - -	7,082,689 - -	\$ 78,174,245 \$ - -	308,733 \$ - -	474,243 - -
Cash Working Capital Adjusted Net Cost Rate Base		OMLF	\$ - 15,203,336 \$	7,082,689	- \$ 78,174,245 \$	308,733 \$	474,243
Rate of Return			1.70%	2.45%	5.39%	8.01%	7.62%

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector	Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Taxable Income Pro-Forma								
Total Operating Revenue				\$ 1,017,201,652	\$ 402,691,158	\$ 140,975,017	\$ 12,142,004	\$ 158,862,992
Operating Expenses				\$ 851,931,689	\$ 369,724,009	\$ 106,449,346	\$ 9,938,698	\$ 118,562,578
Interest Expense		INTEXP		\$ 62,185,554	\$ 30,245,175	\$ 7,893,137	\$ 583,898	\$ 7,528,724
Interest Syncronization Adjustment			INTEXP	\$ 7,354,012	\$ 3,576,769	\$ 933,436	\$ 69,051	\$ 890,341
Taxable Income		TXINCPF		\$ 95,730,397	\$ (854,796)	\$ 25,699,099	\$ 1,550,357	\$ 31,881,349

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector	Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Taxable Income Pro-Forma						
Total Operating Revenue				\$ 123,888,502	\$ 80,679,094	\$ 68,446,605
Operating Expenses				\$ 108,566,629	\$ 52,891,565	\$ 62,816,880
Interest Expense		INTEXP		\$ 6,252,841	\$ 3,737,965	\$ 3,264,549
Interest Syncronization Adjustment			INTEXP	\$ 739,456	\$ 442,049	\$ 386,063
Taxable Income		TXINCPF		\$ 8,329,576	\$ 23,607,515	\$ 1,979,114

## BIP METHODOLOGY

Description Taxable Income Pro-Forma	Ref	Name	Allocation Vector		Special Contract Customer #1		Special Contract Customer #2		treet Lighting RLS, LS, DSK		Street Lighting Rate LE		Traffic Street Lighting Rate TLE
Total Operating Revenue				\$	6,762,886	¢	3,513,275	¢	18,735,746	¢	222,752	¢	281,621
				Ψ	, ,								-
Operating Expenses				\$	6,580,065	\$	3,330,889	\$	12,662,374	\$	183,279	\$	225,377
Interest Expense		INTEXP		\$	393,295	\$	182,377	\$	2,083,547	\$	7,828	\$	12,218
Interest Syncronization Adjustment			INTEXP	\$	46,511	\$	21,568	\$	246,399	\$	926	\$	1,445
Taxable Income		TXINCPF		\$	(256,985)	\$	(21,558)	\$	3,743,426	\$	30,720	\$	42,581

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Cost of Service Summary Pro-Forma (Adjus	ted for Pr	oposed Incr	ease)						
Operating Revenues									
Total Operating Revenue Actual				\$	1,017,201,652	\$ 402,691,158	\$ 140,975,017	\$ 12,142,004	\$ 158,862,992
Pro-Forma Adjustments: Proposed Increase Proposed Reduction in CSR Credit Proposed Changes to Miscellaneous Charges			INTCRE MISCR	\$ \$ \$	91,719,847 1,920,271 (22,391)	\$ 42,131,735 789,146 (20,834)	\$ 12,180,705 269,797 (1,348)	\$ 1,034,517 21,557 (5)	\$ 11,631,167 296,727 (197)
Total Pro-Forma Operating Revenue				\$	1,110,819,379	\$ 445,591,205	\$ 153,424,171	\$ 13,198,073	\$ 170,790,688
Operating Expenses			9	.20%					
Total Operating Expenses				\$	904,148,189	\$ 372,721,995	\$ 119,725,786	\$ 10,733,031	\$ 134,301,383
Total Pro-Forma Adjustments Reflect Increase in Uncollectibles Expense Reflect Increase in PSC Fees			Cust01 R01		(4,059,414) 211,583 181,718	\$ (543,621) 154,044 71,392	(927,031) 19,139 25,572	(58,717) 30 2,168	\$ (1,089,906) 1,195 28,536
Incremental Income Taxes					36,172,979	16,576,161	4,810,232	408,055	4,608,746
Total Pro-forma Operating Expenses				\$	936,655,055	\$ 388,979,972	\$ 123,653,698	\$ 11,084,568	\$ 137,849,954
Net Operating Income Pro-Forma				\$	174,164,325	56,611,233	29,770,473	2,113,505	32,940,734
Net Cost Rate Base				\$	,,,.	\$ 1,151,746,077	\$ 302,071,165	22,598,765	290,318,355
Rate of Return					7.31%	4.92%	9.86%	9.35%	11.35%

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Cost of Service Summary Pro-Forma (Adjus	ted for P	roposed Inci	ease)						
Operating Revenues									
Total Operating Revenue Actual				\$	123,888,502	\$	80,679,094	\$	68,446,605
Pro-Forma Adjustments: Proposed Increase Proposed Reduction in CSR Credit			INTCRE	\$ \$	10,385,231 230,593	\$	5,698,088 155,157	\$	5,824,465 135,793
Proposed Changes to Miscellaneous Charges			MISCR	\$ \$	(1) 134.504.326		(2) 86.532.337		(0) 74.406.863
Total Pro-Forma Operating Revenue Operating Expenses			9.	Ψ 20%	104,004,020	Ψ	00,002,007	Ψ	14,400,000
Total Operating Expenses				\$	113,220,697	\$	64,331,240	\$	64,162,436
Total Pro-Forma Adjustments Reflect Increase in Uncollectibles Expense Reflect Increase in PSC Fees			Cust01 R01	\$ \$	(391,444) 45 22,012	\$ \$	(760,983) 117 14,615		(142,408) 5 12,103
Incremental Income Taxes					4,101,851		2,261,636		2,302,986
Total Pro-forma Operating Expenses				\$	116,953,161	\$	65,846,626	\$	66,335,122
Net Operating Income Pro-Forma				\$	17,551,165	\$	20,685,712	\$	8,071,742
Net Cost Rate Base				\$	242,194,584	\$	143,524,479	\$	127,237,257
Rate of Return					7.25%		14.41%		6.34%

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Cost of Service Summary Pro-Forma (Adjus					oustomer #1		Kate KEO, EO, DOK	Nate LL	Kate FEE
Operating Revenues									
Total Operating Revenue Actual				\$	6,762,886 \$	3,513,275	\$ 18,735,746 \$	222,752 \$	281,621
Pro-Forma Adjustments:				<u>_</u>		000 400	A		00 500
Proposed Increase Proposed Reduction in CSR Credit			INTCRE	\$ \$	604,641 \$ 15,212 \$	288,490 5,948		- \$ - \$	20,580 340
Proposed Reduction in CSR Credit Proposed Changes to Miscellaneous Charges			MISCR	ъ \$	- \$		\$ - 5 \$ (4) \$	- 5 - \$	-
Total Pro-Forma Operating Revenue				\$	7,382,738 \$	3,807,714	\$ 20,655,970 \$	222,752 \$	302,541
			:	9.20%					
Operating Expenses									
Total Operating Expenses				\$	6,505,772 \$	3,343,411	\$ 14,656,232 \$	199,176 \$	247,029
Total Pro-Forma Adjustments					(1,624)	(3,910)	(137,057)	(1,156)	(1,558)
Reflect Increase in Uncollectibles Expense			Cust01	\$	0 \$	(0,0.10)		70 \$	383
Reflect Increase in PSC Fees			R01	\$	1,194 \$	620	\$ 3,415 \$	40 \$	51
Incremental Income Taxes					239,505	113,768	741,956	-	8,083
Total Pro-forma Operating Expenses				\$	6,744,847 \$	3,453,890	\$ 15,301,101 \$	198,129 \$	253,987
Net Operating Income Pro-Forma				\$	637,891 \$	353,824	\$ 5,354,869 \$	24,624 \$	48,554
Net Cost Rate Base				\$	15,203,336 \$	7,082,689	\$ 78,174,245 \$	308,733 \$	474,243
Rate of Return					4.20%	5.00%	6.85%	7.98%	10.24%

## BIP METHODOLOGY

Description Ref	Name	Allocation Vector	Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Allocation Factors							
Energy Allocation Factors							
Energy Usage by Class	E01	Energy	1.000000	0.361778	0.117565	0.014002	0.162233
Customer Allocation Factors							
Primary Distribution Plant Average Number of Custom		Cust08	1.000000	0.86211	0.10711	0.00017	0.00669
Customer Services Weighted cost of Services	C02		1.000000	0.76862	0.19344	-	0.03375
Meter Costs Weighted Cost of Meters	C03		1.000000	0.69992	0.20578	0.00801	0.05536
Lighting Systems Lighting Customers	C04	Cust04	1.000000				
Meter Reading and Billing Weighted Cost	C05	Cust05	1.000000	0.74512	0.18515	0.00074	0.02890
Marketing/Economic Development	C06	Cust06	1.000000	0.86209	0.10711	0.00017	0.00669
Revenue per Billing Determinants	R01		965,204,065	379,200,073	135,825,835	11,517,853	151,571,212
Energy			11,646,473,901	4,180,088,831	1,358,379,221	165,297,553	1,874,492,273
Energy (Loss Adjusted)	Energy		12,308,166,695	4,452,824,321	1,447,008,491	172,341,135	1,996,796,030
O&M Customer Allocators							
Customers (Monthly Bills)			6,001,330	4,369,310	542,844	864	33,890
Average Customers (Bills/12)			500,111	364,109	45,237	72	2,824
Average Customers (Lighting = Lights)			500,111	364,109	45,237	72	2,824
Weighted Average Customers (Lighting = 9 Lights per C	ustor Cust05		488,656	364,109	90,474	360	14,121
Street Lighting	Cust04		86,402				
Average Customers	Cust01		500,111	364,109	45,237	72	2,824
Average Customers (Lighting = 9 Lights per Cust)	Cust06		422,358	364,109	45,237	72	2,824
Average Secondary Customers	Cust07		419,065	364,109	45,237	-	-
Average Primary Customers	Cust08		422,345	364,109	45,237	72	2,824
Average Transformer Customers	Cust09		422,165	364,109	45,237		2,824
Plant Customer Allocators							
Average Customers			500,111	364,109	45,237	72	2,824
Average Customers (Lighting = 10 Lights)			422,349	364,109	45,237	72	2,824
Weighted Average Customers			487,696	364,109	90,474	360	14,121
Street Lighting (plant in service balance)			99,670,958				
Average Customers			500,111	364,109	45,237	72	2,824
Average Customers (Lighting = 10 Lights per Cust)			421,398	364,109	45,237	72	2,824
Average Secondary Customers			421,205	364,109	45,237	-	2,824
Average Primary Customers			421,385	364,109	45,237	72	2,824
Average Transformer Customers			422,165	364,109	45,237	-	2,824
Demand Allocators							
Max Class Non-Coincident Peak Demands (Transmissio			3,508,847	1,559,289	448,837	39,880	462,867
Max Class Non-Coincident Peak Demands (Primary)	NCPP		3,249,885	1,559,289	448,837	39,880	462,867
Sum of the Individual Customer Demands (Transformers			4,718,835	3,273,932	599,115	-	527,645
Sum of the Individual Customer Demands (Secondary)	SICD		3,901,216	3,273,932	599,115	-	-
Summer Peak Period Demand Allocator	SCP		2,733,721	1,069,022	386,318	31,860	449,716
Winter Peak Period Demand Allocator	WCP		1,868,157	798,297	261,221	20,314	273,343
Base Demand Allocator	BDEM		1,405,042	508,313	165,184	19,674	227,945

## BIP METHODOLOGY

Description Ref	Name	Allocation Vector	Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Allocation Factors					
Energy Allocation Factors					
Energy Usage by Class	E01	Energy	0.156600	0.068875	0.095358
Customer Allocation Factors					
Primary Distribution Plant Average Number of Custom		Cust08	0.00025	0.00065	-
Customer Services Weighted cost of Services Meter Costs Weighted Cost of Meters	C02 C03		- 0.01254	0.00420 0.00583	- 0.01026
Lighting Systems Lighting Customers	C03	Cust04	0.01234	0.00565	0.01020
Meter Reading and Billing Weighted Cost	C05	Cust05	0.00540	0.01412	0.00067
Marketing/Economic Development	C06	Cust06	0.00025	0.00065	0.00003
Revenue per Billing Determinants	R01		116,918,595	77,629,237	64,284,636
Energy			1,848,687,110	795,801,135	1,147,609,709
Energy (Loss Adjusted)	Energy		1,927,462,502	847,724,245	1,173,677,077
O&M Customer Allocators					
Customers (Monthly Bills)			1,266	3,312	156
Average Customers (Bills/12)			106 106	276 276	13
Average Customers (Lighting = Lights) Weighted Average Customers (Lighting = 9 Lights per C	Custor Cust05		2.638	6.900	13 325
Street Lighting	Cust04		2,030	0,900	-
Average Customers	Cust01		106	276	13
Average Customers (Lighting = 9 Lights per Cust)	Cust06		106	276	13
Average Secondary Customers	Cust07		-	-	-
Average Primary Customers Average Transformer Customers	Cust08 Cust09		106	276 276	-
Average transionner Customers	Cusios			270	
Plant Customer Allocators			106	276	13
Average Customers Average Customers (Lighting = 10 Lights)			106	276	13
Weighted Average Customers			2,638	6,900	325
Street Lighting (plant in service balance)			-	-	-
Average Customers			106	276	13
Average Customers (Lighting = 10 Lights per Cust)			106	276	13
Average Secondary Customers Average Primary Customers			- 106	276 276	-
Average Transformer Customers			-	276	-
Demand Allocators					
Max Class Non-Coincident Peak Demands (Transmission	on) NCPT		421,067	250,008	258,962
Max Class Non-Coincident Peak Demands (Primary)	NCPP		421,067	250,008	-
Sum of the Individual Customer Demands (Transformer			-	289,975	-
Sum of the Individual Customer Demands (Secondary) Summer Peak Period Demand Allocator	SICD SCP		- 340,132	- 229.732	- 196.716
Winter Peak Period Demand Allocator	WCP		217,675	229,732	130,199
Base Demand Allocator	BDEM		220,030	96,772	133,981

## BIP METHODOLOGY

Description Ref	Name	Allocation Vector	Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Allocation Factors							
Energy Allocation Factors							
Energy Usage by Class	E01	Energy	0.009307	0.004917	0.008808	0.000287	0.000269
Customer Allocation Factors							
Primary Distribution Plant Average Number of Customer: Customer Services Weighted cost of Services	s C01 C02	Cust08	0.00000	0.00000	0.02273	0.00004	0.00024
Meter Costs Weighted Cost of Meters	C02		0.00012	0.00012	-	0.00032	0.00174
Lighting Systems Lighting Customers	C04	Cust04	-	-	1.00000	-	-
Meter Reading and Billing Weighted Cost	C05	Cust05	0.00001	0.00001	0.01965	0.00004	0.00021
Marketing/Economic Development	C06	Cust06	0.00000	0.00000	0.02273	0.00004	0.00024
Revenue per Billing Determinants	R01		6,341,748	3,292,762	18,141,167	210,819	270,128
Energy			109,874,900	58,046,500	101,770,582	3,317,374	3,108,713
Energy (Loss Adjusted)	Energy		114,556,838	60,519,950	108,410,740	3,533,821	3,311,545
O&M Customer Allocators							
Customers (Monthly Bills)			12	12	1,036,824	1,980	10,860
Average Customers (Bills/12)			1	1	86,402	165	905
Average Customers (Lighting = Lights)			1	1	86,402	165	905
Weighted Average Customers (Lighting = 9 Lights per Cus			5	5	9,600	18	101
Street Lighting	Cust04 Cust01		- 1	-	86,402	105	905
Average Customers Average Customers (Lighting = 9 Lights per Cust)	Cust01 Cust06		1	1	86,402 9,600	165 18	905 101
Average Secondary Customers	Cust00 Cust07		-	-	9,600	18	101
Average Primary Customers	Cust08		1	1	9,600	18	101
Average Transformer Customers	Cust09				9,600	18	101
Plant Customer Allocators							
Average Customers			1	1	86,402	165	905
Average Customers (Lighting = 10 Lights)			1	1	8,640	165	905
Weighted Average Customers			5	5	8,640	18	101
Street Lighting (plant in service balance)			-	-	99,670,958	-	-
Average Customers			1	1	86,402	165	905
Average Customers (Lighting = 10 Lights per Cust)			1	1	8,640	18 18	101 101
Average Secondary Customers Average Primary Customers			- 1	- 1	8,640 8,640	18	101
Average Transformer Customers			-	-	9,600	18	101
Demand Allocators							
Max Class Non-Coincident Peak Demands (Transmission)	NCPT		26,105	13,663	26,916	861	392
Max Class Non-Coincident Peak Demands (Primary)	NCPP		26,105	13,663	26,916	861	392
Sum of the Individual Customer Demands (Transformers)	SICDT		-	-	26,916	861	392
Sum of the Individual Customer Demands (Secondary)	SICD		-	-	26,916	861	392
Summer Peak Period Demand Allocator	SCP		21,241	8,598	-	-	385
Winter Peak Period Demand Allocator	WCP		15,032	5,714	-	-	386
Base Demand Allocator	BDEM		13,077	6,909	12,376	403	378

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Allocation Factors (Continued)						12,828,260			
Production Allocation									
Production Residual Winter Demand Allocator		PPWDRA			1,868,157	798,297	261,221	20,314	273,343
Production Winter Demand Costs				\$	34,803,614				
Customer Specific Assignment				\$	-		-	-	-
Production Winter Demand Residual Production Winter Demand Total		PPWDT	PPWDRA	\$	34,803,614	14,872,217	4,866,523	/	\$ 5,092,353
			DDWDT	\$	34,803,614	\$ 14,872,217	\$ 4,866,523	\$ 378,441	\$ 5,092,353
Production Winter Demand Allocator		PPWDA	PPWDT		1.000000	0.42732	0.13983	0.01087	0.14632
Production Residual Summer Demand Allocator		PPSDRA			2,733,721	1,069,022	386,318	31,860	449,716
Production Summer Demand Costs				\$	28,608,453				
Customer Specific Assignment				\$	-		-	-	-
Production Summer Demand Residual			PPSDRA	\$	28,608,453	\$ 11,187,336	\$ 4,042,826	\$ 333,419	\$ 4,706,293
Production Summer Demand Total		PPSDT		\$	28,608,453	\$ 11,187,336	\$ 4,042,826	\$ 333,419	\$ 4,706,293
Production Summer Demand Allocator		PPSDA	PPSDT		1.000000	0.39105	0.14132	0.01165	0.16451
Production Residual Base Demand Allocator		PPBDRA			1,405,042	508,313	165,184	19,674	227,945
Production Base Demand Costs				\$	33,223,400	,	,	,	,• • •
Customer Specific Assignment				\$	-		-	-	-
Production Base Demand Residual			PPBDRA	\$	33,223,400	\$ 12,019,496	\$ 3,905,906	\$ 465,200	\$ 5,389,946
Production Base Demand Total		PPBDT		\$		\$ 12,019,496	3,905,906	465,200	5,389,946
Production Base Demand Allocator		PPBDA	PPBDT	•	1.000000	0.36178	0.11756	0.01400	0.16223

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Allocation Factors (Continued)									
Production Allocation									
Production Residual Winter Demand Allocator Production Winter Demand Costs Customer Specific Assignment		PPWDRA			217,675		145,976		130,199
Production Winter Demand Residual			PPWDRA	\$	4,055,270	\$	2,719,521	\$	2,425,592
Production Winter Demand Total		PPWDT		Ψ \$	4.055.270	\$ \$	2,719,521		2,425,592
Production Winter Demand Allocator		PPWDA	PPWDT	Ŷ	0.11652	Ŷ	0.07814	Ŷ	0.06969
Production Residual Summer Demand Allocator Production Summer Demand Costs Customer Specific Assignment		PPSDRA			340,132		229,732		196,716
Production Summer Demand Residual			PPSDRA	\$	- 3,559,491	\$	2,404,150	¢	2,058,637
Production Summer Demand Total		PPSDT	TT ODICA	Ψ \$	3,559,491	Ψ \$	2,404,150	\$	2,058,637
Production Summer Demand Allocator		PPSDA	PPSDT	Ψ	0.12442	Ψ	0.08404	Ψ	0.07196
Production Residual Base Demand Allocator Production Base Demand Costs Customer Specific Assignment		PPBDRA			220,030		96,772		133,981
Production Base Demand Residual			PPBDRA	\$	- 5,202,794	\$	2.288.260	\$	- 3,168,103
Production Base Demand Total		PPBDT	11 DOIX	\$ \$	5.202.794	φ \$	2,288,260	\$	3,168,103
Production Base Demand Allocator		PPBDA	PPBDT	Ψ	0.15660	Ψ	0.06887	Ψ	0.09536
readenen Base Bernand / moodtor					0.10000		0.00001		0.00000

## BIP METHODOLOGY

Description	Ref Name	Allocation Vector	Special Contract Customer #1	Special Contract Customer #2	Street Lighting ate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Allocation Factors (Continued)							
Production Allocation Production Residual Winter Demand Allocator Production Winter Demand Costs Customer Specific Assignment	PPWDRA		15,032	5,714	-	-	386
Production Winter Demand Residual		PPWDRA	\$ 280,050	\$ 106,448	\$ -	\$ -	\$ 7.198
Production Winter Demand Total	PPWDT		\$ 280,050	106,448	-	\$ -	\$ 7,198
Production Winter Demand Allocator	PPWDA	PPWDT	0.00805	0.00306	-	-	0.00021
Production Residual Summer Demand Allocator Production Summer Demand Costs Customer Specific Assignment	PPSDRA		21,241	8,598	-		385
Production Summer Demand Residual		PPSDRA	\$ 222,285	\$ 89,982	\$ -	\$ -	\$ 4.034
Production Summer Demand Total	PPSDT		\$ 222,285	\$ 89,982	\$ -	\$ -	\$ 4,034
Production Summer Demand Allocator	PPSDA	PPSDT	0.00777	0.00315	-	-	0.00014
Production Residual Base Demand Allocator Production Base Demand Costs Customer Specific Assignment	PPBDRA		13,077	6,909	12,376	403	378
Production Base Demand Residual		PPBDRA	\$ 309,223	\$ 163,361	\$ 292,633	\$ 9,539	\$ 8,939
Production Base Demand Total	PPBDT		\$	\$ 163,361	292,633	9,539	8,939
Production Base Demand Allocator	PPBDA	PPBDT	0.00931	0.00492	0.00881	0.00029	0.00027

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Allocation Factors (Continued)									
Revenue Adjustment Allocators									
Forfeited Discounts Misc Service Revenue Allocator Revenue and Expense Adjust before IT Full Year FAC Base Rate Change Temperature Normalization - Revenue Temperature Normalization - Revenue Temperature Normalization - Expenses VDT Revenue Merger Surcredit Revenue ECR Revenue ECR Revenue ECR Revenue SM revenue Year Customers		FDIS MISCR ITADJ REV01 TREV01 TEXP01 VDTREV MSCREV ECRREV ECRREV ECRREV DSMREV YREND		\$	2,689,127 (1,630,992) (7,438,396) \$ - - - 163,886,444 - - -	2,120,280 (1,517,603) (2,910,913) \$ 64,164,081	385,054 (98,175) (1,709,950) \$ 35,966,001	4,989 (366) (68,866) \$ 1,568,548	86,025 (14,360) (848,232) 19,512,643
Expense Adjustment Allocators Interruptible Credit Allocator (Winter & Summe O&M less fuel Base Rate Revenue at Current Rates	r Peak Prod	PI: INTCRE OMLF		:	1,593,301,897 220,080,914.46 965,204,065	654,776,563 119,554,976.60 379,200,073	223,857,761 30,981,091.21 135,825,835	17,886,310 1,863,596.59 11,517,853	246,202,368 23,262,037.05 151,571,212

## BIP METHODOLOGY

Description	Ref	Name	Allocation Vector	Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Allocation Factors (Continued)						
Revenue Adjustment Allocators						
Forfeited Discounts		FDIS		29,978	51,804	10,655
Misc Service Revenue Allocator		MISCR		(43)	(113)	(5)
Revenue and Expense Adjust before IT		ITADJ		\$ (713,894) \$	(458,543) \$	(396,105)
Full Year FAC Base Rate Change		REV01				
Temperature Normalization - Revenue		TREV01				
Temperature Normalization - Expenses		TEXP01				
VDT Revenue		VDTREV				
Merger Surcredit Revenue		MSCREV				
ECR Revenue		ECRREV		16,210,961	10,462,757	8,983,013
ECR Revenue for Roll-In		ECRREV2				
DSM revenue		DSMREV				
Year Customers		YREND				
Expense Adjustment Allocators						
Interruptible Credit Allocator (Winter & Summer Pe	ak Prod	PI INTCRE		191,329,720	128,738,211	112,671,463
O&M less fuel		OMLF		18,736,631.49	11,253,738.17	9,480,070.36
Base Rate Revenue at Current Rates				116,918,595	77,629,237	64,284,636

## BIP METHODOLOGY

Description	Ref Nam	Allocation e Vector	Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Allocation Factors (Continued)							
Revenue Adjustment Allocators							
Forfeited Discounts Misc Service Revenue Allocator Revenue and Expense Adjust before IT	FDIS MISC ITAE	CR NJ	\$ - (36,241) \$	- (19,757) \$	342 (324.55000) (271,622) \$	- (2,184) \$	- (2,089)
Full Year FAC Base Rate Change Temperature Normalization - Revenue Temperature Normalization - Expenses VDT Revenue	REV TRE TEX VDT	V01 201 REV					
Merger Surcredit Revenue ECR Revenue ECR Revenue for Roll-In DSM revenue Year Customers	MSC ECR ECR DSM YRE	REV REV2 REV	831,030	449,773	5,644,950	46,675	46,012
Expense Adjustment Allocators Interruptible Credit Allocator (Winter & Summer O&M less fuel Base Rate Revenue at Current Rates	Peak Prod Pl INTC OML		12,621,754 1,158,790.19 6,341,748	4,935,546 542,657.59 3,292,762	3,149,595.57 18,141,167	29,826.01 210,819	282,201 67,903.63 270,128

# **Exhibit WSS-24**

Electric Cost of Service Study Class Allocation LOLP Methodology

## LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System		Residential Rate RS				Rate PS Primary		Rate PS Secondary
Plant in Service													
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Total Power Production Plant	TPIS TPIS TPIS TPIS	PLPPDB PLPPDI PLPPDP PLPPEB PLPPT	PPBDA PPWDA PPSDA E01	\$	834,776,533 874,481,255 718,820,643 - 2,428,078,430	·	376,560,087 394,470,525 324,253,441 - 1,095,284,053		95,141,310 99,666,544 81,925,654 - 276,733,417		9,625,543 10,083,365 8,288,492 - 27,997,400	•	121,881,821 127,678,921 104,951,643 - 354,512,385
				Ψ	2,420,070,430	Ψ	1,000,204,000	Ψ	210,100,411	Ψ	21,331,400	Ψ	004,012,000
Transmission Plant Transmission Demand	TPIS	PLTRB	NCPT	\$	465,684,635	\$	206,944,619	\$	59,568,432	\$	5,292,707	\$	61,430,381
Distribution Poles Specific	TPIS	PLDPS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Substation General	TPIS	PLDSG	NCPP	\$	161,101,605	\$	77,296,277	\$	22,249,518	\$	1,976,889	\$	22,944,978
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer	TPIS TPIS TPIS TPIS TPIS	PLDPLS PLDPLD PLDPLC PLDSLD PLDSLC	NCPP NCPP Cust08 SICD Cust07	\$	- 275,500,316 438,423,398 75,736,072 115,092,782	\$	- 132,184,585 377,970,614 63,558,319 99,999,544	\$	38,048,965 46,959,149 11,630,886 12,423,965	\$	3,380,684 74,741 -	\$	- 39,238,273 2,931,681 -
Total Distribution Primary & Secondary Lines	TFIS	PLDSLC	Cusion	\$	904,752,568	\$	673,713,063	\$	109,062,964	\$	- 3,455,425	\$	42,169,954
Distribution Line Transformers Demand Customer Total Distribution Line Transformers	TPIS TPIS	PLDLTD PLDLTC PLDLTT	SICDT Cust09	\$ \$	104,690,102 73,215,269 177,905,371		72,634,069 63,146,691 135,780,760		13,291,707 7,845,358 21,137,065		- -	\$ \$	11,706,101 489,789 12,195,890
Distribution Services Customer	TPIS	PLDSC	C02	\$	36,360,072	\$	27,946,947	\$	7,033,360	\$	-	\$	1,227,015
Distribution Meters Customer	TPIS	PLDMC	C03	\$	42,176,668	\$	29,520,292	\$	8,679,135	\$	337,865	\$	2,334,770
Distribution Street & Customer Lighting Customer	TPIS	PLDSCL	C04	\$	115,567,185	\$	-	\$	-	\$	-	\$	-
Customer Accounts Expense Customer	TPIS	PLCAE	C05	\$	-	\$	-	\$	-	\$	-	\$	-
Customer Service & Info. Customer	TPIS	PLCSI	C06	\$	-	\$	-	\$	-	\$	-	\$	-
Sales Expense Customer	TPIS	PLSEC	C06	\$	-	\$	-	\$	-	\$	-	\$	-
Total		PLT		\$	4,331,626,534	\$	2,246,486,010	\$	504,463,892	\$	39,060,286	\$	496,815,373

## LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary	Rate RTS Transmission
Plant in Service								
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy	TPIS TPIS TPIS TPIS	PLPPDB PLPPDI PLPPDP PLPPEB	PPBDA PPWDA PPSDA E01	\$	100,680,855 105,469,568 86,695,629		64,149,424 67,200,582 55,238,651	57,063,017 59,777,122 49,136,593 -
Total Power Production Plant		PLPPT		\$	292,846,052	\$	186,588,657	\$ 165,976,732
Transmission Plant Transmission Demand	TPIS	PLTRB	NCPT	\$	55,882,901	\$	33,180,334	\$ 34,368,776
Distribution Poles Specific	TPIS	PLDPS	NCPP	\$	-	\$	-	\$ -
Distribution Substation General	TPIS	PLDSG	NCPP	\$	20,872,928	\$	12,393,249	\$ -
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand	TPIS TPIS TPIS TPIS	PLDPLS PLDPLD PLDPLC PLDSLD	NCPP NCPP Cust08 SICD	\$	- 35,694,855 109,516 -	\$	- 21,193,731 286,507 -	\$ - - -
Secondary Customer Total Distribution Primary & Secondary Lines	TPIS	PLDSLC PLDLT	Cust07	\$	- 35,804,371	\$	- 21,480,239	\$ -
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	TPIS TPIS	PLDLTD PLDLTC PLDLTT	SICDT Cust09	\$ \$	-	\$ \$	6,433,268 47,866 6,481,134	-
Distribution Services Customer	TPIS	PLDSC	C02	\$	-	\$	152,750	\$ -
Distribution Meters Customer	TPIS	PLDMC	C03	\$	529,064	\$	245,966	\$ 432,796
Distribution Street & Customer Lighting Customer	TPIS	PLDSCL	C04	\$	-	\$	-	\$ -
Customer Accounts Expense Customer	TPIS	PLCAE	C05	\$	-	\$	-	\$ -
Customer Service & Info. Customer	TPIS	PLCSI	C06	\$	-	\$	-	\$ -
Sales Expense Customer	TPIS	PLSEC	C06	\$	-	\$	-	\$ -
Total		PLT		\$	405,935,317	\$	260,522,329	\$ 200,778,304

## LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1		Special Contract Customer #2		Street Lighting ate RLS, LS, DSK		Street Lighting Rate LE		Traffic Street Lighting Rate TLE
Plant in Service													
Power Production Plant													
Production Demand - Base	TPIS	PLPPDB	PPBDA	\$	6,522,290	\$	2,817,602	\$	201,110	\$	6,506	\$	126,970
Production Demand - Winter Peak	TPIS	PLPPDI	PPWDA		6,832,511		2,951,616		210,675		6,816		133,009
Production Demand - Summer Peak	TPIS TPIS	PLPPDP PLPPEB	PPSDA E01		5,616,301		2,426,219		173,174		5,603		109,333
Production Energy Total Power Production Plant	1915	PLPPED	EUT	\$	- 18,971,102	\$	- 8,195,437	\$	- 584,959	\$	- 18,925	\$	- 369,312
Transmission Plant													
Transmission Demand	TPIS	PLTRB	NCPT	\$	3,464,524	\$	1,813,382	\$	3,572,282	\$	114,252	\$	52,046
Distribution Poles													
Specific	TPIS	PLDPS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Substation	TDIO		NODD	•	1 00 1 0 1 1	•		•	1 00 1 000	•	40.074	•	10.110
General	TPIS	PLDSG	NCPP	\$	1,294,041	\$	677,320	\$	1,334,290	\$	42,674	\$	19,440
Distribution Primary & Secondary Lines													
Primary Specific	TPIS	PLDPLS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Primary Demand	TPIS	PLDPLD	NCPP		2,212,943		1,158,286		2,281,773		72,978		33,244
Primary Customer	TPIS	PLDPLC	Cust08		1,038		1,038		9,965,698		19,031		104,384
Secondary Demand	TPIS	PLDSLD	SICD		-		-		522,542		16,712		7,613
Secondary Customer	TPIS	PLDSLC PLDLT	Cust07	\$	- 2,213,981	¢	- 1,159,324	¢	2,636,621	¢	5,035	¢	27,617 172,857
Total Distribution Primary & Secondary Lines		PLDLI		φ	2,213,901	¢	1,159,324	Φ	15,406,634	¢	113,756	Φ	172,007
Distribution Line Transformers			0.005	•									
Demand	TPIS	PLDLTD	SICDT	\$	-	\$	-	\$	597,158	\$	19,099	\$	8,700
Customer	TPIS	PLDLTC	Cust09	•	-		-		1,664,946		3,180		17,439
Total Distribution Line Transformers		PLDLTT		\$	-	\$	-	\$	2,262,104	\$	22,278	\$	26,139
Distribution Services	TDIO		000	•		•		•		•		•	
Customer	TPIS	PLDSC	C02	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Meters						•							
Customer	TPIS	PLDMC	C03	\$	5,015	\$	5,015	\$	-	\$	13,377	\$	73,373
Distribution Street & Customer Lighting													
Customer	TPIS	PLDSCL	C04	\$	-	\$	-	\$	115,567,185	\$	-	\$	-
Customer Accounts Expense													
Customer	TPIS	PLCAE	C05	\$	-	\$	-	\$	-	\$	-	\$	-
Customer Service & Info.	TDIO	DI OQI	000	•		•		•		•		•	
Customer	TPIS	PLCSI	C06	\$	-	\$	-	\$	-	\$	-	\$	-
Sales Expense	TDIO	DI 050	000	•		•		•		•		•	
Customer	TPIS	PLSEC	C06	\$	-	\$	-	\$	-	\$	-	\$	-
Total		PLT		\$	25,948,663	\$	11,850,477	\$	138,727,454	\$	325,263	\$	713,167

## LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector	Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Net Utility Plant								
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Total Power Production Plant	NTPLANT NTPLANT NTPLANT NTPLANT	UPPPDB UPPPDI UPPPDP UPPPEB UPPPT	PPBDA PPWDA PPSDA E01	\$ 529,045,729 554,208,886 455,557,836 - 1,538,812,451	238,647,707 249,998,578 205,497,988 - 694,144,274	60,296,500 63,164,401 51,920,924 - 175,381,825	6,100,258 6,390,406 5,252,892 - 17,743,557	77,243,495 80,917,450 66,513,871 - 224,674,815
Transmission Plant Transmission Demand	NTPLANT	UPTRB	NCPT	\$ 302,524,467	\$ 134,438,214	\$ 38,697,666	\$ 3,438,321	\$ 39,907,250
Distribution Poles Specific	NTPLANT	UPDPS	NCPP	\$ -	\$ -	\$ -	\$ -	\$
Distribution Substation General	NTPLANT	UPDSG	NCPP	\$ 104,174,581	\$ 49,982,788	\$ 14,387,406	\$ 1,278,334	\$ 14,837,118
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	NTPLANT NTPLANT NTPLANT NTPLANT NTPLANT	UPDPLS UPDPLD UPDPLC UPDSLD UPDSLC UPDLT	NCPP NCPP Cust08 SICD Cust07	\$ 178,149,250 283,501,669 48,973,898 74,423,481 585,048,298	\$ 85,475,708 244,410,541 41,099,288 64,663,606 435,649,143	\$ 24,603,945 30,365,617 7,520,984 8,033,820 70,524,366	\$ 2,186,082 48,330 - 2,234,412	\$ 25,372,998 1,895,739 - - 27,268,737
Distribution Line Transformers Demand Customer Total Distribution Line Transformers	NTPLANT NTPLANT	UPDLTD UPDLTC UPDLTT	SICDT Cust09	\$ 67,696,703 47,343,849 115,040,552	\$ 46,968,022 40,833,113 87,801,135	\$ 8,594,936 5,073,115 13,668,051	\$ 	\$ 7,569,621 316,717 7,886,338
Distribution Services Customer	NTPLANT	UPDSC	C02	\$ 23,511,840	18,071,586	4,548,045	-	\$ 793,436
Distribution Meters Customer	NTPLANT	UPDMC	C03	\$ 27,273,078	\$ 19,088,972	\$ 5,612,267	\$ 218,476	\$ 1,509,753
Distribution Street & Customer Lighting Customer	NTPLANT	UPDSCL	C04	\$ 74,730,249	\$ -	\$ -	\$ -	\$ -
Customer Accounts Expense Customer	NTPLANT	UPCAE	C05	\$ -	\$ -	\$ -	\$ -	\$ -
Customer Service & Info. Customer	NTPLANT	UPCSI	C06	\$ -	\$ -	\$ -	\$ -	\$
Sales Expense Customer	NTPLANT	UPSEC	C06	\$ -	\$ -	\$ -	\$ -	\$ -
Total		UPT		\$ 2,771,115,517	\$ 1,439,176,111	\$ 322,819,626	\$ 24,913,101	\$ 316,877,447

## LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Net Utility Plant									
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Total Power Production Plant	NTPLANT NTPLANT NTPLANT NTPLANT	UPPPDB UPPPDI UPPPDP UPPPEB UPPPT	PPBDA PPWDA PPSDA E01	\$	63,807,228 66,842,110 54,943,989 - 185,593,326		40,655,166 42,588,860 35,007,899 - 118,251,925		36,164,104 37,884,188 31,140,675 - 105,188,967
Transmission Plant		01111		Ψ	100,000,020	Ψ	110,201,020	Ŷ	100,100,001
Transmission Demand	NTPLANT	UPTRB	NCPT	\$	36,303,420	\$	21,555,065	\$	22,327,118
Distribution Poles Specific	NTPLANT	UPDPS	NCPP	\$	-	\$	-	\$	-
Distribution Substation General	NTPLANT	UPDSG	NCPP	\$	13,497,250	\$	8,013,958	\$	-
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	NTPLANT NTPLANT NTPLANT NTPLANT NTPLANT	UPDPLS UPDPLD UPDPLC UPDSLD UPDSLC UPDLT	NCPP NCPP Cust08 SICD Cust07	\$	- 23,081,685 70,818 - - 23,152,503	\$	- 13,704,693 185,267 - - 13,889,960	\$	
Distribution Line Transformers		OPDET		Φ	23,152,505	φ	13,009,900	φ	-
Demand Customer Total Distribution Line Transformers	NTPLANT NTPLANT	UPDLTD UPDLTC UPDLTT	SICDT Cust09	\$ \$	- - -	\$ \$	4,160,002 30,952 4,190,954		-
Distribution Services Customer	NTPLANT	UPDSC	C02	\$	-	\$	98,774	\$	-
Distribution Meters Customer	NTPLANT	UPDMC	C03	\$	342,113	\$	159,051	\$	279,863
Distribution Street & Customer Lighting Customer	NTPLANT	UPDSCL	C04	\$	-	\$	-	\$	-
Customer Accounts Expense Customer	NTPLANT	UPCAE	C05	\$	-	\$	-	\$	-
Customer Service & Info. Customer	NTPLANT	UPCSI	C06	\$	-	\$	-	\$	-
Sales Expense Customer	NTPLANT	UPSEC	C06	\$	-	\$	-	\$	-
Total		UPT		\$	258,888,612	\$	166,159,689	\$	127,795,947

## LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector	Special Contract Customer #1		Special Contract Customer #2		Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Net Utility Plant										
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy	NTPLANT NTPLANT NTPLANT NTPLANT	UPPPDB UPPPDI UPPPDP UPPPEB	PPBDA PPWDA PPSDA E01	\$ 4,133,549 4,330,154 3,559,372 -	\$	1,785,676 1,870,608 1,537,634 -	\$	127,455 133,517 109,750	\$ 4,123 4,320 3,551	\$ 80,468 84,295 69,291 -
Total Power Production Plant		UPPPT		\$ 12,023,074	\$	5,193,918	\$	370,722	\$ 11,994	\$ 234,054
Transmission Plant Transmission Demand	NTPLANT	UPTRB	NCPT	\$ 2,250,672	\$	1,178,034	\$	2,320,675	\$ 74,222	\$ 33,811
Distribution Poles Specific	NTPLANT	UPDPS	NCPP	\$ -	\$	-	\$	-	\$ -	\$ -
Distribution Substation General	NTPLANT	UPDSG	NCPP	\$ 836,777	\$	437,981	\$	862,804	\$ 27,595	\$ 12,570
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	NTPLANT NTPLANT NTPLANT NTPLANT NTPLANT	UPDPLS UPDPLD UPDPLC UPDSLD UPDSLC UPDLT	NCPP NCPP Cust08 SICD Cust07	\$ - 1,430,975 671 - 1,431,647	\$	- 748,993 671 - 749,664	\$	1,475,483 6,444,209 337,896 1,704,942 9,962,530	\$ 47,190 12,306 10,807 3,256 73,559	\$ 21,497 67,499 4,923 17,858 111,776
Distribution Line Transformers Demand Customer Total Distribution Line Transformers	NTPLANT NTPLANT	UPDLTD UPDLTC UPDLTT	SICDT Cust09	\$ 	\$ \$		\$ \$	386,146 1,076,619 1,462,765	\$ 12,350 2,056 14,406	\$ 5,626 11,277 16,903
Distribution Services Customer	NTPLANT	UPDSC	C02	\$ -	\$		\$		\$ -	\$ -
Distribution Meters Customer	NTPLANT	UPDMC	C03	\$ 3,243	\$	3,243	\$	-	\$ 8,650	\$ 47,446
Distribution Street & Customer Lighting Customer	NTPLANT	UPDSCL	C04	\$ -	\$	-	\$	74,730,249	\$ -	\$ -
Customer Accounts Expense Customer	NTPLANT	UPCAE	C05	\$ -	\$	-	\$	-	\$ -	\$ -
Customer Service & Info. Customer	NTPLANT	UPCSI	C06	\$ -	\$	-	\$	-	\$ -	\$ -
Sales Expense Customer	NTPLANT	UPSEC	C06	\$ -	\$	-	\$	-	\$ -	\$ -
Total		UPT		\$ 16,545,413	\$	7,562,840	\$	89,709,745	\$ 210,426	\$ 456,560

Description	Ref	Name	Allocation Vector		Total System		Residential Rate RS		General Service Rate GS		Rate PS Primary		Rate PS Secondary
Net Cost Rate Base													
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Total Power Production Plant	RB RB RB RB	RBPPDB RBPPDI RBPPDP RBPPEB RBPPT	PPBDA PPWDA PPSDA E01	\$	449,333,293 470,705,064 386,917,976 51,365,920 1,358,322,253	·	202,690,154 212,330,765 174,535,173 18,583,062 608,139,153		51,211,500 53,647,287 44,097,889 6,038,830 154,995,505		5,181,119 5,427,550 4,461,428 719,235 15,789,332	•	65,605,054 68,725,447 56,492,086 8,333,269 199,155,856
Transmission Plant	22		NODT										
Transmission Demand	RB	RBTRB	NCPT	\$	251,904,274	\$	111,943,212	\$	32,222,542	\$	2,863,001	\$	33,229,732
Distribution Poles Specific	RB	RBDPS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Substation General	RB	RBDSG	NCPP	\$	86,725,894	\$	41,610,937	\$	11,977,592	\$	1,064,220	\$	12,351,980
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	RB RB RB RB RB	RBDPLS RBDPLD RBDPLC RBDSLD RBDSLC RBDLT	NCPP NCPP Cust08 SICD Cust07	\$	- 146,289,690 232,639,811 40,320,470 61,244,172 480,494,142	\$	70,189,545 200,561,860 33,837,261 53,212,627 357,801,294	\$	20,203,865 24,917,848 6,192,066 6,611,148 57,924,928	\$	- 1,795,131 39,660 - - 1,834,791	\$	20,835,384 1,555,633 - - 22,391,016
Distribution Line Transformers		RBDLI		φ	400,494,142	φ	557,601,294	φ	57,924,920	φ	1,034,791	φ	22,391,010
Demand Customer Total Distribution Line Transformers	RB RB	RBDLTD RBDLTC RBDLTT	SICDT Cust09	\$ \$	55,853,391 39,061,200 94,914,591		38,751,123 33,689,496 72,440,620	·	7,091,281 4,185,590 11,276,871	·	- - -	\$ \$	6,245,341 261,308 6,506,650
Distribution Services Customer	RB	RBDSC	C02	\$	19,387,335	\$	14,901,424	\$	3,750,215	\$	-	\$	654,249
Distribution Meters Customer	RB	RBDMC	C03	\$	24,509,219	\$	17,154,491	\$	5,043,519	\$	196,336	\$	1,356,755
Distribution Street & Customer Lighting Customer	RB	RBDSCL	C04	\$	61,664,820	\$	-	\$	-	\$	-	\$	-
Customer Accounts Expense Customer	RB	RBCAE	C05	\$	2,471,536	\$	1,841,601	\$	457,602	\$	1,821	\$	71,421
Customer Service & Info. Customer	RB	RBCSI	C06	\$	539,863	\$	465,409	\$	57,823	\$	92	\$	3,610
Sales Expense Customer	RB	RBSEC	C06	\$	-	\$	-	\$	-	\$	-	\$	-
Total		RBT		\$	2,380,933,927	\$	1,226,298,141	\$	277,706,597	\$	21,749,593	\$	275,721,267

# LOLP METHODOLOGY

et Cost Rate Base production Demand - Base RB RB RBPPDB PPBDA \$ 54,193,258 \$ 34,529,566 \$ 30,715,182 Production Demand - Winter Peak RB RBPPDI PPWDA 56,770,868 36,171,906 32,176,098 production Demand - Summer Peak RB RBPPDP PPSDA 46,665,462 29,733,185 26,448,644 Production Energy RB RBPPEB E01 8,043,918 3,537,825 4,898,130 ptal Power Production Plant RB RBPPEB NCPT \$ 30,228,916 \$ 103,972,483 \$ 94,238,054 <b>transmission Plant</b> Transmission Demand RB RBTRB NCPT \$ 30,228,916 \$ 17,948,344 \$ 18,591,212 <b>stribution Poles</b> Specific RB RBDPS NCPP \$ - \$ - \$ -
Peroduction Demand - Base         RB         RB PPDB         PPBDA         \$ 54,193,258         \$ 34,529,566         \$ 30,715,182           Production Demand - Winter Peak         RB         RBPPDI         PPWDA         \$ 56,770,868         36,171,906         32,176,098           Production Demand - Summer Peak         RB         RBPPDP         PPSDA         46,665,462         29,733,185         26,448,644           Production Energy         RB         RBPPDE         E01         8,043,918         3,537,825         4,898,130           otal Power Production Plant         RB         RBPPT         \$ 165,673,506         \$ 103,972,483         \$ 94,238,054
Peroduction Demand - Winter Peak         RB         RBPPDI         PPWDA         56,770,868         36,171,906         32,176,098           Production Demand - Summer Peak         RB         RBPPDP         PPSDA         46,665,462         29,733,185         26,448,644           Production Energy         RB         RBPPEB         E01         8,043,918         3,537,825         4,898,130           otal Power Production Plant         RB         RBPPT         \$ 165,673,506         \$ 103,972,483         \$ 94,238,054           ransmission Plant         ransmission Demand         RB         RBTRB         NCPT         \$ 30,228,916         \$ 17,948,344         \$ 18,591,212           istribution Poles         Specific         RB         RBDPS         NCPP         \$ -         \$ -
Production Demand - Summer Peak         RB         RBPPDP         PPSDA         46,665,462         29,733,185         26,448,644           Production Energy         RB         RBPPEB         E01         8,043,918         3,537,825         4,898,130           ytal Power Production Plant         RB         RBPPEB         E01         8,043,918         3,537,825         4,898,130           ransmission Plant         RBPPT         \$ 165,673,506         \$ 103,972,483         \$ 94,238,054           ransmission Demand         RB         RBTRB         NCPT         \$ 30,228,916         \$ 17,948,344         \$ 18,591,212           stribution Poles         Specific         RB         RBDPS         NCPP         \$ - \$         \$ -
Production Energy tal Power Production Plant         RB         RBPPEB         E01         8,043,918         3,537,825         4,899,130           ransmission Plant         RBPPT         \$ 165,673,506         \$ 103,972,483         \$ 94,238,054           ransmission Plant         RB         RBTRB         NCPT         \$ 30,228,916         \$ 17,948,344         \$ 18,591,212           istribution Poles         RB         RBDPS         NCPP         \$ -         \$ -         \$ -
stal Power Production Plant         RBPPT         \$ 165,673,506         \$ 103,972,483         \$ 94,238,054           ransmission Plant         ransmission Demand         RB         RBTRB         NCPT         \$ 30,228,916         \$ 17,948,344         \$ 18,591,212           stribution Poles         specific         RB         RBDPS         NCPP         \$ -         \$ -         \$ -
ransmission Plant Transmission Demand RB RBTRB NCPT \$ 30,228,916 \$ 17,948,344 \$ 18,591,212 Istribution Poles Specific RB RBDPS NCPP \$ - \$ - \$ -
Transmission Demand         RB         RBTRB         NCPT         \$ 30,228,916         \$ 17,948,344         \$ 18,591,212           istribution Poles         Specific         RB         RBDPS         NCPP         \$ - \$         \$ -
istribution Poles Specific RB RBDPS NCPP \$ - \$ - \$ -
Specific RB RBDPS NCPP \$ - \$ - \$ -
- Additional Conduction of the second s
stribution Substation
General RB RBDSG NCPP \$ 11,236,532 \$ 6,671,663 \$ -
stribution Primary & Secondary Lines
Primary Specific RB RBDPLS NCPP \$ - \$ - \$ -
Primary Demand RB RBDPLD NCPP 18,953,841 11,253,796 -
Primary Customer RB RBDPLC Cust08 58,112 152,029 -
Secondary Demand RB RBDSLD SICD
Secondary Customer RB RBDSLC Cust07
otal Distribution Primary & Secondary Lines RBDLT \$ 19,011,954 \$ 11,405,825 \$ -
stribution Line Transformers
Demand RB RBDLTD SICDT \$ - \$ 3,432,224 \$ -
Customer RB RBDLTC Cust09 - 25,537 -
otal Distribution Line Transformers RBDLTT \$ - \$ 3,457,761 \$ -
Istribution Services
Customer RB RBDSC C02 \$ - \$ 81,447 \$ -
Istribution Meters
Customer         RB         RBDMC         C03         \$ 307,443         \$ 142,933         \$ 251,501
stribution Street & Customer Lighting
Customer RB RBDSCL C04 \$ - \$ - \$ -
ustomer Accounts Expense
Customer         RB         RBCAE         C05         \$ 13,340         \$ 34,899         \$ 1,644
ustomer Service & Info.
Customer         RB         RBCSI         C06         \$         135         \$         353         \$         17
ales Expense
Customer RB RBSEC C06 \$ - \$ - \$ -
tal RBT \$ 226,471,826 \$ 143,715,707 \$ 113,082,427

# LOLP METHODOLOGY

Description	l	Ref Name	Allocation Vector		Special Contract Customer #1		Special Contract Customer #2		Street Lighting Rate RLS, LS, DSK		Street Lighting Rate LE		Traffic Street Lighting Rate TLE
Net Cost Rate Base													
Power Production Plant													
Production Demand - Base	RB	RBPPDI		\$	3,510,738	\$	1,516,624	\$	108,251	\$	3,502	\$	68,344
Production Demand - Winter Peak	RB	RBPPDI			3,677,720		1,588,760		113,400		3,669		71,594
Production Demand - Summer Peak	RB RB	RBPPDI			3,023,074		1,305,955		93,214		3,016		58,850
Production Energy	RB	RBPPE	B E01	\$	478,082	¢	252,569	¢	452,433	¢	14,748	¢	13,820
Total Power Production Plant		RBPPT		φ	10,689,615	Ф	4,663,909	¢	767,297	Ф	24,934	φ	212,609
Transmission Plant	RB	RBTRB	NCPT	\$	1 974 076	¢	980.918	¢	1 022 266	¢	61.803	¢	00.450
Transmission Demand	RB	RBIRB	NCPT	\$	1,874,076	\$	980,918	ф	1,932,366	Ъ	61,803	\$	28,153
Distribution Poles													
Specific	RB	RBDPS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Substation													
General	RB	RBDSG	NCPP	\$	696,622	\$	364,622	\$	718,289	\$	22,973	\$	10,465
Distribution Primary & Secondary Lines													
Primary Specific	RB	RBDPLS		\$	-	\$	-	\$	-	\$	-	\$	-
Primary Demand	RB	RBDPL			1,175,065		615,046		1,211,613		38,751		17,652
Primary Customer	RB	RBDPLC			551		551		5,288,080		10,099		55,389
Secondary Demand	RB	RBDSL			-		-		278,192		8,897		4,053
Secondary Customer	RB	RBDSLC	C Cust07	۴	-	¢	-	¢	1,403,022	¢	2,679	¢	14,696
Total Distribution Primary & Secondary Lines		RBDLT		\$	1,175,616	\$	615,597	Ф	8,180,907	Ф	60,426	\$	91,790
Distribution Line Transformers				•		•		•	040 504	•	10,100	•	4.040
Demand	RB RB	RBDLTE		\$	-	\$	-	\$	318,591	\$	10,189	\$	4,642
Customer	RB	RBDLTC		¢	-	¢	-	¢	888,268	¢	1,696	¢	9,304
Total Distribution Line Transformers		RBDLTT		\$	-	\$	-	\$	1,206,859	Ф	11,886	\$	13,946
Distribution Services	RB	RBDSC	C02	\$		¢		¢		¢		¢	
Customer	RB	RBDSC	C02	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Meters													
Customer	RB	RBDMC	C03	\$	2,914	\$	2,914	\$	-	\$	7,774	\$	42,638
Distribution Street & Customer Lighting													
Customer	RB	RBDSCI	L C04	\$	-	\$	-	\$	61,664,820	\$	-	\$	-
Customer Accounts Expense													
Customer	RB	RBCAE	C05	\$	25	\$	25	\$	48,556	\$	93	\$	509
Customer Service & Info.													
Customer	RB	RBCSI	C06	\$	1	\$	1	\$	12,271	\$	23	\$	129
Sales Expense													
Customer	RB	RBSEC	C06	\$	-	\$	-	\$	-	\$	-	\$	-
Total		RBT		\$	14,438,869	\$	6,627,986	\$	74,531,365	\$	189,912	\$	400,237
10101				Ψ	17,700,009	Ψ	0,021,300	Ψ	77,001,000	Ψ	103,912	Ψ	700,207

Description	Ref	Name	Allocation Vector		Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary		Rate PS Secondary
Operation and Maintenance Expenses										
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Total Power Production Plant	ТОМ ТОМ ТОМ ТОМ	omppdb omppdi omppdp omppeb omppt	PPBDA PPWDA PPSDA E01	\$	33,223,400 34,803,614 28,608,453 465,540,988 562,176,455	14,986,773 15,699,593 12,905,013 168,422,502 212,013,881	3,786,544 3,966,644 3,260,568 54,731,284 65,745,040	383,088 401,309 329,875 6,518,588 7,632,860		4,850,793 5,081,513 4,176,987 75,526,309 89,635,602
Transmission Plant Transmission Demand	ТОМ	OMTRB	NCPT	\$	22,151,695	\$ 9,843,945	\$ 2,833,552	\$ 251,764	\$	2,922,121
Distribution Poles Specific	ТОМ	OMDPS	NCPP	\$	-	\$ -	\$ -	\$ -	\$	-
Distribution Substation General	ТОМ	OMDSG	NCPP	\$	8,189,264	\$ 3,929,195	\$ 1,131,008	\$ 100,491	\$	1,166,360
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer	ТОМ ТОМ ТОМ ТОМ ТОМ	OMDPLS OMDPLD OMDPLC OMDSLD OMDSLC	NCPP NCPP Cust08 SICD Cust07	\$	- 14,230,158 21,300,716 4,785,490 7,030,141	\$ 6,827,606 18,363,629 4,016,022 6,108,210	\$ - 1,965,307 2,281,501 734,914 758,885	\$ 174,619 3,631 -	\$	2,026,737 142,435 -
Total Distribution Primary & Secondary Lines		OMDLT		\$	47,346,505	\$ 35,315,466	\$ 5,740,608	\$ 178,251	\$	2,169,173
Distribution Line Transformers Demand Customer Total Distribution Line Transformers	TOM TOM	OMDLTD OMDLTC OMDLTT	SICDT Cust09	\$ \$	1,119,996 783,272 1,903,268	777,054 675,556 1,452,610	142,197 83,931 226,129	- -	\$ \$	125,234 5,240 130,474
Distribution Services Customer	ТОМ	OMDSC	C02	\$	295,809	\$ 227,363	\$ 57,220	\$ -	\$	9,982
Distribution Meters Customer	ТОМ	OMDMC	C03	\$	17,171,209	\$ 12,018,472	\$ 3,533,500	\$ 137,553	\$	950,545
Distribution Street & Customer Lighting Customer	ТОМ	OMDSCL	C04	\$	1,306,145	\$ -	\$ -	\$ -	\$	-
Customer Accounts Expense Customer	ТОМ	OMCAE	C05	\$	20,585,101	\$ 15,338,459	\$ 3,811,307	\$ 15,165	\$	594,854
Customer Service & Info. Customer	ТОМ	OMCSI	C05	\$	4,496,452	\$ 3,350,416	\$ 832,513	\$ 3,313	\$	129,935
Sales Expense Customer	ТОМ	OMSEC	C06	\$	-	\$ -	\$ -	\$ -	\$	-
Total		OMT		\$	685,621,903	\$ 293,489,808	\$ 83,910,875	\$ 8,319,397	\$	97,709,047

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Operation and Maintenance Expenses									
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Total Power Production Plant	ТОМ ТОМ ТОМ ТОМ	omppdb omppdi omppdp omppeb omppt	PPBDA PPWDA PPSDA E01	\$	4,007,013 4,197,600 3,450,413 72,903,855 84,558,880		2,553,093 2,674,526 2,198,452 32,064,108 39,490,178		2,271,060 2,379,079 1,955,595 44,392,865 50,998,599
Transmission Plant		011111		Ŷ	04,000,000	Ŷ	00,400,110	Ŷ	00,000,000
Transmission Demand	ТОМ	OMTRB	NCPT	\$	2,658,239	\$	1,578,323	\$	1,634,855
Distribution Poles Specific	ТОМ	OMDPS	NCPP	\$	-	\$	-	\$	-
Distribution Substation General	ТОМ	OMDSG	NCPP	\$	1,061,032	\$	629,985	\$	-
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	TOM TOM TOM TOM TOM	OMDPLS OMDPLD OMDPLC OMDSLD OMDSLC OMDLT	NCPP NCPP Cust08 SICD Cust07	\$	- 1,843,713 5,321 - - 1,849.033	\$	1,094,700 13,920 - 1,108,620	\$	
Distribution Line Transformers Demand Customer Total Distribution Line Transformers	TOM TOM	OMDLTD OMDLTC OMDLTT	SICDT Cust09	\$		\$ \$	68,824 512 69,337	\$	- -
Distribution Services Customer	ТОМ	OMDSC	C02	\$	-	\$	1,243		-
Distribution Meters Customer	ТОМ	OMDMC	C03	\$	215,396	\$	100,139	\$	176,202
Distribution Street & Customer Lighting Customer	ТОМ	OMDSCL	C04	\$	-	\$	-	\$	-
Customer Accounts Expense Customer	ТОМ	OMCAE	C05	\$	111,107	\$	290,669	\$	13,691
Customer Service & Info. Customer	ТОМ	OMCSI	C05	\$	24,269	\$	63,492	\$	2,991
Sales Expense Customer	ТОМ	OMSEC	C06	\$	-	\$	-	\$	-
Total		OMT		\$	90,477,956	\$	43,331,985	\$	52,826,337

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1		Special Contract Customer #2		Street Lighting Rate RLS, LS, DSK		Street Lighting Rate LE		Traffic Street Lighting Rate TLE
Operation and Maintenance Expenses													
Power Production Plant													
Production Demand - Base	TOM	OMPPDB	PPBDA	\$	259,582	\$	112,138	\$	8,004	\$	259	\$	5,053
Production Demand - Winter Peak	TOM	OMPPDI	PPWDA		271,928		117,472		8,385		271		5,294
Production Demand - Summer Peak	TOM	OMPPDP	PPSDA		223,524		96,561		6,892		223		4,351
Production Energy Total Power Production Plant	ТОМ	OMPPEB OMPPT	E01	\$	4,332,969 5,088,003	\$	2,289,091 2,615,263	\$	4,100,500 4,123,781	\$	133,662 134,416	\$	125,255 139,953
				·	-,,	·	,,		, , , -	·	- , -		
Transmission Plant				•								•	
Transmission Demand	ТОМ	OMTRB	NCPT	\$	164,801	\$	86,259	\$	169,926	\$	5,435	\$	2,476
Distribution Poles													
Specific	TOM	OMDPS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Ordentation													
Distribution Substation General	ТОМ	OMDSG	NCPP	\$	65,780	¢	34,430	¢	67,826	¢	2,169	¢	988
General		OND3G	NCFF	φ	05,780	φ	54,430	φ	07,020	φ	2,109	φ	900
Distribution Primary & Secondary Lines													
Primary Specific	TOM	OMDPLS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Primary Demand	TOM	OMDPLD	NCPP		114,303		59,828		117,858		3,769		1,717
Primary Customer	TOM	OMDPLC	Cust08		50		50		484,182		925		5,071
Secondary Demand	TOM	OMDSLD	SICD		-		-		33,018		1,056		481
Secondary Customer	ТОМ	OMDSLC	Cust07	•	-	•	-	•	161,051	•	308	•	1,687
Total Distribution Primary & Secondary Lines		OMDLT		\$	114,353	\$	59,878	\$	796,108	\$	6,058	\$	8,957
Distribution Line Transformers													
Demand	ТОМ	OMDLTD	SICDT	\$	-	\$	-	\$	6,389	\$	204	\$	93
Customer	TOM	OMDLTC	Cust09		-		-		17,812		34		187
Total Distribution Line Transformers		OMDLTT		\$	-	\$	-	\$	24,200	\$	238	\$	280
Distribution Services													
Customer	том	OMDSC	C02	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Meters													
Customer	TOM	OMDMC	C03	\$	2,042	\$	2,042	\$	-	\$	5,446	\$	29,872
Distribution Street & Customer Lighting													
Customer	ТОМ	OMDSCL	C04	\$	-	\$	-	\$	1,306,145	\$	-	\$	-
Customer Accounts Expense													
Customer	ТОМ	OMCAE	C05	\$	211	\$	211	\$	404,419	\$	772	\$	4,236
Customer Service & Info.													
Customer	ТОМ	OMCSI	C05	\$	46	\$	46	\$	88,338	\$	169	\$	925
	-			Ŧ	10		10		22,200			•	
Sales Expense													
Customer	TOM	OMSEC	C06	\$	-	\$	-	\$	-	\$	-	\$	-
<b>T</b> ( )		0.117		•	E 405 005	•	0 700 /00	•	0 000 =	•	151	•	107.007
Total		OMT		\$	5,435,235	\$	2,798,128	\$	6,980,744	\$	154,703	\$	187,687

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary		Rate PS Secondary
Labor Expenses					3.43%	3.93%				
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Production Energy - Not Used	TLB TLB TLB TLB TLB	LBPPDB LBPPDI LBPPDP LBPPEB LBPPEI	PPBDA PPWDA PPSDA E01 E01	\$	8,354,904 8,752,290 7,194,353 17,970,758	\$ 3,768,821 3,948,078 3,245,307 6,501,425	\$ 952,227 997,518 819,956 2,112,730	\$ 96,338 100,920 82,956 251,630	\$	1,219,860 1,277,881 1,050,414 2,915,458
Production Energy - Not Used Total Power Production Plant	TLB	LBPPEP	E01	\$	- 42,272,305	\$ - 17,463,632	\$ - 4,882,431	\$ - 531,843	\$	- 6,463,613
Transmission Plant Transmission Demand	TLB	LBTRB	NCPT	\$	4,308,731	\$ 1,914,748	\$ 551,155	\$ 48,971	\$	568,382
Distribution Poles Specific	TLB	LBDPS	NCPP	\$	-	\$ -	\$ -	\$ -	\$	-
Distribution Substation General	TLB	LBDSG	NCPP	\$	2,685,252	\$ 1,288,380	\$ 370,856	\$ 32,951	\$	382,448
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	TLB TLB TLB TLB TLB	LBDPLS LBDPLD LBDPLC LBDSLD LBDSLC LBDLT	NCPP NCPP Cust08 SICD Cust07	\$	- 2,551,847 3,857,080 833,939 1,230,591 8,473,457	\$ 1,224,372 3,325,240 699,849 1,069,212 6,318,672	\$ 352,432 413,129 128,069 132,839 1,026,469	\$ 31,314 658 - 31,971	\$	363,448 25,792 - 389,240
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	TLB TLB	LBDLTD LBDLTC LBDLTT	SICDT Cust09	\$ \$	240,841 168,432 409,273	167,095 145,270 312,365	30,578 18,048 48,626	-	\$ \$	26,930 1,127 28,057
Distribution Services Customer	TLB	LBDSC	C02	\$	62,054	\$ 47,696	\$ 12,003	\$ -	\$	2,094
Distribution Meters Customer	TLB	LBDMC	C03	\$	5,681,158	\$ 3,976,356	\$ 1,169,071	\$ 45,510	\$	314,491
Distribution Street & Customer Lighting Customer	TLB	LBDSCL	C04	\$	206,477	\$ -	\$ -	\$ -	\$	-
Customer Accounts Expense Customer	TLB	LBCAE	C05	\$	5,837,418	\$ 4,349,602	\$ 1,080,791	\$ 4,301	\$	168,686
Customer Service & Info. Customer	TLB	LBCSI	C05	\$	1,602,599	\$ 1,194,136	\$ 296,719	\$ 1,181	\$	46,311
Sales Expense Customer	TLB	LBSEC	C06	\$	-	\$ -	\$ -	\$ -	\$	-
Total		LBT		\$	71,538,724	\$ 36,865,585	\$ 9,438,122	\$ 696,727	\$	8,363,322

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector	Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Labor Expenses						
Power Production Plant						
Production Demand - Base	TLB	LBPPDB	PPBDA	\$ 1,007,669	\$ 642,043	\$ 571,118
Production Demand - Winter Peak	TLB	LBPPDI	PPWDA	1,055,598	672,580	598,282
Production Demand - Summer Peak	TLB	LBPPDP	PPSDA	867,698	552,859	491,786
Production Energy	TLB	LBPPEB	E01	2,814,226	1,237,735	1,713,648
Production Energy - Not Used	TLB	LBPPEI	E01	-	-	-
Production Energy - Not Used	TLB	LBPPEP	E01	-		_
Total Power Production Plant	120	LBPPT	201	\$ 5,745,191	\$ 3,105,217	\$ 3,374,835
Transmission Plant						
Transmission Demand	TLB	LBTRB	NCPT	\$ 517,055	\$ 307,000	\$ 317,996
Distribution Poles						
Specific	TLB	LBDPS	NCPP	\$ -	\$ -	\$ -
Distribution Substation						
General	TLB	LBDSG	NCPP	\$ 347,911	\$ 206,572	\$ -
Distribution Primary & Secondary Lines						
Primary Specific	TLB	LBDPLS	NCPP	\$ -	\$ -	\$ -
Primary Demand	TLB	LBDPLD	NCPP	330,627	196,309	-
Primary Customer	TLB	LBDPLC	Cust08	963	2,521	-
Secondary Demand	TLB	LBDSLD	SICD	-	-	-
Secondary Customer	TLB	LBDSLC	Cust07	-	-	-
Total Distribution Primary & Secondary Lines		LBDLT		\$ 331,590	\$ 198,829	\$ -
Distribution Line Transformers						
Demand	TLB	LBDLTD	SICDT	\$ -	\$ 14,800	\$ -
Customer	TLB	LBDLTC	Cust09	-	110	-
Total Distribution Line Transformers		LBDLTT		\$ -	\$ 14,910	\$ -
Distribution Services						
Customer	TLB	LBDSC	C02	\$ -	\$ 261	\$ -
Distribution Meters						
Customer	TLB	LBDMC	C03	\$ 71,264	\$ 33,131	\$ 58,297
Distribution Street & Customer Lighting						
Customer	TLB	LBDSCL	C04	\$ -	\$ -	\$ -
Customer Accounts Expense						
Customer	TLB	LBCAE	C05	\$ 31,507	\$ 82,427	\$ 3,882
Customer Service & Info.						
Customer	TLB	LBCSI	C05	\$ 8,650	\$ 22,629	\$ 1,066
Sales Expense						
Customer	TLB	LBSEC	C06	\$ -	\$ -	\$ -
Total		LBT		\$ 7,053,169	\$ 3,970,976	\$ 3,756,076

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1		Special Contract Customer #2		Street Lighting e RLS, LS, DSK		Street Lighting Rate LE		Traffic Street Lighting Rate TLE
Labor Expenses													
Power Production Plant													
Production Demand - Base	TLB	LBPPDB	PPBDA	\$	65,279	\$	28,200	\$	2,013	\$	65	\$	1,271
Production Demand - Winter Peak	TLB	LBPPDI	PPWDA		68,384		29,541		2,109		68		1,331
Production Demand - Summer Peak	TLB	LBPPDP	PPSDA		56,211		24,283		1,733		56		1,094
Production Energy	TLB	LBPPEB	E01		167,261		88,363		158,287		5,160		4,835
Production Energy - Not Used	TLB	LBPPEI	E01		-		-		-		-		-
Production Energy - Not Used	TLB	LBPPEP	E01		-		-		-		-		-
Total Power Production Plant		LBPPT		\$	357,134	\$	170,388	\$	164,142	\$	5,349	\$	8,531
Transmission Plant													
Transmission Demand	TLB	LBTRB	NCPT	\$	32,055	\$	16,778	\$	33,052	\$	1,057	\$	482
Distribution Poles													
Specific	TLB	LBDPS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Substation													
General	TLB	LBDSG	NCPP	\$	21,569	\$	11,290	\$	22,240	\$	711	\$	324
Distribution Primary & Secondary Lines													
Primary Specific	TLB	LBDPLS	NCPP	\$	-	\$	-	\$	-	\$	-	\$	-
Primary Demand	TLB	LBDPLD	NCPP		20,498		10,729		21,135		676		308
Primary Customer	TLB	LBDPLC	Cust08		9		9		87,674		167		918
Secondary Demand	TLB	LBDSLD	SICD		-		-		5,754		184		84
Secondary Customer	TLB	LBDSLC	Cust07		-		-		28,191		54		295
Total Distribution Primary & Secondary Lines		LBDLT		\$	20,507	\$	10,738	\$	142,754	\$	1,081	\$	1,605
Distribution Line Transformers													
Demand	TLB	LBDLTD	SICDT	\$	-	\$	-	\$	1,374	\$	44	\$	20
Customer	TLB	LBDLTC	Cust09		-		-		3,830		7		40
Total Distribution Line Transformers		LBDLTT		\$	-	\$	-	\$	5,204	\$	51	\$	60
Distribution Services													
Customer	TLB	LBDSC	C02	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Meters													
Customer	TLB	LBDMC	C03	\$	675	\$	675	\$	-	\$	1,802	\$	9,883
Distribution Street & Customer Lighting													
Customer	TLB	LBDSCL	C04	\$	-	\$	-	\$	206,477	\$	-	\$	-
Customer Accounts Expense													
Customer	TLB	LBCAE	C05	\$	60	\$	60	\$	114,683	\$	219	\$	1,201
Customer Service & Info.													
Customer	TLB	LBCSI	C05	\$	16	\$	16	\$	31,485	\$	60	\$	330
Sales Expense													
Customer	TLB	LBSEC	C06	\$	-	\$	-	\$	-	\$	-	\$	-
Total		LBT		\$	432,017	\$	209,945	\$	720,037	\$	10,331	\$	22,417
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# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System	Residential Rate RS		General Service Rate GS	Rate PS Primary		Rate PS Secondary
Depreciation Expenses											
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy	TDEPR TDEPR TDEPR TDEPR TDEPR	DEPPDB DEPPDI DEPPDP DEPPEB DEPPEI	PPBDA PPWDA PPSDA E01 E01	\$	28,434,166 29,786,588 24,484,475 -	\$ 12,826,393 13,436,459 11,044,724 -	\$	3,240,704 3,394,843 2,790,549 -	\$ 327,865 343,460 282,323 -	\$	4,151,540 4,349,001 3,574,864 -
Production Energy - Not Used Production Energy - Not Used Total Power Production Plant	TDEPR	DEPPEI DEPPEP DEPPT	E01 E01	\$	- 82,705,230	\$ - - 37,307,575	\$	9,426,096	\$ - - 953,648	\$	- - 12,075,404
Transmission Plant Transmission Demand	TDEPR	DETRB	NCPT	\$	11,770,778	\$ 5,230,792	\$	1,505,669	\$ 133,780	\$	1,552,732
Distribution Poles Specific	TDEPR	DEDPS	NCPP	\$	-	\$ -	\$	-	\$ -	\$	-
Distribution Substation General	TDEPR	DEDSG	NCPP	\$	4,970,929	\$ 2,385,043	\$	686,528	\$ 60,999	\$	707,987
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	TDEPR TDEPR TDEPR TDEPR TDEPR	DEDPLS DEDPLD DEDPLC DEDSLD DEDSLC DEDLT	NCPP NCPP Cust08 SICD Cust07	\$	8,500,800 13,527,932 2,336,902 3,551,287 27,916,921	\$ 4,078,669 11,662,610 1,961,147 3,085,572 20,787,998	\$	1,174,034 1,448,965 358,881 383,352 3,365,232	\$ 104,314 2,306 - - 106,620	\$	1,210,731 90,460 - - 1,301,190
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	TDEPR TDEPR	DEDLTD DEDLTC DEDLTT	SICDT Cust09	\$ \$	3,230,303 2,259,120 5,489,424	2,241,187 1,948,446 4,189,633	•	410,127 242,075 652,202	-	\$ \$	361,202 15,113 376,315
Distribution Services Customer	TDEPR	DEDSC	C02	\$	1,121,921	\$ 862,327	\$	217,020	\$ -	\$	37,861
Distribution Meters Customer	TDEPR	DEDMC	C03	\$	1,301,397	\$ 910,874	\$	267,802	\$ 10,425	\$	72,041
Distribution Street & Customer Lighting Customer	TDEPR	DEDSCL	C04	\$	3,565,925	\$ -	\$	-	\$ -	\$	-
Customer Accounts Expense Customer	TDEPR	DECAE	C05	\$	-	\$ -	\$	-	\$ -	\$	-
Customer Service & Info. Customer	TDEPR	DECSI	C05	\$	-	\$ -	\$	-	\$ -	\$	-
Sales Expense Customer	TDEPR	DESEC	C06	\$	-	\$ -	\$	-	\$ -	\$	-
Total		DET		\$	138,842,527	\$ 71,674,242	\$	16,120,550	\$ 1,265,472	\$	16,123,530

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Depreciation Expenses									
Power Production Plant									
Production Demand - Base	TDEPR	DEPPDB	PPBDA	\$	3,429,392	\$	2,185,058	\$	1,943,681
Production Demand - Winter Peak	TDEPR	DEPPDI	PPWDA		3,592,505		2,288,987		2,036,129
Production Demand - Summer Peak	TDEPR	DEPPDP	PPSDA		2,953,027		1,881,539		1,673,691
Production Energy	TDEPR	DEPPEB	E01		-		-		-
Production Energy - Not Used	TDEPR	DEPPEI	E01		-		-		-
Production Energy - Not Used	TDEPR	DEPPEP	E01		-		-		-
Total Power Production Plant		DEPPT		\$	9,974,925	\$	6,355,585	\$	5,653,501
Transmission Plant									
Transmission Demand	TDEPR	DETRB	NCPT	\$	1,412,512	\$	838,676	\$	868,715
Distribution Poles									
Specific	TDEPR	DEDPS	NCPP	\$	-	\$	-	\$	-
Distribution Substation						•			
General	TDEPR	DEDSG	NCPP	\$	644,052	\$	382,404	\$	-
Distribution Primary & Secondary Lines									
Primary Specific	TDEPR	DEDPLS	NCPP	\$	-	\$	-	\$	-
Primary Demand	TDEPR	DEDPLD	NCPP		1,101,396		653,951		-
Primary Customer	TDEPR	DEDPLC	Cust08		3,379		8,840		-
Secondary Demand	TDEPR	DEDSLD	SICD		-		-		-
Secondary Customer	TDEPR	DEDSLC	Cust07		-		-		-
Total Distribution Primary & Secondary Lines		DEDLT		\$	1,104,775	\$	662,791	\$	-
Distribution Line Transformers									
Demand	TDEPR	DEDLTD	SICDT	\$	-	\$	198,504	\$	-
Customer	TDEPR	DEDLTC	Cust09		-		1,477		-
Total Distribution Line Transformers		DEDLTT		\$	-	\$	199,981	\$	-
Distribution Services						•			
Customer	TDEPR	DEDSC	C02	\$	-	\$	4,713	\$	-
Distribution Meters	TDEDD	DEDMO	C03	۴	40.005	¢	7 500	¢	40.054
Customer	TDEPR	DEDMC	C03	\$	16,325	\$	7,590	Ф	13,354
Distribution Street & Customer Lighting	TREPR	DEDOOL	004	•		•		•	
Customer	TDEPR	DEDSCL	C04	\$	-	\$	-	\$	-
Customer Accounts Expense									
Customer	TDEPR	DECAE	C05	\$	-	\$	-	\$	-
Customer Service & Info.									
Customer	TDEPR	DECSI	C05	\$	-	\$	-	\$	-
Sales Expense									
Customer	TDEPR	DESEC	C06	\$	-	\$	-	\$	-
Total		DET		\$	13,152,589	\$	8,451,740	\$	6,535,570

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1		Special Contract Customer #2			Street Lighting Rate LE		Traffic Street Lighting Rate TLE
Depreciation Expenses												
Power Production Plant												
Production Demand - Base	TDEPR	DEPPDB	PPBDA	\$	222,162	\$	95,973				\$	4,325
Production Demand - Winter Peak	TDEPR	DEPPDI	PPWDA		232,729		100,538	7,176		232		4,531
Production Demand - Summer Peak	TDEPR	DEPPDP	PPSDA		191,302		82,642	5,899	)	191		3,724
Production Energy	TDEPR	DEPPEB	E01		-		-	-		-		-
Production Energy - Not Used	TDEPR	DEPPEI	E01		-		-	-		-		-
Production Energy - Not Used Total Power Production Plant	TDEPR	DEPPEP DEPPT	E01	\$	- 646,194	¢	- 279,153	\$ 19,925	. e	- 645	¢	- 12,579
Total Power Production Plant		DEPPT		φ	040,194	φ	279,155	φ 19,923	) Þ	645	φ	12,579
Transmission Plant	TREPR	DETDD	NODT	•	07.570	•	15.000	• • • • • •		0.000	•	1 0 1 0
Transmission Demand	TDEPR	DETRB	NCPT	\$	87,570	\$	45,836	\$ 90,294	5	2,888	\$	1,316
Distribution Poles												
Specific	TDEPR	DEDPS	NCPP	\$	-	\$	-	\$-	\$	-	\$	-
Distribution Substation												
General	TDEPR	DEDSG	NCPP	\$	39,929	\$	20,899	\$ 41,17	\$	1,317	\$	600
Distribution Primary & Secondary Lines												
Primary Specific	TDEPR	DEDPLS	NCPP	\$	-	\$	-	\$-	\$	-	\$	-
Primary Demand	TDEPR	DEDPLD	NCPP		68,282		35,740	70,406	5	2,252		1,026
Primary Customer	TDEPR	DEDPLC	Cust08		32		32	307,500	)	587		3,221
Secondary Demand	TDEPR	DEDSLD	SICD		-		-	16,123	3	516		235
Secondary Customer	TDEPR	DEDSLC	Cust07		-		-	81,355	5	155		852
Total Distribution Primary & Secondary Lines		DEDLT		\$	68,314	\$	35,772	\$ 475,385	5 \$	3,510	\$	5,334
Distribution Line Transformers												
Demand	TDEPR	DEDLTD	SICDT	\$	-	\$	-	\$ 18,426	6 \$	589	\$	268
Customer	TDEPR	DEDLTC	Cust09		-		-	51,373	3	98		538
Total Distribution Line Transformers		DEDLTT		\$	-	\$	-	\$ 69,799	\$	687	\$	807
Distribution Services												
Customer	TDEPR	DEDSC	C02	\$	-	\$	-	\$-	\$	-	\$	-
Distribution Meters												
Customer	TDEPR	DEDMC	C03	\$	155	\$	155	\$-	\$	413	\$	2,264
Distribution Street & Customer Lighting												
Customer	TDEPR	DEDSCL	C04	\$	-	\$	-	\$ 3,565,925	5 \$	-	\$	-
Customer Accounts Expense												
Customer	TDEPR	DECAE	C05	\$	-	\$	-	\$-	\$	-	\$	-
Customer Service & Info. Customer	TDEPR	DECSI	C05	\$		\$		\$ -	\$		\$	
Gustomet	IDEFR	DECOI	000	φ	-	φ	-	φ -	φ	-	φ	-
Sales Expense												
Customer	TDEPR	DESEC	C06	\$	-	\$	-	\$-	\$	-	\$	-
Total		DET		\$	842,162	\$	381,815	\$ 4,262,499	) \$	9,459	\$	22,899
					. ,		,	, , , , , , , , , , , , , , , , , , , ,		-,	•	,

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System		Residential Rate RS	General Service Rate GS		Rate PS Primary	Rate PS Secondary
Regulatory Credits											
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Production Energy - Not Used Production Energy - Not Used Total Power Production Plant	TRCTN TRCTN TRCTN TRCTN TRCTN TRCTN	RCPDB RCPDI RCPDP RCPEB RCPEI RCPEP RCPT	PPBDA PPWDA PPSDA E01 E01 E01	\$	- \$ - - - - - - \$		- \$ - - - - - - - \$		\$	- \$ - - - - - - \$	- - - -
Transmission Plant Transmission Demand	TRCTN	RCRB	NCPT	\$	- \$	6	- \$	-	\$	- 4	; -
Distribution Poles Specific	TRCTN	RCPS	NCPP	\$	- \$	6	- \$	-	\$	- 4	; -
Distribution Substation General	TRCTN	RCSG	NCPP	\$	- \$	6	- \$	-	\$	- 4	; <u>-</u>
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	TRCTN TRCTN TRCTN TRCTN TRCTN	RCPLS RCPLD RCPLC RCSLD RCSLC RCLT	NCPP NCPP Cust08 SICD Cust07	\$	- \$ - - - - - - \$		- \$ - - - - - - \$	- - - -	\$	- \$ - - - - - \$	
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	TRCTN TRCTN	RCLTD RCLTC RCLTT	SICDT Cust09	\$ \$	- \$ - - \$		- \$ - - \$	-	\$ \$	- 4 - - 4	-
Distribution Services Customer	TRCTN	RCSC	C02	\$	- \$	6	- \$	-	\$	- \$	; -
Distribution Meters Customer	TRCTN	RCMC	C03	\$	- \$	6	- \$	-	\$	- \$	; -
Distribution Street & Customer Lighting Customer	TRCTN	RCSCL	C04	\$	- \$	6	- \$	-	\$	- 4	; -
Customer Accounts Expense Customer	TRCTN	RCCAE	C05	\$	- \$	6	- \$	-	\$	- \$	; -
Customer Service & Info. Customer	TRCTN	RCCSI	C05	\$	- \$	6	- \$	-	\$	- \$	; -
Sales Expense Customer	TRCTN	RCSEC	C06	\$	- \$	6	- \$	-	\$	- 4	; -
Total		RCT		\$	- \$	6	- \$	-	\$	- 9	-

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Regulatory Credits							
Power Production Plant							
Production Demand - Base	TRCTN	RCPDB	PPBDA	\$	- \$	- \$	-
Production Demand - Winter Peak	TRCTN	RCPDI	PPWDA		-	-	-
Production Demand - Summer Peak	TRCTN	RCPDP	PPSDA		-	-	-
Production Energy	TRCTN	RCPEB	E01		-	-	-
Production Energy - Not Used	TRCTN	RCPEI	E01		-	-	-
Production Energy - Not Used	TRCTN	RCPEP	E01			-	
Total Power Production Plant		RCPT		\$	- \$	- \$	-
Transmission Plant							
Transmission Demand	TRCTN	RCRB	NCPT	\$	- \$	- \$	-
Distribution Poles							
Specific	TRCTN	RCPS	NCPP	\$	- \$	- \$	-
Distribution Substation							
General	TRCTN	RCSG	NCPP	\$	- \$	- \$	-
Distribution Primary & Secondary Lines							
Primary Specific	TRCTN	RCPLS	NCPP	\$	- \$	- \$	-
Primary Demand	TRCTN	RCPLD	NCPP		-	-	-
Primary Customer	TRCTN	RCPLC	Cust08		-	-	-
Secondary Demand	TRCTN	RCSLD	SICD		-	-	-
Secondary Customer	TRCTN	RCSLC	Cust07		-	-	-
Total Distribution Primary & Secondary Lines		RCLT		\$	- \$	- \$	-
Distribution Line Transformers							
Demand	TRCTN	RCLTD	SICDT	\$	- \$	- \$	-
Customer	TRCTN	RCLTC	Cust09		-	-	-
Total Distribution Line Transformers		RCLTT		\$	- \$	- \$	-
Distribution Services							
Customer	TRCTN	RCSC	C02	\$	- \$	- \$	-
Distribution Meters	TROTH	DOMO	000	•	<u>_</u>	•	
Customer	TRCTN	RCMC	C03	\$	- \$	- \$	-
Distribution Street & Customer Lighting							
Customer	TRCTN	RCSCL	C04	\$	- \$	- \$	-
Customer Accounts Expense				•			
Customer	TRCTN	RCCAE	C05	\$	- \$	- \$	-
Customer Service & Info.							
Customer	TRCTN	RCCSI	C05	\$	- \$	- \$	-
Sales Expense							
Customer	TRCTN	RCSEC	C06	\$	- \$	- \$	-
Total		RCT		\$	- \$	- \$	-

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Regulatory Credits									
Power Production Plant									
Production Demand - Base	TRCTN	RCPDB	PPBDA	\$	- \$	-	\$-\$	- \$	-
Production Demand - Winter Peak	TRCTN	RCPDI	PPWDA		-	-	-	-	-
Production Demand - Summer Peak	TRCTN	RCPDP	PPSDA		-	-	-	-	-
Production Energy	TRCTN	RCPEB	E01		-	-	-	-	-
Production Energy - Not Used	TRCTN	RCPEI	E01		-	-	-	-	-
Production Energy - Not Used	TRCTN	RCPEP	E01		-	-	-	-	-
Total Power Production Plant		RCPT		\$	- \$	-	\$-\$	- \$	-
Transmission Plant									
Transmission Demand	TRCTN	RCRB	NCPT	\$	- \$	-	\$-\$	- \$	-
Distribution Poles									
Specific	TRCTN	RCPS	NCPP	\$	- \$	-	\$-\$	- \$	-
Distribution Substation									
General	TRCTN	RCSG	NCPP	\$	- \$	-	\$ - \$	- \$	-
Distribution Primary & Secondary Lines									
Primary Specific	TRCTN	RCPLS	NCPP	\$	- \$	-	\$-\$	- \$	-
Primary Demand	TRCTN	RCPLD	NCPP		-	-	-	-	-
Primary Customer	TRCTN	RCPLC	Cust08		-	-	-	-	-
Secondary Demand	TRCTN	RCSLD	SICD		-	-	-	-	-
Secondary Customer	TRCTN	RCSLC	Cust07		-	-	-	-	-
Total Distribution Primary & Secondary Lines		RCLT		\$	- \$	-	\$ - \$	- \$	-
Distribution Line Transformers									
Demand	TRCTN	RCLTD	SICDT	\$	- \$		\$ - \$	- \$	-
Customer	TRCTN	RCLTC	Cust09		-		-	-	-
Total Distribution Line Transformers		RCLTT		\$	- \$	-	\$ - \$	- \$	-
Distribution Services									
Customer	TRCTN	RCSC	C02	\$	- \$	-	\$-\$	- \$	-
Distribution Meters									
Customer	TRCTN	RCMC	C03	\$	- \$	-	\$-\$	- \$	-
Distribution Street & Customer Lighting									
Customer	TRCTN	RCSCL	C04	\$	- \$	-	\$-\$	- \$	-
Customer Accounts Expense									
Customer	TRCTN	RCCAE	C05	\$	- \$	-	\$-\$	- \$	-
Customer Service & Info.									
Customer	TRCTN	RCCSI	C05	\$	- \$	-	\$-\$	- \$	-
Sales Expense									
Customer	TRCTN	RCSEC	C06	\$	- \$	-	\$ - \$	- \$	-
Tatal		DOT		¢	¢.		¢ •	¢	
Total		RCT		\$	- \$	-	\$-\$	- \$	-

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System	Residential Rate RS		General Service Rate GS		Rate PS Primary		Rate PS Secondary
Accretion Expenses												
Power Production Plant Production Demand - Base Production Demand - Winter Peak	TACRTN TACRTN	ACRPDB ACRPDI	PPBDA PPWDA	\$	- 4	\$ -	\$	-	\$	-	\$	-
Production Demand - Summer Peak Production Energy Production Energy - Not Used	TACRTN TACRTN TACRTN	ACRPDP ACRPEB ACRPEI ACRPEP	PPSDA E01 E01		-	-		-		-		-
Production Energy - Not Used Total Power Production Plant	TACRTN	ACRPEP	E01	\$	- 4	\$ -	\$	-	\$	-	\$	-
Transmission Plant Transmission Demand	TACRTN	ACRRB	NCPT	\$	- \$	\$ -	\$	-	\$	-	\$	-
Distribution Poles Specific	TACRTN	ACRPS	NCPP	\$	- 9	\$ -	\$	-	\$	-	\$	-
Distribution Substation General	TACRTN	ACRSG	NCPP	\$	- 5	\$ -	\$	-	\$	-	\$	-
Distribution Primary & Secondary Lines Primary Specific Primary Demand	TACRTN TACRTN	ACRPLS ACRPLD	NCPP NCPP	\$	- \$	\$ -	\$	-	\$	-	\$	-
Primary Customer Secondary Demand Secondary Customer	TACRTN TACRTN TACRTN	ACRPLC ACRSLD ACRSLC	Cust08 SICD Cust07		- -	-				-		-
Total Distribution Primary & Secondary Lines		ACRLT		\$	- 9	\$ -	\$	-	\$	-	\$	-
Distribution Line Transformers Demand Customer Total Distribution Line Transformers	TACRTN TACRTN	ACRLTD ACRLTC ACRLTT	SICDT Cust09	\$ \$	- \$ - - \$	\$ -	\$ \$	-	\$ \$	-	\$ \$	-
Distribution Services						-		-		-		-
Customer Distribution Meters	TACRTN	ACRSC	C02	\$	- 9	\$ -	\$	-	\$	-	\$	-
Customer	TACRTN	ACRMC	C03	\$	- 9	\$ -	\$	-	\$	-	\$	-
Distribution Street & Customer Lighting Customer	TACRTN	ACRSCL	C04	\$	- 9	\$ -	\$	-	\$	-	\$	-
Customer Accounts Expense Customer	TACRTN	ACRCAE	C05	\$	- 9	\$ -	\$	-	\$	-	\$	-
Customer Service & Info. Customer	TACRTN	ACRCSI	C05	\$	- \$	\$ -	\$	-	\$	-	\$	-
Sales Expense Customer	TACRTN	ACRSEC	C06	\$	- 9	\$ -	\$	-	\$	-	\$	-
Total		ACRT		\$	- 9	\$ -	\$	-	\$	-	\$	-

# LOLP METHODOLOGY

Power Production Plant Production Demand - Base TACRTN ACRPDB PPBDA \$ Production Demand - Winter Peak TACRTN ACRPDP PPVDA Production Energy - Nat Used TACRTN ACRPDP PPSDA Production Energy - Nat Used TACRTN ACRPEB E01 Production Plant ACRPT S Production Plant Transmission Demand TACRTN ACRPEB E01 Production Plant Transmission Demand TACRTN ACRPEB E01 Production Plant TACRTN ACRPEB E01 Primary Specific TACRTN ACRPEB E01 Primary Specific TACRTN ACRPEB P01 Primary Specific TACRTN ACRPES NCPP \$ Primary Specific TACRTN ACRPLS SCD \$ Primary Specific TACRTN ACRPLS \$ Primary Specific TACRTN ACRPLS \$ Primary	Description	Ref	Name	Allocation Vector		Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Production Demand - Base Production Demand - Winter Peak Production Demand - Winter Peak TACRTN Production Demand - Summer Peak TACRTN Production Demand - Summer Peak TACRTN ACRPD Production Demand - Summer Peak TACRTN ACRPDE Production Demand - Summer Peak 	Accretion Expenses							
Production Demand - Winter Peak Production Demand - Summer Peak TACRTNTACRTN ACRPDPACRPDP PPSDAPPSDA <t< td=""><td>Power Production Plant</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Power Production Plant							
Production Demand - Summer Peak Production Energy - Not Used TACRTNTACRTN ACRPEB TACRTN ACRPEP E01	Production Demand - Base	TACRTN	ACRPDB	PPBDA	\$	- \$	- \$	-
Production Demand - Summer Peak Production Energy - Not Used TACRTNTACRTN ACRPEB TACRTNACRPEB E01	Production Demand - Winter Peak	TACRTN	ACRPDI	PPWDA		-	-	-
Production Energy Production Energy - Not Used TACRTN Total Power Production PlantTACRTN ACRPEP ACRPEPE01 <t< td=""><td>Production Demand - Summer Peak</td><td></td><td>ACRPDP</td><td>PPSDA</td><td></td><td>-</td><td>-</td><td>-</td></t<>	Production Demand - Summer Peak		ACRPDP	PPSDA		-	-	-
Production Energy - Not Used Production PlantTACRTN TACRTN ACRPEPACRPEP E01E01						-		
Production Energy - Not Used Total Power Production PlantTACRTNACRPEP ACRPTE01 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								
Total Power Production PlantACRPT\$-\$\$-\$\$>>\$>\$ <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>								
Transmission DemandTACRTNACRRBNCPT\$-\$\$-\$\$1\$1\$1	Total Power Production Plant	TACININ		LUI	\$	- \$	- \$	-
Distribution Poles SpecificTACRTNACRPSNCPP\$-\$-\$-\$-Distribution Substation GeneralTACRTNACRSGNCPP\$-\$-\$-\$-Distribution Primary & Secondary LinesTACRTNACRPLSNCPP\$-\$-\$Primary DemandTACRTNACRPLCNCPP\$-\$-\$Primary DemandTACRTNACRPLCNCPP\$-\$Primary DemandTACRTNACRPLCCust08\$Primary DemandTACRTNACRPLCCust08	Transmission Plant							
SpecificTACRTNACRPSNCPP\$-\$-\$-\$-Distribution Substation GeneralTACRTNACRSGNCPP\$-\$-\$-\$-Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Demand Secondary Demand Secondary CustomerTACRTNACRPLS ACRTNNCPP ACRPLC Custo8-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$<		TACRTN	ACRRB	NCPT	\$	- \$	- \$	-
Distribution GeneralTACRTNACRSGNCPP\$-\$-\$-\$Distribution Primary Deenific Primary Deenific Primary Demand Primary Customer Secondary Demand Secondary LinesTACRTNACRPLSNCPP NCPP\$-\$-\$-\$-Primary Customer Secondary Customer Total Distribution Line Transformers Demand CustomerTACRTNACRPLC ACRLTNCPP Custo Custo ACRLT\$-\$\$-\$ <td>Distribution Poles</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Distribution Poles							
GeneralTACRTNACRSGNCPP\$-\$-\$-\$-Distribution Primary & Secondary LinesTACRTNACRPLSNCPP\$-\$-\$Primary DemandTACRTNACRPLDNCPP\$-\$-\$ <t< td=""><td>Specific</td><td>TACRTN</td><td>ACRPS</td><td>NCPP</td><td>\$</td><td>- \$</td><td>- \$</td><td>-</td></t<>	Specific	TACRTN	ACRPS	NCPP	\$	- \$	- \$	-
Distribution Primary & Secondary LinesTACRTNACRPLSNCPP\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$	Distribution Substation							
Primary SpecificTACRTNACRPLSNCPP\$-\$-\$-\$Primary DemandTACRTNACRPLDNCPPPrimary CustomerTACRTNACRPLCCust08Secondary DemandTACRTNACRSLCCust08 <td< td=""><td>General</td><td>TACRTN</td><td>ACRSG</td><td>NCPP</td><td>\$</td><td>- \$</td><td>- \$</td><td>-</td></td<>	General	TACRTN	ACRSG	NCPP	\$	- \$	- \$	-
Primary DemandTACRTNACRPLDNCPPPrimary CustomerTACRTNACRPLCCust08Secondary DemandTACRTNACRSLDSICDSecondary CustomerTACRTNACRSLCCust07<	Distribution Primary & Secondary Lines							
Primary Customer Secondary Demand Secondary CustomerTACRTN TACRTN ACRSLDACRSLD ACRSLDCustoBTotal Distribution Line Transformers Demand CustomerTACRTN ACRTNACRLTD ACRLTSICD Custo7	Primary Specific	TACRTN	ACRPLS	NCPP	\$	- \$	- \$	-
Secondary Demand       TACRTN       ACRSLD       SICD       - <t< td=""><td>Primary Demand</td><td>TACRTN</td><td>ACRPLD</td><td>NCPP</td><td></td><td>-</td><td>-</td><td>-</td></t<>	Primary Demand	TACRTN	ACRPLD	NCPP		-	-	-
Secondary Demand       TACRTN       ACRSLD       SICD       - <t< td=""><td>Primary Customer</td><td>TACRTN</td><td>ACRPLC</td><td>Cust08</td><td></td><td>-</td><td>-</td><td>-</td></t<>	Primary Customer	TACRTN	ACRPLC	Cust08		-	-	-
Secondary Customer       TACRTN       ACRSLC       Cust07       -		TACRTN	ACRSLD	SICD		-	-	-
Total Distribution Primary & Secondary LinesACRLT\$-\$-\$-\$-Distribution Line Transformers CustomerTACRTN TACRTN ACRLTCACRLTCSICDT Cust09\$-\$-\$-Distribution Line Transformers CustomerTACRTN TACRTN ACRLTCACRLTCCust09 Cust09-\$-\$-\$-Distribution Services CustomerTACRTN TACRTNACRSCC02\$-\$\$-\$-Distribution Meters CustomerTACRTNACRMCC03\$-\$-\$-\$-						-	-	-
Demand CustomerTACRTN TACRTN ACRLTCACRLTD Cust09SICDT Cust09\$-\$-\$-\$-Total Distribution Line TransformersTACRTN ACRLTCACRLTC Cust09Cust09-\$-\$ </td <td>Total Distribution Primary &amp; Secondary Lines</td> <td></td> <td></td> <td></td> <td>\$</td> <td>- \$</td> <td>- \$</td> <td>-</td>	Total Distribution Primary & Secondary Lines				\$	- \$	- \$	-
Customer       TACRTN       ACRLTC       Cust09       - <td>Distribution Line Transformers</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Distribution Line Transformers							
Customer       TACRTN       ACRLTC       Cust09       - <td>Demand</td> <td>TACRTN</td> <td>ACRLTD</td> <td>SICDT</td> <td>\$</td> <td>- \$</td> <td>- \$</td> <td>-</td>	Demand	TACRTN	ACRLTD	SICDT	\$	- \$	- \$	-
Distribution Services       TACRTN       ACRSC       C02       \$       -       \$       -         Distribution Meters       Customer       TACRTN       ACRMC       C03       \$       -       \$       -       \$       -	Customer	TACRTN	ACRLTC	Cust09		-	-	-
Customer       TACRTN       ACRSC       C02       \$       -       \$       -       \$       -         Distribution Meters       Customer       TACRTN       ACRMC       C03       \$       -       \$       -       \$       -	Total Distribution Line Transformers		ACRLTT		\$	- \$	- \$	-
Customer       TACRTN       ACRSC       C02       \$       -       \$       -       \$       -         Distribution Meters       Customer       TACRTN       ACRMC       C03       \$       -       \$       -       \$       -	Distribution Services							
Customer TACRTN ACRMC C03 \$ - \$ - \$ -		TACRTN	ACRSC	C02	\$	- \$	- \$	-
Customer TACRTN ACRMC C03 \$ - \$ - \$ -	Distribution Maters							
Distribution Street & Customer Lighting		TACRTN	ACRMC	C03	\$	- \$	- \$	-
	Distribution Street & Customer Lighting							
Customer TACRTN ACRSCL C04 \$ - \$ - \$ -		TACRTN	ACRSCL	C04	\$	- \$	- \$	-
Customer Accounts Expense Customer TACRTN ACRCAE C05 \$ - \$ - \$ -	Customer Accounts Expense Customer	TACRTN	ACRCAE	C05	\$	- \$	- \$	-
Customer Service & Info. Customer TACRTN ACRCSI C05 \$ - \$ - \$ -	Customer Service & Info.	TACRTN	ACROSI	C05	\$	- \$	- \$	
	Customer	AONIN	,,0,,001	000	Ψ	- ψ	- φ	-
	Sales Expense							
Customer TACRTN ACRSEC C06 \$ - \$ - \$ -	Customer	IACRTN	ACRSEC	C06	\$	- \$	- \$	-
Total ACRT \$ - \$ - \$ -	Total		ACRT		\$	- \$	- \$	-

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector	Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Accretion Expenses								
Power Production Plant								
Production Demand - Base	TACRTN	ACRPDB	PPBDA	\$ - \$	-	\$-\$	- \$	-
Production Demand - Winter Peak	TACRTN	ACRPDI	PPWDA	-	-	-	-	-
Production Demand - Summer Peak	TACRTN	ACRPDP	PPSDA	-	-	-	-	-
Production Energy	TACRTN	ACRPEB	E01	-	-	-	-	-
Production Energy - Not Used	TACRTN	ACRPEI	E01	-	-	-	-	-
Production Energy - Not Used	TACRTN	ACRPEP	E01	-	-	-	-	-
Total Power Production Plant		ACRPT		\$ - \$	-	\$-\$	- \$	-
Transmission Plant								
Transmission Demand	TACRTN	ACRRB	NCPT	\$ - \$	-	\$ - \$	- \$	-
Distribution Poles								
Specific	TACRTN	ACRPS	NCPP	\$ - \$	-	\$-\$	- \$	-
Distribution Substation								
General	TACRTN	ACRSG	NCPP	\$ - \$	-	\$-\$	- \$	-
Distribution Primary & Secondary Lines								
Primary Specific	TACRTN	ACRPLS	NCPP	\$ - \$	-	\$-\$	- \$	-
Primary Demand	TACRTN	ACRPLD	NCPP	-	-	-	-	-
Primary Customer	TACRTN	ACRPLC	Cust08	-	-	-	-	-
Secondary Demand	TACRTN	ACRSLD	SICD	-	-	-	-	-
Secondary Customer	TACRTN	ACRSLC	Cust07	-	-	-	-	-
Total Distribution Primary & Secondary Lines		ACRLT		\$ - \$	-	\$-\$	- \$	-
Distribution Line Transformers								
Demand	TACRTN	ACRLTD	SICDT	\$ - \$	-	\$-\$	- \$	-
Customer	TACRTN	ACRLTC	Cust09	-	-	-	-	-
Total Distribution Line Transformers		ACRLTT		\$ - \$	-	\$-\$	- \$	-
Distribution Services								
Customer	TACRTN	ACRSC	C02	\$ - \$	-	\$-\$	- \$	-
Distribution Meters								
Customer	TACRTN	ACRMC	C03	\$ - \$	-	\$-\$	- \$	-
Distribution Street & Customer Lighting								
Customer	TACRTN	ACRSCL	C04	\$ - \$	-	\$ - \$	- \$	-
Customer Accounts Expense								
Customer	TACRTN	ACRCAE	C05	\$ - \$	-	\$-\$	- \$	-
Customer Service & Info.								
Customer	TACRTN	ACRCSI	C05	\$ - \$	-	\$-\$	- \$	-
Sales Expense								
Customer	TACRTN	ACRSEC	C06	\$ - \$	-	\$-\$	- \$	-
Total		ACRT		\$ - \$	-	\$-\$	- \$	-

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# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector	Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Property and Other Taxes								
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Production Energy - Not Used Production Energy - Not Used	PTAX PTAX PTAX PTAX PTAX PTAX	PTPPDB PTPPDI PTPPDP PTPPEB PTPPEI PTPPEP	PPBDA PPWDA PPSDA E01 E01 E01	\$ 6,289,767 6,588,929 5,416,077 - -	2,837,257 2,972,206 2,443,143 - - -	716,859 750,955 617,282 - -	72,525 75,975 62,451 - - -	918,339 962,019 790,776 - - -
Total Power Production Plant		PTPPT		\$ 18,294,773	\$ 8,252,605	\$ 2,085,095	\$ 210,951	\$ 2,671,134
Transmission Plant Transmission Demand	PTAX	PTTRB	NCPT	\$ 3,464,937	\$ 1,539,776	\$ 443,220	\$ 39,381	\$ 457,074
Distribution Poles Specific	PTAX	PTDPS	NCPP	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution Substation General	PTAX	PTDSG	NCPP	\$ 1,206,640	\$ 578,944	\$ 166,647	\$ 14,807	\$ 171,856
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	PTAX PTAX PTAX PTAX PTAX	PTDPLS PTDPLD PTDPLC PTDSLD PTDSLC PTDLT	NCPP NCPP Cust08 SICD Cust07	\$ 2,063,479 3,283,761 567,258 862,037 6,776,535	\$ 990,054 2,830,974 476,047 748,990 5,046,065	\$ 284,984 351,721 87,115 93,055 816,874	\$ 25,321 560 - 25,881	\$ 293,892 21,958 - 315,850
Distribution Line Transformers Demand Customer Total Distribution Line Transformers	PTAX PTAX	PTDLTD PTDLTC PTDLTT	SICDT Cust09	\$ 784,122 548,377 1,332,499	\$ 544,024 472,964 1,016,989	\$ 99,554 58,761 158,315	\$ 	\$ 87,678 3,668 91,346
Distribution Services Customer	PTAX	PTDSC	C02	\$ 272,334	\$ 209,321	\$ 52,679	\$ -	\$ 9,190
Distribution Meters Customer	ΡΤΑΧ	PTDMC	C03	\$ 315,900	\$ 221,105	\$ 65,006	\$ 2,531	\$ 17,487
Distribution Street & Customer Lighting Customer	PTAX	PTDSCL	C04	\$ 865,590	\$ -	\$ -	\$ -	\$ -
Customer Accounts Expense Customer	PTAX	PTCAE	C05	\$ -	\$ -	\$ -	\$ -	\$ -
Customer Service & Info. Customer	ΡΤΑΧ	PTCSI	C05	\$ -	\$ -	\$ -	\$ -	\$ -
Sales Expense Customer	ΡΤΑΧ	PTSEC	C06	\$ -	\$ -	\$ -	\$ -	\$ -
Total		PTT		\$ 32,529,209	\$ 16,864,804	\$ 3,787,838	\$ 293,550	\$ 3,733,939

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Property and Other Taxes									
Power Production Plant Production Demand - Base	PTAX	PTPPDB	PPBDA	\$	758,597	\$	483,345	\$	429,951
Production Demand - Winter Peak Production Demand - Summer Peak Production Energy	PTAX PTAX PTAX	PTPPDI PTPPDP PTPPEB	PPWDA PPSDA E01		794,679 653,223 -		506,334 416,205 -		450,401 370,228
Production Energy - Not Used	PTAX	PTPPEI	E01		-		-		-
Production Energy - Not Used Total Power Production Plant	ΡΤΑΧ	PTPPEP PTPPT	E01	\$	- 2,206,499	\$	- 1,405,884	\$	- 1,250,580
Transmission Plant									
Transmission Demand	PTAX	PTTRB	NCPT	\$	415,798	\$	246,879	\$	255,722
Distribution Poles Specific	ΡΤΑΧ	PTDPS	NCPP	\$	-	\$	-	\$	-
Distribution Substation									
General	PTAX	PTDSG	NCPP	\$	156,337	\$	92,825	\$	-
Distribution Primary & Secondary Lines									
Primary Specific	PTAX	PTDPLS	NCPP	\$	-	\$	-	\$	-
Primary Demand	PTAX	PTDPLD	NCPP		267,352		158,740		-
Primary Customer	PTAX	PTDPLC	Cust08		820		2,146		-
Secondary Demand	PTAX	PTDSLD	SICD		-		-		-
Secondary Customer Total Distribution Primary & Secondary Lines	PTAX	PTDSLC PTDLT	Cust07	\$	- 268,172	\$	- 160,886	\$	-
		TIDET		Ŷ	200,172	Ŷ	100,000	Ψ	
Distribution Line Transformers Demand	PTAX	PTDLTD	SICDT	\$	-	\$	48,185	\$	-
Customer	PTAX	PTDLTC	Cust09	•	-	•	359	•	-
Total Distribution Line Transformers		PTDLTT		\$	-	\$	48,543	\$	-
Distribution Services						•			
Customer	PTAX	PTDSC	C02	\$	-	\$	1,144	\$	-
Distribution Meters Customer	PTAX	PTDMC	C03	\$	3,963	\$	1,842	\$	3,242
Distribution Street & Customer Lighting Customer	PTAX	PTDSCL	C04	\$	-	\$	-	\$	-
Customer Accounts Expense Customer	PTAX	PTCAE	C05	\$	-	\$	-	\$	-
Customer Service & Info. Customer	PTAX	PTCSI	C05	\$	-	\$	-	\$	-
Sales Expense Customer	PTAX	PTSEC	C06	\$	-	\$	-	\$	-
Total		PTT		\$	3,050,768	\$	1,958,003	\$	1,509,543

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1		Special Contract Customer #2	Street Lighting Rate RLS, LS, DS		Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Property and Other Taxes											
Power Production Plant											
Production Demand - Base	PTAX	PTPPDB	PPBDA	\$	49,143	\$	21,230				\$ 957
Production Demand - Winter Peak	PTAX	PTPPDI	PPWDA		51,481		22,239	1,587		51	1,002
Production Demand - Summer Peak	PTAX	PTPPDP	PPSDA		42,317		18,281	1,305		42	824
Production Energy	PTAX	PTPPEB	E01		-		-	-		-	-
Production Energy - Not Used	PTAX	PTPPEI	E01		-		-	-		-	-
Production Energy - Not Used	PTAX	PTPPEP	E01		-		-	-		-	-
Total Power Production Plant		PTPPT		\$	142,941	\$	61,750	\$ 4,407	\$	143	\$ 2,783
Transmission Plant											
Transmission Demand	PTAX	PTTRB	NCPT	\$	25,778	\$	13,493	\$ 26,580	\$	850	\$ 387
Distribution Poles											
Specific	PTAX	PTDPS	NCPP	\$	-	\$	-	\$-	\$	-	\$ -
Distribution Substation											
General	PTAX	PTDSG	NCPP	\$	9,692	\$	5,073	\$ 9,994	\$	320	\$ 146
Distribution Primary & Secondary Lines											
Primary Specific	PTAX	PTDPLS	NCPP	\$		\$	-	\$-	\$		\$ -
Primary Demand	PTAX	PTDPLD	NCPP		16,575		8,675	17,090		547	249
Primary Customer	PTAX	PTDPLC	Cust08		8		8	74,642		143	782
Secondary Demand	PTAX	PTDSLD	SICD		-		-	3,914		125	57
Secondary Customer	PTAX	PTDSLC	Cust07		-		-	19,748		38	207
Total Distribution Primary & Secondary Lines	;	PTDLT		\$	16,583	\$	8,683	\$ 115,395	\$	852	\$ 1,295
Distribution Line Transformers											
Demand	PTAX	PTDLTD	SICDT	\$	-	\$	-	\$ 4,473		143	
Customer	PTAX	PTDLTC	Cust09		-		-	12,470		24	131
Total Distribution Line Transformers		PTDLTT		\$	-	\$	-	\$ 16,943	\$	167	\$ 196
Distribution Services											
Customer	PTAX	PTDSC	C02	\$	-	\$	-	\$ -	\$	-	\$ -
Distribution Meters											
Customer	PTAX	PTDMC	C03	\$	38	\$	38	\$-	\$	100	\$ 550
Distribution Street & Customer Lighting											
Customer	PTAX	PTDSCL	C04	\$	-	\$	-	\$ 865,590	\$	-	\$ -
Customer Accounts Expense											
Customer	PTAX	PTCAE	C05	\$	-	\$	-	\$-	\$	-	\$ -
Customer Service & Info.											
Customer Service & Into.	PTAX	PTCSI	C05	\$	-	\$	-	\$ -	\$	-	\$ -
o 1 - 5											
Sales Expense	DTAX	DTOFO	000	•		•		•	•		•
Customer	PTAX	PTSEC	C06	\$	-	\$	-	\$ -	\$	-	\$ -
Total		PTT		\$	195,031	\$	89,036	\$ 1,038,909	\$	2,431	\$ 5,356

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Amortization of ITC									
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Production Energy - Not Used Production Energy - Not Used Total Power Production Plant	OTAX OTAX OTAX OTAX OTAX OTAX	OTPPDB OTPPDI OTPPDP OTPPEB OTPPEI OTPPEP OTPPT	PPBDA PPWDA PPSDA E01 E01 E01	\$ \$	(193,848) \$ (203,068) (166,921) - - (563,836) \$	(87,443) \$ (91,602) (75,297) - - (254,341) \$	(22,093) (23,144) (19,024) - - (64,262)	(2,342) (1,925) - -	(29,649) (24,371) - - -
Transmission Plant Transmission Demand	ΟΤΑΧ	OTTRB	NCPT	\$ \$	(106,788) \$	(47,455) \$			
Transmission Demand	UTAX	UTIRD	NCPT	φ	(100,700) \$	(47,455) \$	(13,660)	\$ (1,214)	\$ (14,087)
Distribution Poles Specific	ΟΤΑΧ	OTDPS	NCPP	\$	- \$	- \$	-	\$-	\$-
Distribution Substation									
General	OTAX	OTDSG	NCPP	\$	(37,188) \$	(17,843) \$	(5,136)	\$ (456)	\$ (5,297)
Distribution Primary & Secondary Lines Primary Specific	ΟΤΑΧ	OTDPLS	NCPP	\$	- \$	- \$		\$-	\$ -
Primary Demand Primary Customer Secondary Demand	OTAX OTAX OTAX	OTDPLD OTDPLC OTDSLD	NCPP Cust08 SICD		(63,595) (101,204) (17,483)	(30,513) (87,249) (14,672)	(8,783) (10,840) (2,685)	(780) (17) -	(9,058) (677) -
Secondary Customer Total Distribution Primary & Secondary Lines	ΟΤΑΧ	OTDSLC OTDLT	Cust07	\$	(26,568) (208,850) \$	(23,084) (155,517) \$	(2,868) (25,176)	\$ (798)	\$ (9,734)
Distribution Line Transformers									
Demand Customer Total Distribution Line Transformers	OTAX OTAX	OTDLTD OTDLTC OTDLTT	SICDT Cust09	\$ \$	(24,166) \$ (16,901) (41,067) \$	(16,767) \$ (14,577) (31,343) \$	(3,068) (1,811) (4,879)	-	\$ (2,702) (113) \$ (2,815)
Distribution Services Customer	OTAX	OTDSC	C02	\$	(8,393) \$	(6,451) \$	(1,624)	\$-	\$ (283)
Distribution Meters Customer	OTAX	OTDMC	C03	\$	(9,736) \$	(6,814) \$	(2,003)	\$ (78)	\$ (539)
Distribution Street & Customer Lighting Customer	ΟΤΑΧ	OTDSCL	C04	\$	(26,677) \$	- \$	-	\$-	\$-
Customer Accounts Expense Customer	ΟΤΑΧ	OTCAE	C05	\$	- \$	- \$	-	\$-	\$-
Customer Service & Info. Customer	ΟΤΑΧ	OTCSI	C05	\$	- \$	- \$	-	\$-	\$-
Sales Expense Customer	ΟΤΑΧ	OTSEC	C06	\$	- \$	- \$	-	\$-	\$-
Total		OTT		\$	(1,002,535) \$	(519,765) \$	(116,739)	\$ (9,047)	\$ (115,078)

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Amortization of ITC									
Power Production Plant									
Production Demand - Base	OTAX	OTPPDB	PPBDA	\$	(23,380)	\$	(14,896)	\$	(13,251)
Production Demand - Winter Peak	ΟΤΑΧ	OTPPDI	PPWDA		(24,492)		(15,605)		(13,881)
Production Demand - Summer Peak	OTAX	OTPPDP	PPSDA		(20,132)		(12,827)		(11,410)
Production Energy	OTAX	OTPPEB	E01		(,)		(,=)		-
Production Energy - Not Used	OTAX	OTPPEI	E01				-		
Production Energy - Not Used	OTAX	OTPPEP	E01						
Total Power Production Plant		OTPPT	LUI	\$	(68,003)	¢	(43,329)	¢	(38,542)
		UIFFI		Ψ	(00,003)	φ	(43,329)	φ	(30,342)
Transmission Plant									
Transmission Demand	OTAX	OTTRB	NCPT	\$	(12,815)	\$	(7,609)	\$	(7,881)
Distribution Poles									
Specific	OTAX	OTDPS	NCPP	\$	-	\$	-	\$	-
Distrikution Outstation									
Distribution Substation	OTAY	OTDOO	NODD	¢	(4.040)	¢	(0.004)	¢	
General	OTAX	OTDSG	NCPP	\$	(4,818)	\$	(2,861)	\$	-
Distribution Primary & Secondary Lines									
Primary Specific	OTAX	OTDPLS	NCPP	\$	-	\$	-	\$	-
Primary Demand	OTAX	OTDPLD	NCPP		(8,240)		(4,892)		-
Primary Customer	OTAX	OTDPLC	Cust08		(25)		(66)		-
Secondary Demand	OTAX	OTDSLD	SICD		-		- /		-
Secondary Customer	ΟΤΑΧ	OTDSLC	Cust07		-		-		-
Total Distribution Primary & Secondary Lines		OTDLT		\$	(8,265)	\$	(4,958)	\$	-
Distribution Line Transformers									
Demand	ΟΤΑΧ	OTDLTD	SICDT	\$		\$	(1,485)	¢	
Customer	OTAX	OTDLTC	Cust09	φ	-	φ	(1,403)	φ	-
Total Distribution Line Transformers	UTAX	OTDLTC	Cusios	\$	-	\$	(1,496)	¢	-
Total Distribution Line Transformers		UIDLII		φ	-	Þ	(1,490)	φ	-
Distribution Services									
Customer	OTAX	OTDSC	C02	\$	-	\$	(35)	\$	-
Distribution Meters									
Customer	OTAX	OTDMC	C03	\$	(122)	\$	(57)	\$	(100)
Distribution Street & Customer Lighting									
Customer	OTAX	OTDSCL	C04	\$	-	\$	-	\$	-
Customer Accounts Expense									
Customer	OTAX	OTCAE	C05	\$	-	\$	-	\$	-
Customer Service & Info.	OTAY	07001	005	•		•		•	
Customer	OTAX	OTCSI	C05	\$	-	\$	-	\$	-
Sales Expense									
Customer	ΟΤΑΧ	OTSEC	C06	\$	-	\$	-	\$	-
				•		,			
Total		OTT		\$	(94,023)	\$	(60,345)	\$	(46,523)
					,		,		,

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Amortization of ITC									
Power Production Plant									
Production Demand - Base	ΟΤΑΧ	OTPPDB	PPBDA	\$	(1,515) \$	(654)	\$ (47) \$	(2) \$	(29)
Production Demand - Winter Peak	OTAX	OTPPDI	PPWDA	·	(1,587)	(685)	(49)	(2)	(31)
Production Demand - Summer Peak	OTAX	OTPPDP	PPSDA		(1,304)	(563)	(40)	(1)	(25)
Production Energy	OTAX	OTPPEB	E01		(1,001)	-	(10)	(.)	()
Production Energy - Not Used	OTAX	OTPPEI	E01		-		_	_	-
Production Energy - Not Used	OTAX	OTPPEP	E01		_	-	_	-	-
Total Power Production Plant	UTAX	OTPPE	EUT	\$	(4,405) \$	(1,903)	\$ (136) \$	(4) \$	(86)
Transmission Plant									
Transmission Demand	ΟΤΑΧ	OTTRB	NCPT	\$	(794) \$	(416)	\$ (819) \$	(26) \$	(12)
Distribution Poles									
Specific	ΟΤΑΧ	OTDPS	NCPP	\$	- \$	-	\$-\$	- \$	-
Distribution Substation									
General	ΟΤΑΧ	OTDSG	NCPP	\$	(299) \$	(156)	\$ (308) \$	(10) \$	(4)
Distribution Primary & Secondary Lines									
Primary Specific	OTAX	OTDPLS	NCPP	\$	- \$		\$-\$	- \$	-
Primary Demand	OTAX	OTDPLD	NCPP		(511)	(267)	(527)	(17)	(8)
Primary Customer	OTAX	OTDPLC	Cust08		(0)	(0)	(2,300)	(4)	(24)
Secondary Demand	OTAX	OTDSLD	SICD		-	-	(121)	(4)	(2)
Secondary Customer	OTAX	OTDSLC	Cust07		-	-	(609)	(1)	(6)
Total Distribution Primary & Secondary Lines		OTDLT		\$	(511) \$	(268)	\$ (3,556) \$	(26) \$	(40)
Distribution Line Transformers									
Demand	OTAX	OTDLTD	SICDT	\$	- \$	-	\$ (138) \$	(4) \$	(2)
Customer	OTAX	OTDLTC	Cust09		-	-	(384)	(1)	(4)
Total Distribution Line Transformers		OTDLTT		\$	- \$	-	\$ (522) \$	(5) \$	(6)
Distribution Services									
Customer	ΟΤΑΧ	OTDSC	C02	\$	- \$	-	\$ - \$	- \$	-
Distribution Meters	ΟΤΑΧ	OTDMC	C03	\$	(1) (1)	(1)	\$-\$	(2) ¢	(17)
Customer	UTAX	OTDIVIC	003	φ	(1) \$	(1)	φ - φ	(3) \$	(17)
Distribution Street & Customer Lighting Customer	ΟΤΑΧ	OTDSCL	C04	\$	- \$		\$ (26.677) \$	- \$	
	UTAX	UIDSCL	04	φ	- ⊅	-	\$ (26,677) \$	- ⊅	-
Customer Accounts Expense Customer	ΟΤΑΧ	OTCAE	C05	\$	- \$		\$-\$	- \$	
	UTAX	OTCAL	005	Ψ	- V	-	φ - φ	- <b></b>	-
Customer Service & Info. Customer	ΟΤΑΧ	OTCSI	C05	\$	- \$	-	\$-\$	- \$	_
		01001	000	Ψ	- ψ	-	φ - ψ	- φ	-
Sales Expense Customer	ΟΤΑΧ	OTSEC	C06	\$	- \$	-	\$-\$	- \$	
Guatomet	UTAA	UISEU	000	φ	- Þ	-	φ - φ	- ⊅	-
Total		OTT		\$	(6,011) \$	(2,744)	\$ (32,019) \$	(75) \$	(165)

# LOLP METHODOLOGY

Description	Ret	f Name	Allocation Vector	Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Other Expenses								
Power Production Plant								
Production Demand - Base	OT	OTPPDB	PPBDA	\$ -	\$ -	\$ -	\$ -	\$ -
Production Demand - Winter Peak	OT	OTPPDI	PPWDA	-	-	-	-	-
Production Demand - Summer Peak	OT	OTPPDP	PPSDA	-	-	-	-	-
Production Energy	OT	OTPPEB	E01	-	-	-	-	-
Production Energy - Not Used	OT	OTPPEI	E01	-	-	-	-	-
Production Energy - Not Used	OT	OTPPEP	E01	-	-	-	-	-
Total Power Production Plant		OTPPT		\$ -	\$ -	\$ -	\$ -	\$ -
Transmission Plant								
Transmission Demand	OT	OTTRB	NCPT	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution Poles								
Specific	OT	OTDPS	NCPP	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution Substation								
General	ОТ	OTDSG	NCPP	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution Primary & Secondary Lines								
Primary Specific	OT	OTDPLS	NCPP	\$ -	\$ -	\$ -	\$ -	\$ -
Primary Demand	OT	OTDPLD	NCPP	-	-	-	-	-
Primary Customer	OT	OTDPLC	Cust08	-	-	-	-	-
Secondary Demand	OT	OTDSLD	SICD	-	-	-	-	-
Secondary Customer	OT	OTDSLC	Cust07	-	-	-	-	-
Total Distribution Primary & Secondary Lines		OTDLT		\$ -	\$ -	\$ -	\$ -	\$ -
Distribution Line Transformers								
Demand	OT	OTDLTD	SICDT	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	OT	OTDLTC	Cust09	-	-	-	-	-
Total Distribution Line Transformers		OTDLTT		\$ -	\$ -	\$ -	\$ -	\$ -
Distribution Services								
Customer	OT	OTDSC	C02	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution Meters								
Customer	OT	OTDMC	C03	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution Street & Customer Lighting								
Customer	ОТ	OTDSCL	C04	\$ -	\$ -	\$ -	\$ -	\$ -
Customer Accounts Expense								
Customer	OT	OTCAE	C05	\$ -	\$ -	\$ -	\$ -	\$ -
Customer Service & Info.								
Customer	OT	OTCSI	C05	\$ -	\$ -	\$ -	\$ -	\$ -
Sales Expense								
Customer	OT	OTSEC	C06	\$ -	\$ -	\$ -	\$ -	\$ -
Total		ОТТ		\$ -	\$ -	\$ -	\$ -	\$ -

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Other Expenses							
Power Production Plant							
Production Demand - Base	OT	OTPPDB	PPBDA	\$	- \$	- \$	-
Production Demand - Winter Peak	OT	OTPPDI	PPWDA		-	-	-
Production Demand - Summer Peak	ОТ	OTPPDP	PPSDA		-	-	-
Production Energy	OT	OTPPEB	E01		-	-	-
Production Energy - Not Used	OT	OTPPEI	E01		-	-	-
Production Energy - Not Used	OT	OTPPEP	E01		-	-	-
Total Power Production Plant		OTPPT		\$	- \$	- \$	-
Transmission Plant							
Transmission Demand	ОТ	OTTRB	NCPT	\$	- \$	- \$	-
Distribution Poles							
Specific	ОТ	OTDPS	NCPP	\$	- \$	- \$	-
Distribution Substation							
General	ОТ	OTDSG	NCPP	\$	- \$	- \$	-
Distribution Primary & Secondary Lines							
Primary Specific	OT	OTDPLS	NCPP	\$	- \$	- \$	-
Primary Demand	OT	OTDPLD	NCPP		-	-	-
Primary Customer	OT	OTDPLC	Cust08		-	-	-
Secondary Demand	ОТ	OTDSLD	SICD		-	-	-
Secondary Customer	ОТ	OTDSLC	Cust07		-	-	-
Total Distribution Primary & Secondary Lines		OTDLT		\$	- \$	- \$	-
Distribution Line Transformers							
Demand	OT	OTDLTD	SICDT	\$	- \$	- \$	-
Customer	OT	OTDLTC	Cust09	•	-	-	-
Total Distribution Line Transformers		OTDLTT		\$	- \$	- \$	-
Distribution Services							
Customer	OT	OTDSC	C02	\$	- \$	- \$	-
Distribution Meters							
Customer	OT	OTDMC	C03	\$	- \$	- \$	-
Distribution Street & Customer Lighting							
Customer	ОТ	OTDSCL	C04	\$	- \$	- \$	-
Customer Accounts Expense							
Customer	ОТ	OTCAE	C05	\$	- \$	- \$	-
Customer Service & Info.							
Customer	ОТ	OTCSI	C05	\$	- \$	- \$	-
Sales Expense							
Customer	ОТ	OTSEC	C06	\$	- \$	- \$	-
Total		OTT		\$	- \$	- \$	-
				•	•	•	

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Other Expenses									
Power Production Plant									
Production Demand - Base	OT	OTPPDB	PPBDA	\$	- \$	-	\$ -	\$-\$	-
Production Demand - Winter Peak	OT	OTPPDI	PPWDA		-	-	-	-	-
Production Demand - Summer Peak	OT	OTPPDP	PPSDA		-	-	-	-	-
Production Energy	OT	OTPPEB	E01		-	-	-	-	-
Production Energy - Not Used	OT	OTPPEI	E01		-	-	-	-	-
Production Energy - Not Used	OT	OTPPEP	E01		-	-	-	-	-
Total Power Production Plant		OTPPT		\$	- \$	-	\$ -	\$ - \$	-
Transmission Plant									
Transmission Demand	ОТ	OTTRB	NCPT	\$	- \$	-	\$ -	\$ - \$	-
Distribution Poles									
Specific	OT	OTDPS	NCPP	\$	- \$	-	\$ -	\$ - \$	-
Distribution Substation									
General	OT	OTDSG	NCPP	\$	- \$	-	\$ -	\$ - \$	-
Distribution Primary & Secondary Lines									
Primary Specific	ОТ	OTDPLS	NCPP	\$	- \$	-	\$ -	\$-\$	-
Primary Demand	ОТ	OTDPLD	NCPP		-	-	-	-	-
Primary Customer	ОТ	OTDPLC	Cust08		-	-	-	-	-
Secondary Demand	ОТ	OTDSLD	SICD		-	-	-	-	-
Secondary Customer	ОТ	OTDSLC	Cust07		-	-	-	-	-
Total Distribution Primary & Secondary Lines		OTDLT		\$	- \$	-	\$ -	\$-\$	-
Distribution Line Transformers									
Demand	ОТ	OTDLTD	SICDT	\$	- \$	-	\$ -	\$-\$	-
Customer	ОТ	OTDLTC	Cust09		-	-	-	-	-
Total Distribution Line Transformers		OTDLTT		\$	- \$	-	\$ -	\$-\$	-
Distribution Services									
Customer	OT	OTDSC	C02	\$	- \$	-	\$ -	\$ - \$	-
Distribution Meters									
Customer	OT	OTDMC	C03	\$	- \$	-	\$ -	\$ - \$	-
Distribution Street & Customer Lighting									
Customer	OT	OTDSCL	C04	\$	- \$	-	\$ -	\$ - \$	-
Customer Accounts Expense									
Customer	OT	OTCAE	C05	\$	- \$	-	\$ -	\$ - \$	-
Customer Service & Info.									
Customer	ОТ	OTCSI	C05	\$	- \$	-	\$ -	\$ - \$	-
Sales Expense									
Customer	OT	OTSEC	C06	\$	- \$	-	\$ -	\$-\$	-
Total		OTT		\$	- \$	_	\$ -	\$ - \$	
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# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary		Rate PS Secondary
Interest Expenses										
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak Production Energy Production Energy - Not Used Production Energy - Not Used Total Power Production Plant	INTLTD INTLTD INTLTD INTLTD INTLTD INTLTD	INTPDB INTPDI INTPDP INTPEB INTPEI INTPEP INTPT	PPBDA PPWDA PPSDA E01 E01 E01	\$	12,024,044 12,595,947 10,353,826 - - - 34,973,817	5,423,937 5,681,917 4,670,517 - - 15,776,370	1,370,407 1,435,588 1,180,048 - - 3,986,043	138,645 145,240 119,387 - - - 403,272	·	1,755,574 1,839,075 1,511,714 - - 5,106,364
Transmission Plant Transmission Demand	INTLTD	INTTRB	NCPT	\$	6,623,863	2,943,564	847,297	75,283		873,781
Distribution Poles Specific	INTLTD	INTDPS	NCPP	\$	-	\$ -	\$	\$ -	\$	-
Distribution Substation General	INTLTD	INTDSG	NCPP	\$	2,306,714	\$ 1,106,757	\$ 318,577	\$ 28,306	\$	328,535
Distribution Primary & Secondary Lines Primary Specific Primary Demand Primary Customer Secondary Demand Secondary Customer Total Distribution Primary & Secondary Lines	INTLTD INTLTD INTLTD INTLTD INTLTD	INDPLS INDPLD INDPLC INDSLD INDSLC INDLT	NCPP NCPP Cust08 SICD Cust07	\$	3,944,718 6,277,512 1,084,418 1,647,942 12,954,590	\$ 1,892,669 5,411,927 910,052 1,431,831 9,646,479	\$ 544,800 672,379 166,535 177,891 1,561,605	\$ 48,406 1,070 - - 49,476	\$	561,828 41,977 - - 603,805
<b>Distribution Line Transformers</b> Demand Customer Total Distribution Line Transformers	INTLTD INTLTD	INDLTD INDLTC INDLTT	SICDT Cust09	\$ \$	1,498,993 1,048,324 2,547,317	1,040,002 904,158 1,944,160	190,316 112,333 302,649	-	\$ \$	167,612 7,013 174,625
Distribution Services Customer	INTLTD	INDSC	C02	\$	520,617	\$ 400,155	\$ 100,706	\$ -	\$	17,569
Distribution Meters Customer	INTLTD	INDMC	C03	\$	603,902	\$ 422,683	\$ 124,271	\$ 4,838	\$	33,430
Distribution Street & Customer Lighting Customer	INTLTD	INDSCL	C04	\$	1,654,735	\$ -	\$ -	\$ -	\$	-
Customer Accounts Expense Customer	INTLTD	INCAE	C05	\$	-	\$ -	\$ -	\$ -	\$	-
Customer Service & Info. Customer	INTLTD	INCSI	C05	\$	-	\$ -	\$ -	\$ -	\$	-
Sales Expense Customer	INTLTD	INSEC	C06	\$	-	\$ -	\$ -	\$ -	\$	-
Total		INTT		\$	62,185,554	\$ 32,240,169	\$ 7,241,147	\$ 561,175	\$	7,138,109

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector	Rate TOD Primary	Rate TOD Secondary		Rate RTS Transmission
Interest Expenses							
Power Production Plant Production Demand - Base Production Demand - Winter Peak Production Demand - Summer Peak	INTLTD INTLTD INTLTD	INTPDB INTPDI INTPDP	PPBDA PPWDA PPSDA	\$ 1,450,198 1,519,174 1,248,756	\$ 924,002 967,951 795,652	\$	821,930 861,024 707,759
Production Energy Production Energy - Not Used	INTLTD INTLTD	INTPEB INTPEI	E01 E01	-	-		
Production Energy - Not Used Total Power Production Plant	INTLTD	INTPEP INTPT	E01	\$ - 4,218,127	\$ - 2,687,606	\$	- 2,390,713
Transmission Plant Transmission Demand	INTLTD	INTTRB	NCPT	\$ 794,874	\$ 471,955	\$	488,859
Distribution Poles Specific	INTLTD	INTDPS	NCPP	\$ -	\$ -	\$	-
Distribution Substation General	INTLTD	INTDSG	NCPP	\$ 298,867	\$ 177,451	\$	-
Distribution Primary & Secondary Lines							
Primary Specific Primary Demand Primary Customer	INTLTD INTLTD INTLTD	INDPLS INDPLD INDPLC	NCPP NCPP Cust08	\$ - 511,092 1,568	\$ - 303,460 4,102	\$	-
Secondary Demand Secondary Customer	INTLTD INTLTD	INDSLD INDSLC	SICD Cust07	-	-	•	-
Total Distribution Primary & Secondary Lines Distribution Line Transformers		INDLT		\$ 512,661	\$ 307,562	\$	-
Demand Customer	INTLTD INTLTD	INDLTD INDLTC	SICDT Cust09	\$ -	\$ 92,114 685		-
Total Distribution Line Transformers Distribution Services		INDLTT		\$ -	\$ 92,799	\$	-
Customer	INTLTD	INDSC	C02	\$ -	\$ 2,187	\$	-
Distribution Meters Customer	INTLTD	INDMC	C03	\$ 7,575	\$ 3,522	\$	6,197
Distribution Street & Customer Lighting Customer	INTLTD	INDSCL	C04	\$ -	\$ -	\$	-
Customer Accounts Expense Customer	INTLTD	INCAE	C05	\$ -	\$ -	\$	-
Customer Service & Info. Customer	INTLTD	INCSI	C05	\$ -	\$ -	\$	-
Sales Expense Customer	INTLTD	INSEC	C06	\$ -	\$ -	\$	-
Total		INTT		\$ 5,832,104	\$ 3,743,082	\$	2,885,769

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1	Special Contract Customer #2			Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Interest Expenses										
Power Production Plant										
Production Demand - Base	INTLTD	INTPDB	PPBDA	\$	93,946	\$ 40,584	\$ 2,897	\$	94	\$ 1,829
Production Demand - Winter Peak	INTLTD	INTPDI	PPWDA		98,415	42,515	3,035	5	98	1,916
Production Demand - Summer Peak	INTLTD	INTPDP	PPSDA		80,897	34,947	2,494	ł	81	1,575
Production Energy	INTLTD	INTPEB	E01		-	-	-		-	-
Production Energy - Not Used	INTLTD	INTPEI	E01		-	-	-		-	-
Production Energy - Not Used	INTLTD	INTPEP	E01		-	-	-		-	-
Total Power Production Plant		INTPT		\$	273,258	\$ 118,046	\$ 8,426	\$	273	\$ 5,320
Transmission Plant										
Transmission Demand	INTLTD	INTTRB	NCPT	\$	49,279	\$ 25,793	\$ 50,812	2 \$	1,625	\$ 740
Distribution Poles										
Specific	INTLTD	INTDPS	NCPP	\$	-	\$ -	\$-	\$	-	\$ -
Distribution Substation										
General	INTLTD	INTDSG	NCPP	\$	18,529	\$ 9,698	\$ 19,105	5\$	611	\$ 278
Distribution Primary & Secondary Lines										
Primary Specific	INTLTD	INDPLS	NCPP	\$	-	\$ -	\$ -	\$	-	\$ -
Primary Demand	INTLTD	INDPLD	NCPP		31,686	16,585	32,67		1,045	476
Primary Customer	INTLTD	INDPLC	Cust08		15	15	142,693	3	272	1,495
Secondary Demand	INTLTD	INDSLD	SICD		-	-	7,482	2	239	109
Secondary Customer	INTLTD	INDSLC	Cust07		-	-	37,752	2	72	395
Total Distribution Primary & Secondary Lines		INDLT		\$	31,701	\$ 16,600	\$ 220,598	\$	1,629	\$ 2,475
Distribution Line Transformers										
Demand	INTLTD	INDLTD	SICDT	\$	-	\$ -	\$ 8,550		273	\$ 125
Customer	INTLTD	INDLTC	Cust09		-	-	23,839		46	250
Total Distribution Line Transformers		INDLTT		\$	-	\$ -	\$ 32,390	)\$	319	\$ 374
Distribution Services										
Customer	INTLTD	INDSC	C02	\$	-	\$ -	\$-	\$	-	\$ -
Distribution Meters										
Customer	INTLTD	INDMC	C03	\$	72	\$ 72	\$ -	\$	192	\$ 1,051
Distribution Street & Customer Lighting										
Customer	INTLTD	INDSCL	C04	\$	-	\$ -	\$ 1,654,735	5 \$	-	\$ -
Customer Accounts Expense										
Customer	INTLTD	INCAE	C05	\$	-	\$ -	\$-	\$	-	\$ -
Customer Service & Info.										
Customer	INTLTD	INCSI	C05	\$	-	\$ -	\$ -	\$	-	\$ -
Sales Expense										
Customer	INTLTD	INSEC	C06	\$	-	\$ -	\$-	\$	-	\$ -
Total		INTT		\$	372,838	\$ 170,209	\$ 1,986,065	5 \$	4,648	\$ 10,238
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Description	Ref	Name	Allocation Vector		Total System	R	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Cost of Service Summary Unadjusted										
Operating Revenues										
Sales to Ultimate Consumers		REVUC	R01	\$	965,204,065	-	9,200,073 \$	/	11,517,853 \$	151,571,212
Sales for Resale			Energy		42,971,045		5,545,980	5,051,887	601,688	6,971,340
Curtailable Service Rider		CSR	INTCRE		(4,334,522)		1,955,263)	(494,015)	(49,980)	(632,863)
Forfeited Discounts		FORDIS	FDIS		2,623,527		2,068,557	375,660	4,867	83,927
Misc Service Revenues		REVMISC	MISCR		3,775,989		3,513,478	227,290	848	33,247
Rent From Electric Property			RBT		3,785,840		1,949,894	441,572	34,583	438,415
Other Electric Revenue Unbilled Revenue		UNBREV	RBT R01		11,598,968		5,974,039	1,352,877	105,955	1,343,205
Unbilled Revenue		UNBREV	RUI		-		-	-	-	-
Total Operating Revenues		TOR		\$	1,025,624,912	\$ 40	6,296,758 \$	142,781,106 \$	12,215,815 \$	159,808,482
Operating Expenses										
Operation and Maintenance Expenses				\$	685,621,903		3,489,808 \$		8,319,397 \$	97,709,047
Depreciation Expenses					138,842,527	7	1,674,242	16,120,550	1,265,472	16,123,530
Regulatory Credits					-		-	-	-	-
Accretion Expense					-		-	-	-	-
Depreciation for Asset Retirement Costs			DET		-		-	-	-	-
Amortization Expense			DET					-		
Property and Other Taxes			NPT		32,529,209	1	6,864,804	3,787,838	293,550	3,733,939
Amortization of Investment Tax Credit					(1,002,535)		(519,765)	(116,739)	(9,047)	(115,078)
Other Expenses								-	-	
State and Federal Income Taxes			TAXINC		48,157,086	(	3,340,126)	14,269,176	800,137	15,784,726
Total Operating Expenses		TOE		\$	904.148.189	\$ 37	8.168.963 \$	117.971.700 \$	10,669,508 \$	133,236,164
		.02		φ	507, 170, 108 4	, 57	ο, 100,000 φ		10,000,000 φ	100,200,104
Utility Operating Income		ТОМ		\$	121,476,723	6 2	8,127,795 \$	24,809,406 \$	1,546,306 \$	26,572,318
Net Cost Rate Base				\$	2,380,933,927	\$ 1,22	6,298,141 \$	277,706,597 \$	21,749,593 \$	275,721,267

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector	Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Cost of Service Summary Unadjusted						
Operating Revenues						
Sales to Ultimate Consumers		REVUC	R01	\$ 116,918,595 \$	77,629,237 \$	64,284,636
Sales for Resale			Energy	6,729,278	2,959,628	4,097,615
Curtailable Service Rider		CSR	INTCRE	(522,779)	(333,092)	(296,296)
Forfeited Discounts		FORDIS	FDIS	29,247	50,540	10,395
Misc Service Revenues		REVMISC	MISCR	100	262	12
Rent From Electric Property			RBT	360,105	228,517	179,808
Other Electric Revenue			RBT	1,103,281	700,126	550,893
Unbilled Revenue		UNBREV	R01	 -	-	-
Total Operating Revenues		TOR		\$ 124,617,828 \$	81,235,219 \$	68,827,063
Operating Expenses						
Operation and Maintenance Expenses				\$ 90,477,956 \$	43,331,985 \$	52,826,337
Depreciation Expenses				13,152,589	8,451,740	6,535,570
Regulatory Credits				-	-	-
Accretion Expense				-	-	-
Depreciation for Asset Retirement Costs			DET	-	-	-
Amortization Expense			DET	-	-	-
Property and Other Taxes			NPT	3,050,768	1,958,003	1,509,543
Amortization of Investment Tax Credit				(94,023)	(60,345)	(46,523)
Other Expenses				-	-	-
State and Federal Income Taxes			TAXINC	 5,467,199	10,671,709	2,293,097
Total Operating Expenses		TOE		\$ 112,054,490 \$	64,353,092 \$	63,118,025
Utility Operating Income		ТОМ		\$ 12,563,338 \$	16,882,127 \$	5,709,039
Net Cost Rate Base				\$ 226,471,826 \$	143,715,707 \$	113,082,427

# LOLP METHODOLOGY

Description	Ref N	ame	Allocation Vector	Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Cost of Service Summary Unadjusted								
Operating Revenues								
Sales to Ultimate Consumers	R	EVUC	R01	\$ 6,341,748 \$	3,292,762		210,819 \$	270,128
Sales for Resale			Energy	399,948	211,291	378,490	12,337	11,561
Curtailable Service Rider		SR	INTCRE	(33,867)	(14,630)	(1,044)	(34)	(659)
Forfeited Discounts		ORDIS	FDIS	-	-	334	-	-
Misc Service Revenues	R	EVMISC	MISCR	-	-	751	-	-
Rent From Electric Property			RBT	22,959	10,539	118,510	302	636
Other Electric Revenue			RBT	70,340	32,289	363,087	925	1,950
Unbilled Revenue	U	NBREV	R01	 -	-	-	-	-
Total Operating Revenues	т	OR		\$ 6,801,129 \$	3,532,251	\$ 19,001,296 \$	224,350 \$	283,616
Operating Expenses								
Operation and Maintenance Expenses				\$ 5,435,235 \$	2,798,128	\$ 6,980,744 \$	154,703 \$	187,687
Depreciation Expenses				842,162	381,815	4,262,499	9,459	22,899
Regulatory Credits				-	-	-	-	-
Accretion Expense				-	-	-	-	-
Depreciation for Asset Retirement Costs			DET	-	-	-	-	-
Amortization Expense			DET	-	-	-	-	-
Property and Other Taxes			NPT	195,031	89,036	1,038,909	2,431	5,356
Amortization of Investment Tax Credit				(6,011)	(2,744)	(32,019)	(75)	(165)
Other Expenses				-	-	-	-	-
State and Federal Income Taxes			TAXINC	 (17,088)	42,939	2,135,663	23,836	25,817
Total Operating Expenses	т	OE		\$ 6,449,329 \$	3,309,175	\$ 14,385,796 \$	190,355 \$	241,593
Utility Operating Income	т	ОМ		\$ 351,799 \$	223,076	\$ 4,615,500 \$	33,995 \$	42,024
Net Cost Rate Base				\$ 14,438,869 \$	6,627,986	\$ 74,531,365 \$	189,912 \$	400,237

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector	Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Taxable Income Unadjusted								
Total Operating Revenue				\$ 1,025,624,912	\$ 406,296,758 \$	142,781,106	\$ 12,215,815	\$ 159,808,482
Operating Expenses				\$ 855,991,103	\$ 381,509,089 \$	103,702,524	\$ 9,869,371	\$ 117,451,438
Interest Expense		INTEXP		\$ 62,185,554	\$ 32,240,169 \$	7,241,147	\$ 561,175	\$ 7,138,109
Taxable Income		TAXINC		\$ 107,448,255	\$ (7,452,500) \$	31,837,435	\$ 1,785,269	\$ 35,218,935

# LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector	Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Taxable Income Unadjusted						
Total Operating Revenue				\$ 124,617,828	\$ 81,235,219	\$ 68,827,063
Operating Expenses				\$ 106,587,290	\$ 53,681,383	\$ 60,824,927
Interest Expense		INTEXP		\$ 5,832,104	\$ 3,743,082	\$ 2,885,769
Taxable Income		TAXINC		\$ 12,198,434	\$ 23,810,754	\$ 5,116,367

# LOLP METHODOLOGY

Description	Ref	Alloo Name Vect	cation or	Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Taxable Income Unadjusted								
Total Operating Revenue			\$	6,801,129	\$ 3,532,251	\$ 19,001,296	\$ 224,350	\$ 283,616
Operating Expenses			\$	6,466,417	\$ 3,266,235	\$ 12,250,133	\$ 166,519	\$ 215,776
Interest Expense		INTEXP	\$	372,838	\$ 170,209	\$ 1,986,065	\$ 4,648	\$ 10,238
Taxable Income		TAXINC	\$	(38,127)	\$ 95,806	\$ 4,765,098	\$ 53,183	\$ 57,602

#### LOLP METHODOLOGY

Description R	ef Narr	Allocation ne Vector	Total System	Residential Rate RS		Rate PS Primary	Rate PS Secondary
Cost of Service Summary Pro-Forma							
Operating Revenues							
Total Operating Revenue Actual			\$ 1,025,624,912 \$	406,296,758	\$ 142,781,106	\$ 12,215,815	\$ 159,808,482
Pro-Forma Adjustments: Remove Off-System ECR revenues Customer Account Changes		ECRREV	(8,423,260)	(3,297,837)	(1,848,542)	(80,619)	(1,002,890)
Total Pro-Forma Operating Revenue			\$ 1,017,201,652 \$	402,998,922	\$ 140,932,564	\$ 12,135,196	\$ 158,805,592
Operating Expenses							
Operation and Maintenance Expenses Depreciation and Amortization Expenses Property and Other Taxes Amortization of Investment Tax Credit State and Federal Income Taxes Specific Assignment of Interruptible Credit Allocation of Interruptible Credits		NPT TAXINC INTCRE	\$ 685,621,903 \$ 138,842,527 32,529,209 (1,002,535) 48,157,086 - -	293,489,808 71,674,242 16,864,804 (519,765) (3,340,126) -	16,120,550 3,787,838 (116,739)	1,265,472 293,550	\$ 97,709,047 16,123,530 3,733,939 (115,078) 15,784,726 - -
Adjustments to Operating Expenses: Eliminate advertising expenses Federal & State Income Tax Adjustment Federal & State Income Tax Interest Adjustment	ent	REVUC TAXINC TAXINC	 (984,863) (3,074,551) -	(386,924) 213,248 -	(911,004)	-	(154,658) (1,007,763) - -
Total Expense Adjustments			(4,059,414)	(173,676)		(62,837)	(1,162,422)
Total Operating Expenses	TOE		\$ 900,088,775 \$	377,995,288	\$ 116,922,103	\$ 10,606,672	\$ 132,073,742
Net Operating Income Pro-Forma			\$ 117,112,877 \$	5 25,003,634	\$ 24,010,460	\$ 1,528,524	\$ 26,731,850
Cost of Service Summary Pro-Forma							
Net Operating Income Pro-Forma			\$ 117,112,877 \$	25,003,634	\$ 24,010,460	\$ 1,528,524	\$ 26,731,850
Net Cost Rate Base ECR Plan Eliminations Adjustment to Reflect Depreciation Reserve Cash Working Capital Adjusted Net Cost Rate Base		PLPPT DET OMLF	\$ 2,380,933,927 \$ - - 2,380,933,927 \$	-	-		- - -
Rate of Return			4.92%	2.04%	8.65%	7.03%	9.70%

#### LOLP METHODOLOGY

Description	Ref Name	Allocation Vector	Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Cost of Service Summary Pro-Forma					
Operating Revenues					
Total Operating Revenue Actual			\$ 124,617,828 \$	81,235,219 \$	68,827,063
Pro-Forma Adjustments: Remove Off-System ECR revenues Customer Account Changes		ECRREV	(833,194)	(537,754) -	(461,699)
Total Pro-Forma Operating Revenue			\$ 123,784,634 \$	80,697,466 \$	68,365,364
Operating Expenses					
Operation and Maintenance Expenses Depreciation and Amortization Expenses Property and Other Taxes Amortization of Investment Tax Credit State and Federal Income Taxes Specific Assignment of Interruptible Credit Allocation of Interruptible Credits		NPT TAXINC INTCRE	\$ 90,477,956 \$ 13,152,589 3,050,768 (94,023) 5,467,199 - -	43,331,985 \$ 8,451,740 1,958,003 (60,345) 10,671,709 - -	52,826,337 6,535,570 1,509,543 (46,523) 2,293,097 -
Adjustments to Operating Expenses: Eliminate advertising expenses Federal & State Income Tax Adjustment Federal & State Income Tax Interest Adjustr	nent	REVUC TAXINC TAXINC	 (119,300) (349,049) -	(79,210) (681,327) -	(65,594) (146,401) -
Total Expense Adjustments			(468,349)	(760,537)	(211,995)
Total Operating Expenses	TOE		\$ 111,586,141 \$	63,592,555 \$	62,906,030
Net Operating Income Pro-Forma			\$ 12,198,494 \$	17,104,911 \$	5,459,334
Cost of Service Summary Pro-Forma					
Net Operating Income Pro-Forma			\$ 12,198,494 \$	17,104,911 \$	5,459,334
Net Cost Rate Base ECR Plan Eliminations Adjustment to Reflect Depreciation Reserve Cash Working Capital Adjusted Net Cost Rate Base		PLPPT DET OMLF	\$ 226,471,826 \$ - - 226,471,826 \$	143,715,707 \$ - - 143,715,707 \$	113,082,427 - - 113,082,427
Rate of Return			5.39%	11.90%	4.83%

#### LOLP METHODOLOGY

Description Ref	Name	Allocation Vector	Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Cost of Service Summary Pro-Forma							
Operating Revenues							
Total Operating Revenue Actual			\$ 6,801,129 \$	3,532,251	\$ 19,001,296 \$	224,350 \$	283,616
Pro-Forma Adjustments: Remove Off-System ECR revenues Customer Account Changes		ECRREV	(42,712)	(23,117)	(290,133)	(2,399)	(2,365)
Total Pro-Forma Operating Revenue			\$ 6,758,416 \$	3,509,134	\$ 18,711,163 \$	221,951 \$	281,252
Operating Expenses							
Operation and Maintenance Expenses Depreciation and Amortization Expenses Property and Other Taxes Amortization of Investment Tax Credit State and Federal Income Taxes Specific Assignment of Interruptible Credit		NPT TAXINC	\$ 5,435,235 \$ 842,162 195,031 (6,011) (17,088)	2,798,128 381,815 89,036 (2,744) 42,939	\$ 6,980,744 \$ 4,262,499 1,038,909 (32,019) 2,135,663	154,703 \$ 9,459 2,431 (75) 23,836	187,687 22,899 5,356 (165) 25,817
Allocation of Interruptible Credits		INTCRE	-	-	-	-	-
Adjustments to Operating Expenses: Eliminate advertising expenses Federal & State Income Tax Adjustment Federal & State Income Tax Interest Adjustmen Total Expense Adjustments	t	REVUC TAXINC TAXINC	 (6,471) 1,091 - (5,380)	(3,360) (2,741) - (6,101)	(18,511) (136,350) - (154,860)	(215) (1,522) - (1,737)	(276) (1,648) - (1,924)
Total Operating Expenses	TOE		\$ 6,443,949 \$	3,303,073	\$ 14,230,935 \$	188,618 \$	239,669
Net Operating Income Pro-Forma			\$ 314,467 \$	206,060	\$ 4,480,227 \$	33,333 \$	41,583
Cost of Service Summary Pro-Forma							
Net Operating Income Pro-Forma			\$ 314,467 \$	206,060	\$ 4,480,227 \$	33,333 \$	41,583
Net Cost Rate Base ECR Plan Eliminations Adjustment to Reflect Depreciation Reserve		PLPPT DET	\$ 14,438,869 \$ - -	6,627,986 - -	\$        74,531,365   \$ - -	189,912 \$ - -	400,237 - -
Cash Working Capital Adjusted Net Cost Rate Base		OMLF	\$ - 14,438,869 \$	6,627,986	\$	- 189,912 \$	- 400,237
Rate of Return			2.18%	3.11%	6.01%	17.55%	10.39%

#### LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector	Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Taxable Income Pro-Forma								
Total Operating Revenue				\$ 1,017,201,652	\$ 402,998,922	\$ 140,932,564	\$ 12,135,196	\$ 158,805,592
Operating Expenses				\$ 851,931,689	\$ 381,335,414	\$ 102,652,927	\$ 9,806,535	\$ 116,289,016
Interest Expense		INTEXP		\$ 62,185,554	\$ 32,240,169	\$ 7,241,147	\$ 561,175	\$ 7,138,109
Interest Syncronization Adjustment			INTEXP	\$ 7,354,012	\$ 3,812,696	\$ 856,332	\$ 66,364	\$ 844,147
Taxable Income		TXINCPF		\$ 95,730,397	\$ (14,389,357)	\$ 30,182,157	\$ 1,701,123	\$ 34,534,320

#### LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector	Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Taxable Income Pro-Forma						
Total Operating Revenue				\$ 123,784,634	\$ 80,697,466	\$ 68,365,364
Operating Expenses				\$ 106,118,941	\$ 52,920,846	\$ 60,612,932
Interest Expense		INTEXP		\$ 5,832,104	\$ 3,743,082	\$ 2,885,769
Interest Syncronization Adjustment			INTEXP	\$ 689,700	\$ 442,654	\$ 341,269
Taxable Income		TXINCPF		\$ 11,143,889	\$ 23,590,884	\$ 4,525,394

#### LOLP METHODOLOGY

Description Taxable Income Pro-Forma	Ref	Name	Allocation Vector	Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	
Total Operating Revenue				\$ 6,758,416 \$	3,509,134	\$ 18,711,163	\$ 221,951	\$ 281,252
Operating Expenses				\$ 6,461,037 \$	3,260,134	\$ 12,095,273	\$ 164,782	\$ 213,852
Interest Expense		INTEXP		\$ 372,838 \$	170,209	\$ 1,986,065	\$ 4,648	\$ 10,238
Interest Syncronization Adjustment			INTEXP	\$ 44,092 \$	20,129	\$ 234,870	\$ 550	\$ 1,211
Taxable Income		TXINCPF		\$ (119,551) \$	58,662	\$ 4,394,955	\$ 51,971	\$ 55,950

#### LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Cost of Service Summary Pro-Forma (Adjus	ted for P	roposed Incr	rease)						
Operating Revenues									
Total Operating Revenue Actual				\$	1,017,201,652	\$ 402,998,922	\$ 140,932,564	\$ 12,135,196	\$ 158,805,592
Pro-Forma Adjustments: Proposed Increase Proposed Reduction in CSR Credit Proposed Changes to Miscellaneous Charges			INTCRE MISCR	\$ \$ \$	91,719,847 1,920,271 (22,391)	\$ 42,131,735 866,217 (20,834)	\$ 12,180,705 218,857 (1,348)	\$ 1,034,517 22,142 (5)	\$ 11,631,167 280,370 (197)
Total Pro-Forma Operating Revenue				\$	1,110,819,379	\$ 445,976,039	\$ 153,330,778	\$ 13,191,850	\$ 170,716,931
Operating Expenses				9.20%					
Total Operating Expenses				\$	904,148,189	\$ 378,168,963	\$ 117,971,700	\$ 10,669,508	\$ 133,236,164
Total Pro-Forma Adjustments Reflect Increase in Uncollectibles Expense Reflect Increase in PSC Fees			Cust01 R01		(4,059,414) 211,583 181,718	(173,676) 154,044 71,392	(1,049,597) 19,139 25,572	(62,837) 30 2,168	\$ (1,162,422) 1,195 28,536
Incremental Income Taxes					36,172,979	16,605,940	4,790,550	408,281	4,602,426
Total Pro-forma Operating Expenses				\$	936,655,055	\$ 394,826,664	\$ 121,757,363	\$ 11,017,152	\$ 136,705,899
Net Operating Income Pro-Forma				\$	174,164,325	\$ 51,149,375	\$ 31,573,415	\$ 2,174,698	\$ 34,011,033
Net Cost Rate Base				\$	2,380,933,927	\$ 1,226,298,141	\$ 277,706,597	\$ 21,749,593	\$ 275,721,267
Rate of Return					7.31%	4.17%	11.37%	10.00%	12.34%

#### LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary	Rate TOD Secondary		Rate RTS Transmission
Cost of Service Summary Pro-Forma (Adjust	ed for Pr	oposed Incr	ease)					
Operating Revenues								
Total Operating Revenue Actual				\$	123,784,634	\$ 80,697,466	\$	68,365,364
Pro-Forma Adjustments: Proposed Increase Proposed Reduction in CSR Credit Proposed Changes to Miscellaneous Charges			INTCRE MISCR	\$ \$ \$	10,385,231 231,600 (1)	\$ 5,698,088 147,566 (2)	\$	5,824,465 131,264 (0)
Total Pro-Forma Operating Revenue				\$	134,401,465	\$ 86,543,118	\$	74,321,094
Operating Expenses			9.	20%				
Total Operating Expenses				\$	112,054,490	\$ 64,353,092	\$	63,118,025
Total Pro-Forma Adjustments Reflect Increase in Uncollectibles Expense Reflect Increase in PSC Fees Incremental Income Taxes			Cust01 R01	\$ \$	(468,349) 45 22,012 4,102,240	\$ (760,537) 117 14,615 2,258,703		(211,995) 5 12,103 2,301,236
Total Pro-forma Operating Expenses				\$	115,710,438	\$ 65,865,990	\$	65,219,374
Net Operating Income Pro-Forma				\$	18,691,028	20,677,128		9,101,720
Rate of Return				\$	226,471,826 8.25%	143,715,707 <b>14.39%</b>	φ	113,082,427 <b>8.05%</b>

#### LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSF		Street Lighting Rate LE		Traffic Street Lighting Rate TLE
Cost of Service Summary Pro-Forma (Adjust	ted for P	roposed Incr	rease)								
Operating Revenues											
Total Operating Revenue Actual				\$	6,758,416	\$ 3,509,134	\$ 18,711,163	\$	221,951	\$	281,252
Pro-Forma Adjustments: Proposed Increase Proposed Reduction in CSR Credit Proposed Changes to Miscellaneous Charges			INTCRE MISCR	\$ \$ \$	604,641 15,003 -	288,490 6,481 -	\$ 463		- 15 -	\$ \$ \$	20,580 292 -
Total Pro-Forma Operating Revenue				\$	7,378,061	\$ 3,804,105	\$ 20,631,849	\$	221,966	\$	302,124
Operating Expenses				9.20%							
Total Operating Expenses				\$	6,449,329	\$ 3,309,175	\$ 14,385,796	\$	190,355	\$	241,593
Total Pro-Forma Adjustments Reflect Increase in Uncollectibles Expense Reflect Increase in PSC Fees			Cust01 R01	\$ \$	(5,380) 0 1,194	(6,101) 0 620	(154,860 \$ 36,554 \$ 3,415	\$	(1,737) 70 40	\$	(1,924) 383 51
Incremental Income Taxes					239,425	113,974	742,134		6		8,065
Total Pro-forma Operating Expenses				\$	6,684,568	\$ 3,417,668	\$ 15,013,040	\$	188,733	\$	248,168
Net Operating Income Pro-Forma				\$	693,492	386,437			33,233		53,956
Net Cost Rate Base				\$	14,438,869	\$ 6,627,986			189,912		400,237
Rate of Return					4.80%	 5.83%	7.54%	ó	17.50%		13.48%

#### LOLP METHODOLOGY

Description Ref	Name	Allocation Vector	Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Allocation Factors							
Energy Allocation Factors							
Energy Usage by Class	E01	Energy	1.000000	0.361778	0.117565	0.014002	0.162233
Customer Allocation Factors							
Primary Distribution Plant Average Number of Custom Customer Services Weighted cost of Services	ers C01 C02	Cust08	1.000000 1.000000	0.86211 0.76862	0.10711 0.19344	0.00017	0.00669 0.03375
Meter Costs Weighted Cost of Meters	C02		1.000000	0.69992	0.20578	0.00801	0.05536
Lighting Systems Lighting Customers	C04	Cust04	1.000000	-	-	-	-
Meter Reading and Billing Weighted Cost	C05	Cust05	1.000000	0.74512	0.18515	0.00074	0.02890
Marketing/Economic Development	C06	Cust06	1.000000	0.86209	0.10711	0.00017	0.00669
Revenue per Billing Determinants	R01		965,204,065	379,200,073	135,825,835	11,517,853	151,571,212
Energy			11,646,473,901	4,180,088,831	1,358,379,221	165,297,553	1,874,492,273
Energy (Loss Adjusted)	Energy		12,308,166,695	4,452,824,321	1,447,008,491	172,341,135	1,996,796,030
O&M Customer Allocators							
Customers (Monthly Bills)			6,001,330	4,369,310	542,844	864	33,890
Average Customers (Bills/12)			500,111	364,109	45,237	72	2,824
Average Customers (Lighting = Lights) Weighted Average Customers (Lighting = 9 Lights per C	unter CustOF		500,111 488,656	364,109 364,109	45,237 90,474	72 360	2,824 14,121
Street Lighting	Cust04		86,402	304,109	90,474	300	14,121
Average Customers	Cust01		500,111	364,109	45,237	72	2,824
Average Customers (Lighting = 9 Lights per Cust)	Cust06		422,358	364,109	45,237	72	2,824
Average Secondary Customers	Cust07		419,065	364,109	45,237	-	-
Average Primary Customers Average Transformer Customers	Cust08 Cust09		422,345 422,165	364,109 364,109	45,237 45,237	72	2,824 2,824
Average Transformer Customers	Cusioa		422,105	304,109	45,257		2,024
Plant Customer Allocators Average Customers			500.111	364.109	45.237	72	2.824
Average Customers (Lighting = 10 Lights)			422,349	364,109	45,237	72	2,824
Weighted Average Customers			487,696	364,109	90,474	360	14,121
Street Lighting (plant in service balance)			99,670,958				
Average Customers			500,111	364,109	45,237	72	2,824
Average Customers (Lighting = 10 Lights per Cust)			421,398	364,109	45,237	72	2,824
Average Secondary Customers Average Primary Customers			421,205 421,385	364,109 364,109	45,237 45.237	- 72	2,824 2.824
Average Fransformer Customers			421,385	364,109	45,237	- 12	2,824
C C			122,100	001,100	10,201		2,02 1
Demand Allocators Max Class Non-Coincident Peak Demands (Transmissic	n) NCPT		3.508.847	1.559.289	448.837	39.880	462.867
Max Class Non-Coincident Peak Demands (Primary)	NCPP		3,249,885	1,559,289	448,837	39,880	462,867
Sum of the Individual Customer Demands (Transformers	s) SICDT		4,718,835	3,273,932	599,115	-	527,645
Sum of the Individual Customer Demands (Secondary)	SICD		3,901,216	3,273,932	599,115	-	-
Summer Peak Period Demand Allocator	SCP		34,305	15,475	3,910	396	5,009
Winter Peak Period Demand Allocator Base Demand Allocator	WCP BDEM		34,305	15,475 15,475	3,910	396 396	5,009 5.009
Dase Demanu Anocator	DUEIVI		34,305	10,470	3,910	390	5,009

#### LOLP METHODOLOGY

Description Ref	Name	Allocation Vector	Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Allocation Factors					
Energy Allocation Factors					
Energy Usage by Class	E01	Energy	0.156600	0.068875	0.095358
Customer Allocation Factors					
Primary Distribution Plant Average Number of Customer Customer Services Weighted cost of Services	rs C01 C02	Cust08	0.00025	0.00065 0.00420	-
Meter Costs Weighted Cost of Meters	C02		0.01254	0.00583	0.01026
Lighting Systems Lighting Customers	C04	Cust04	-		-
Meter Reading and Billing Weighted Cost	C05	Cust05	0.00540	0.01412	0.00067
Marketing/Economic Development	C06	Cust06	0.00025	0.00065	0.00003
Revenue per Billing Determinants	R01		116,918,595	77,629,237	64,284,636
Energy	<b>Energy</b>		1,848,687,110	795,801,135	1,147,609,709
Energy (Loss Adjusted)	Energy		1,927,462,502	847,724,245	1,173,677,077
O&M Customer Allocators					
Customers (Monthly Bills) Average Customers (Bills/12)			1,266 106	3,312 276	156 13
Average Customers (Lighting = Lights)			106	276	13
Weighted Average Customers (Lighting = 9 Lights per Cu	stor Cust05		2,638	6,900	325
Street Lighting	Cust04		-	-	-
Average Customers	Cust01		106	276	13
Average Customers (Lighting = 9 Lights per Cust)	Cust06		106	276	13
Average Secondary Customers Average Primary Customers	Cust07 Cust08		- 106	- 276	-
Average Transformer Customers	Cust08 Cust09		100	276	-
Plant Customer Allocators					
Average Customers			106	276	13
Average Customers (Lighting = 10 Lights)			106	276	13
Weighted Average Customers			2,638	6,900	325
Street Lighting (plant in service balance)			-	-	-
Average Customers			106	276	13
Average Customers (Lighting = 10 Lights per Cust)			106	276 276	13
Average Secondary Customers Average Primary Customers			- 106	276	-
Average Transformer Customers			-	276	-
Demand Allocators					
Max Class Non-Coincident Peak Demands (Transmission	) NCPT		421,067	250,008	258,962
Max Class Non-Coincident Peak Demands (Primary)	NCPP		421,067	250,008	-
Sum of the Individual Customer Demands (Transformers)			-	289,975	-
Sum of the Individual Customer Demands (Secondary)	SICD		-	-	-
Summer Peak Period Demand Allocator Winter Peak Period Demand Allocator	SCP WCP		4,137	2,636	2,345 2.345
Base Demand Allocator	BDEM		4,137 4,137	2,636 2,636	2,345 2,345
Dase Demand Allocator			4,137	2,030	2,040

#### LOLP METHODOLOGY

Description Ref	Name	Allocation Vector	Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Allocation Factors							
Energy Allocation Factors							
Energy Usage by Class	E01	Energy	0.009307	0.004917	0.008808	0.000287	0.000269
Customer Allocation Factors							
Primary Distribution Plant Average Number of Customers Customer Services Weighted cost of Services	C01 C02	Cust08	0.00000	0.00000	0.02273	0.00004	0.00024
Meter Costs Weighted Cost of Meters	C02 C03		0.00012	0.00012		0.00032	- 0.00174
Lighting Systems Lighting Customers	C04	Cust04	-	-	1.00000	-	-
Meter Reading and Billing Weighted Cost	C05	Cust05	0.00001	0.00001	0.01965	0.00004	0.00021
Marketing/Economic Development	C06	Cust06	0.00000	0.00000	0.02273	0.00004	0.00024
Revenue per Billing Determinants	R01		6,341,748	3,292,762	18,141,167	210,819	270,128
Energy			109,874,900	58,046,500	101,770,582	3,317,374	3,108,713
Energy (Loss Adjusted)	Energy		114,556,838	60,519,950	108,410,740	3,533,821	3,311,545
O&M Customer Allocators							
Customers (Monthly Bills)			12	12	1,036,824	1,980	10,860
Average Customers (Bills/12)			1	1	86,402	165	905
Average Customers (Lighting = Lights)			1	1	86,402	165	905
Weighted Average Customers (Lighting = 9 Lights per Cus			5	5	9,600	18	101
Street Lighting	Cust04		- 1	-	86,402	405	005
Average Customers Average Customers (Lighting = 9 Lights per Cust)	Cust01 Cust06		1	1	86,402 9,600	165 18	905 101
Average Secondary Customers	Cust00 Cust07		I	-	9,600	18	101
Average Primary Customers	Cust07 Cust08		- 1	- 1	9,600	18	101
Average Transformer Customers	Cust09				9,600	18	101
Plant Customer Allocators							
Average Customers			1	1	86,402	165	905
Average Customers (Lighting = 10 Lights)			1	1	8,640	165	905
Weighted Average Customers			5	5	8,640	18	101
Street Lighting (plant in service balance)			-	-	99,670,958	-	-
Average Customers			1	1	86,402	165	905
Average Customers (Lighting = 10 Lights per Cust)			1	1	8,640	18 18	101 101
Average Secondary Customers Average Primary Customers			- 1	- 1	8,640 8,640	18	101
Average Transformer Customers			- '	-	9,600	18	101
Demand Allocators							
Max Class Non-Coincident Peak Demands (Transmission)	NCPT		26,105	13,663	26,916	861	392
Max Class Non-Coincident Peak Demands (Primary)	NCPP		26,105	13,663	26,916	861	392
Sum of the Individual Customer Demands (Transformers)	SICDT		-	-	26,916	861	392
Sum of the Individual Customer Demands (Secondary)	SICD		-	-	26,916	861	392
Summer Peak Period Demand Allocator	SCP		268	116	8	0	5
Winter Peak Period Demand Allocator	WCP		268	116	8	0	5
Base Demand Allocator	BDEM		268	116	8	0	5

#### LOLP METHODOLOGY

Description	Ref Name	Allocation Vector		Total System	Residential Rate RS		General Service Rate GS		Rate PS Primary	Rate PS Secondary
Allocation Factors (Continued)										
Production Allocation Production Residual Winter Demand Allocator Production Winter Demand Costs Customer Specific Assignment	PPW	DRA	\$ \$	34,305 34,803,614	15,475		3,910		396	5,009
Production Winter Demand Residual Production Winter Demand Total Production Winter Demand Allocator	PPW PPW		\$ \$	34,803,614 34,803,614 1.000000	15,699,593 15,699,593 0.45109		3,966,644 3,966,644 0.11397	\$ \$	401,309 401,309 0.01153	5,081,513 5,081,513 0.14601
Production Residual Summer Demand Allocator Production Summer Demand Costs Customer Specific Assignment	PPSE	DRA	\$	34,305 28,608,453 -	15,475		3,910		396 -	5,009
Production Summer Demand Residual Production Summer Demand Total Production Summer Demand Allocator	PPSE PPSE		\$ \$	28,608,453 28,608,453 1.000000	12,905,013 12,905,013 0.45109	\$ \$	3,260,568 3,260,568 0.11397	\$ \$	329,875 329,875 0.01153	4,176,987 4,176,987 0.14601
Production Residual Base Demand Allocator Production Base Demand Costs Customer Specific Assignment	PPBE	DRA	\$	34,305 33,223,400 -	15,475		3,910		396 -	5,009
Production Base Demand Residual Production Base Demand Total Production Base Demand Allocator	PPBE PPBE		\$ \$	33,223,400 33,223,400 1.000000	14,986,773 14,986,773 0.45109		3,786,544 3,786,544 0.11397	\$ \$	383,088 383,088 0.01153	4,850,793 4,850,793 0.14601

#### LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Rate TOD Primary		Rate TOD Secondary		Rate RTS Transmission
Allocation Factors (Continued)									
Production Allocation									
Production Residual Winter Demand Allocator Production Winter Demand Costs Customer Specific Assignment		PPWDRA			4,137		2,636		2,345
Production Winter Demand Residual			PPWDRA	\$	4,197,600	\$	2,674,526	\$	2,379,079
Production Winter Demand Total		PPWDT		\$		\$	2,674,526	\$	2,379,079
Production Winter Demand Allocator		PPWDA	PPWDT		0.12061		0.07685		0.06836
Production Residual Summer Demand Allocator Production Summer Demand Costs Customer Specific Assignment		PPSDRA			4,137		2,636		2,345
Production Summer Demand Residual			PPSDRA	\$	- 3,450,413	\$	- 2,198,452	\$	- 1,955,595
Production Summer Demand Total		PPSDT	TT ODICA	Ψ \$		\$	2,198,452	\$	1,955,595
Production Summer Demand Allocator		PPSDA	PPSDT	Ψ	0.12061	Ψ	0.07685	Ψ	0.06836
Production Residual Base Demand Allocator Production Base Demand Costs		PPBDRA			4,137		2,636		2,345
Customer Specific Assignment					-		-		-
Production Base Demand Residual		DDDDT	PPBDRA	\$		\$	2,553,093	\$	2,271,060
Production Base Demand Total		PPBDT	DDDDT	\$		\$	2,553,093	\$	2,271,060
Production Base Demand Allocator		PPBDA	PPBDT		0.12061		0.07685		0.06836

#### LOLP METHODOLOGY

Description	Ref Name	Allocation Vector		Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Allocation Factors (Continued)								
Production Allocation Production Residual Winter Demand Allocator Production Winter Demand Costs Customer Specific Assignment	PPWDRA			268	116	8	0	5
Production Winter Demand Residual		PPWDRA	\$	271,928 \$	117,472	\$ 8,385	\$ 271 \$	5,294
Production Winter Demand Total	PPWDT		\$	271,928 \$				
Production Winter Demand Allocator	PPWDA	PPWDT		0.00781	0.00338	0.00024	0.00001	0.00015
Production Residual Summer Demand Allocator Production Summer Demand Costs Customer Specific Assignment	PPSDRA			268	116	8	0	5
Production Summer Demand Residual		PPSDRA	\$	223,524 \$	96,561	\$ 6,892	\$ 223 \$	4,351
Production Summer Demand Total	PPSDT		\$	223,524 \$	96,561	\$ 6,892	\$ 223 \$	4,351
Production Summer Demand Allocator	PPSDA	PPSDT		0.00781	0.00338	0.00024	0.00001	0.00015
Production Residual Base Demand Allocator Production Base Demand Costs Customer Specific Assignment	PPBDRA			268	116	8	0	5
Production Base Demand Residual		PPBDRA	\$	259,582 \$	112,138	\$ 8,004	\$ 259 \$	5,053
Production Base Demand Total	PPBDT		\$	259,582 \$				5,053
Production Base Demand Allocator	PPBDA	PPBDT	·	0.00781	0.00338	0.00024	0.00001	0.00015

#### LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Total System	Residential Rate RS	General Service Rate GS	Rate PS Primary	Rate PS Secondary
Allocation Factors (Continued)									
Revenue Adjustment Allocators									
Forfeited Discounts Misc Service Revenue Allocator Revenue and Expense Adjust before IT Full Year FAC Base Rate Change Temperature Normalization - Revenue Temperature Normalization - Expenses VDT Revenue Merger Surcredit Revenue ECR Revenue ECR Revenue ECR Revenue Merger Surcredit Roll-In DSM revenue Year Customers		FDIS MISCR ITADJ REV01 TEXP01 VDTREV MSCREV ECRREV ECRREV ECRREV DSMREV YREND		\$	2,689,127 (1,630,992) (7,438,396) \$ - - - 163,886,444 - - -	2,120,280 (1,517,603) (2,910,913) \$ 64,164,081	385,054 (98,175) (1,709,950) \$ 35,966,001	4,989 (366) (68,866) \$ 1,568,548	86,025 (14,360) (848,232) 19,512,643
Expense Adjustment Allocators Interruptible Credit Allocator (Winter & Summe O&M less fuel Base Rate Revenue at Current Rates	r Peak Prod	PI: INTCRE OMLF		2	1,593,301,897 220,080,914.46 965,204,065	718,723,966 125,067,305.80 379,200,073	181,592,107 29,179,591.57 135,825,835	18,371,857 1,800,809.36 11,517,853	232,630,564 22,182,738.25 151,571,212

#### LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector	Rate TOD Primary	Rate TOD Secondary	Rate RTS Transmission
Allocation Factors (Continued)						
Revenue Adjustment Allocators						
Forfeited Discounts Misc Service Revenue Allocator Revenue and Expense Adjust before IT Full Year FAC Base Rate Change Temperature Normalization - Revenue Temperature Normalization - Expenses VDT Revenue Merger Surcredit Revenue ECR Revenue ECR Revenue ECR Revenue Marger Surcredit Revenue Year Customers		FDIS MISCR ITADJ REV01 TREV01 VDTREV MSCREV ECRREV ECRREV2 DSMREV YREND		\$ 29,978 (43) (713,894) \$ 16,210,961	51,804 (113) (458,543) \$ 10,462,757	10,655 (5) (396,105) 8,983,013
Expense Adjustment Allocators Interruptible Credit Allocator (Winter & Summe O&M less fuel Base Rate Revenue at Current Rates	er Peak Prod	PI:INTCRE OMLF		192,165,197 17,574,101.44 116,918,595	122,439,233 11,267,877.41 77,629,237	108,913,715 8,433,471.75 64,284,636

#### LOLP METHODOLOGY

Description	Ref	Name	Allocation Vector		Special Contract Customer #1	Special Contract Customer #2	Street Lighting Rate RLS, LS, DSK	Street Lighting Rate LE	Traffic Street Lighting Rate TLE
Allocation Factors (Continued)									
Revenue Adjustment Allocators									
Forfeited Discounts Misc Service Revenue Allocator		FDIS MISCR		¢	-	-	342 (324.55000)	-	-
Revenue and Expense Adjust before IT Full Year FAC Base Rate Change Temperature Normalization - Revenue Temperature Normalization - Expenses VDT Revenue Merger Surcredit Revenue		ITADJ REV01 TREV01 TEXP01 VDTREV MSCREV		\$	(36,241) \$	(19,757) \$	\$ (271,622) \$	(2,184) \$	(2,089)
ECR Revenue ECR Revenue for Roll-In DSM revenue Year Customers		ECRREV ECRREV2 DSMREV YREND			831,030	449,773	5,644,950	46,675	46,012
Expense Adjustment Allocators Interruptible Credit Allocator (Winter & Summe O&M less fuel Base Rate Revenue at Current Rates	r Peak Prod Pl	INTCRE OMLF			12,448,812 1,102,266.00 6,341,748	5,377,835 509,037.16 3,292,762	383,849 2,880,243.53 18,141,167	12,418 21,040.46 210,819	242,342 62,431.73 270,128

## **Exhibit WSS-25**

Gas Transmission Plant Functional Assignment for the Cost of Service Study

		~	Unit	Storage	Storage	Non-Storage	Non-Storage	Total
	Units	Cost	Cost	Feet	Cost	Feet	Cost	Feet
2" Transmission Mains	691	\$ 24,701.87	\$ 35.75	3,696	\$ 8,233.96	7,392	\$ 16,467.91	11,088
4" Transmission Mains	946	\$ 102,001.69	\$ 107.82	173,184	\$ 98,113.06	6,864	\$ 3,888.63	180,048
6" Transmission Mains	736	\$ 82,461.90	\$ 112.04	51,744	\$ 74,140.06	5,808	\$ 8,321.84	57,552
8" Transmission Mains	33,504	\$ 295,248.74	\$ 8.81	100,848	\$ 200,685.09	47,520	\$ 94,563.65	148,368
10" Transmission Mains	21	\$ 8,240.18	\$ 392.39	30,624	\$ 8,100.52	528	\$ 139.66	31,152
12" Transmission Mains	188,381	\$ 1,219,346.68	\$ 6.47	105,072	\$ 249,127.30	409,200	\$ 970,219.38	514,272
16" Transmission Mains	341,284	\$ 12,941,616.19	\$ 37.92	389,664	\$ 11,144,588.97	62,832	\$ 1,797,027.22	452,496
20" Transmission Mains	526,912	\$ 18,412,182.76	\$ 34.94	531,696	\$ 15,502,565.25	99,792	\$ 2,909,617.51	631,488
22" Transmission Mains	13,227	\$ 136,688.95	\$ 10.33	13,200	\$ 136,688.95	-	\$ -	13,200
24" Transmission Mains	346	\$ 56,770.35	\$ 164.08	1,584	\$ 56,770.35	-	\$ -	1,584
	1,106,048	33,279,259.31		1,401,312	\$ 27,479,013.50	639,936	\$ 5,800,245.81	2,041,248
Remaining Plant		12,882,840.41			\$ 10,637,488.72		2,245,351.69	
-		46,162,099.72			\$ 38,116,502.22		\$ 8,045,597.50	
					82.5710%		17.4290%	

# **Exhibit WSS-26**

Zero Intercept Distribution Mains

## Weighted Linear Regression Statistics

weighted Linear Regression Statistics					
			Standard		
	Estimate		Error	LINEST	Array
-				1.301410942	7.872765172
Size Coefficient (\$ per Foot)	1.3014109		0.4654748	0.465474788	2.328308126
Zero Intercept (\$ per Foot)	7.8727652		2.3283081	0.74054422	6844.640716
				49.94887305	35
R-Square	74.05%			4680120150	1639718729
Plant Classification					
Total All Distribution Mains			24,992,604		
Zero Intercept			7.8727652		
Zero Intercept Cost	\$	5	196,760,902		
Total Cost of Sample	\$	6	328,352,990		
Customer Percentage of Total			59.92%		

T was a f Mala			0	
	Pipe Size 10	Net Cost of Plant	Quantity 45,547	Avg Cost
PIPE, CAST IRON, 10	10	77,658.52	,	1.70501943
PIPE, CAST IRON, 12 PIPE, CAST IRON, 14	12	66,569.39 21,255.50	31,107 7,950	2.14001318 2.673647799
PIPE, CAST IRON, 14 PIPE, CAST IRON, 16	14	90,103.45	28,376	3.175340076
PIPE, CAST IRON, 18	18	34,815.59	8,985	3.874856984
PIPE, CAST IRON, 18 PIPE, CAST IRON, 24	24	464,327.77	7,681	60.45147377
PIPE, CAST IRON, 24 PIPE, CAST IRON, 4	4	232,011.34	284,533	0.815411007
PIPE, CAST IRON, 6	4	45,197.47	44,543	1.014692993
PIPE, CAST IRON, 8	8	39,006.81	28,205	1.382975004
PIPE, PLASTIC, 2	2	84,089,680.35	6,828,366	12.31475881
PIPE, PLASTIC, 4	4	85,216,563.46	3,630,750	23.47078798
PIPE, PLASTIC, 6	6	23,716,585.31	699,120	33.92348282
PIPE, PLASTIC, 8	8	12,432,891.59	192,119	64.71453417
PIPE, STEEL, 1	1	1,820,984.47	73,839	24.66155379
PIPE, STEEL, 1 1/2	1.5	25,393.20	652	38.94662577
PIPE, STEEL, 1 1/4	1.25	11,352.19	403	28.16920596
PIPE, STEEL, 10	10	92,683.96	5,185	17.87540212
PIPE, STEEL, 12	12	13,386,182.57	515,967	25.94387348
PIPE, STEEL, 16	16	7,971,454.04	257,727	30.92983677
PIPE, STEEL, 2	2	18,281,010.16	4,264,288	4.28700176
PIPE, STEEL, 2 1/2	2.5	624.01	438	1.424680365
PIPE, STEEL, 20	20	3,658,736.02	154,201	23.72705767
PIPE, STEEL, 22	22	56,616.99	3,497	16.19016014
PIPE, STEEL, 24	24	122,746.10	871	140.9254879
PIPE, STEEL, 4	4	37,862,423.54	4,765,301	7.945442175
PIPE, STEEL, 6	6	11,104,118.37	834,492	13.30644077
PIPE, STEEL, 8	8	27,070,746.01	1,971,678	13.72980071
PIPE, WROUGHT IRON, 1 1/2	1.5	952.91	2,403	0.396550146
PIPE, WROUGHT IRON, 1 1/4	1.25	3,456.16	8,637	0.400157462
PIPE, WROUGHT IRON, 10	10	49,188.14	26,564	1.851684234
PIPE, WROUGHT IRON, 12	12	14,816.90	5,786	2.560819219
PIPE, WROUGHT IRON, 16	16	46,942.53	14,045	3.342294767
PIPE, WROUGHT IRON, 2	2	30,117.31	60,514	0.497691609
PIPE, WROUGHT IRON, 3	3	1,348.82	2,388	0.564832496
PIPE, WROUGHT IRON, 4	4	77,495.09	89,175	0.869022596
PIPE, WROUGHT IRON, 6	6	209.19	204	1.025441176
PIPE, WROUGHT IRON, 8	8	136,724.50	97,067	1.408558006

n	у	x	est y	y*n^.5	n^.5	xn^.5
45,547	1.70502	10.00	20.887	363.88	213.42	2134.17431
31,107	2.14001	12.00	23.490	377.44	176.37	2116.4612
7,950	2.67365	14.00	26.093	238.39	89.16	1248.27882
28,376	3.17534	16.00	28.695	534.89	168.45	2695.22838
8,985	3.87486	18.00	31.298	367.29	94.79	1706.20632
7,681	60.45147	24.00	39.107	5298	87.64	2103.39155
284,533	0.81541	4.00	13.078	434.95	533.42	2133.66539
44,543	1.01469	6.00	15.681	214.15	211.05	1266.31276
28,205	1.38298	8.00	18.284	232.26	167.94	1343.54754
6,828,366	12.31476	2.00	10.476	32180	2,613.11	5226.22847
3,630,750	23.47079	4.00	13.078	44722	1,905.45	7621.81081
699,120	33.92348	6.00	15.681	28365	836.13	5016.80376
192,119	64.71453	8.00	18.284	28365	438.31	3506.51052
73,839	24.66155	1.00	9.174	6701.4	271.73	271.733325
652	38.94663	1.50	9.825	994.47	25.53	38.301436
403	28.16921	1.25	9.500	565.49	20.07	25.0935749
5,185	17.87540	10.00	20.887	1287.2	72.01	720.069441
515,967	25.94387	12.00	23.490	18636	718.31	8619.70115
257,727	30.92984	16.00	28.695	15702	507.67	8122.69118
4,264,288	4.28700	2.00	10.476	8852.7	2,065.02	4130.03051
438	1.42468	2.50	11.126	29.816	20.93	52.3211238
154,201	23.72706	20.00	33.901	9317.2	392.68	7853.68703
3,497	16.19016	22.00	36.504	957.41	59.14	1300.97963
871	140.92549	24.00	39.107	4159.1	29.51	708.305019
4,765,301	7.94544	4.00	13.078	17345	2,182.96	8731.82776
834,492	13.30644	6.00	15.681	12156	913.51	5481.03202
1,971,678	13.72980	8.00	18.284	19279	1,404.16	11233.3162
2,403	0.39655	1.50	9.825	19.439	49.02	73.5306059
8,637	0.40016	1.25	9.500	37.189	92.94	116.169327
26,564	1.85168	10.00	20.887	301.8	162.98	1629.84662
5,786	2.56082	12.00	23.490	194.79	76.07	912.789132
14,045	3.34229	16.00	28.695	396.1	118.51	1896.18564
60,514	0.49769	2.00	10.476	122.43	246.00	491.99187
2,388	0.56483	3.00	11.777	27.602	48.87	146.601501
89,175	0.86902	4.00	13.078	259.51	298.62	1194.48734
204	1.02544	6.00	15.681	14.646	14.28	85.6971411
97,067	1.40856	8.00	18.284	438.84	311.56	2492.44619

# Exhibit WSS-27

# Low-, Medium- and High-Pressure Distribution Mains

## Exhibit WSS-27 Page 1 of 1

## Louisville Gas and Electric Company Low-, Medium-, High-Pressure Distribution Functional Assignment

	Total D	)istribution Main	s	High Pre	essure Mains		Low and Medium Pressure Mains			
Nominal Size (in inches)	Feet of Pipe	Installed Costs	Unit Costs		Feet of Pipe	Installed Costs	Feet of Pipe	Installed Costs		
(III IIIciles)	of Fipe	COSIS	COSIS	_		COSIS	OI Fipe	COSIS		
				Category II 1" Category III 1"	0 2,059					
1	73,839	1,820,984	24.6616		2,059	50,783	71,780	1,770,201		
1.25	9,040	14,808	1.6381		0	0	9,040	14,808		
1.5	3,055	26,346	8.6239		0	0	3,055	26,346		
				Category II 2"	0					
2	11,153,168	102,400,808	9.1813	Category III 2"	55,440 55,440	509,012	11,097,728	101,891,796		
2.5	438	624	1.4247		0	0	438	624		
3	2,388	1,349	0.5648	Category II 3"	106	60	2,282	1,289		
				Category II 4" Category III 4"	0 469,286					
4	8,769,759	123,388,493	14.0698	Calegory III 4	469,286	6,602,752	8,300,473	116,785,741		
				Category II 6"	0					
6	1,578,359	34,866,110	22.0901	Category III 6"	152,222 152,222	3,362,608	1,426,137	31,503,502		
0	1,570,555	54,000,110	22.0501			3,302,000	1,420,137	31,303,302		
				Category II 8" Category III 8"	0 537,504					
8	2,289,069	39,679,369	17.3343		537,504	9,317,246	1,751,565	30,362,123		
10	77,296	219,531	2.8401	Category II 10"	264	750	77,032	218,781		
				Category II 12"	0					
12	552,860	13,467,569	24.3598	Category III 12"	229,838 229,838	5,598,822	323,022	7,868,747		
14	7,950	21,256	2.6736		0	0	7,950	21,256		
16	300,148	8,108,500	27.0150	Category II 16"	191,664	5,177,804	108,484	2,930,696		
18	8,985	34,816	3.8749		0	0	8,985	34,816		
				Category II 20"	0					
				Category III 20"	74,818					
20	154,201	3,658,736	23.7271		74,818	1,775,202	79,383	1,883,534		
22	3,497	56,617	16.1902	Category II 22"	950	15,387	2,547	41,230		
24	8,552	587,074	68.6476	Category II 24"	950	65,243	7,602	521,831		
tal All Mains	24,992,604	328,352,990			1,715,102 \$	32,475,669	23,277,502	\$ 295,877,321		
ro Intercept	\$	5 7.8727652			\$	7.8727652	:	\$ 7.8727652		
lated Costs* tion of Total	\$	59.92% 59.92%			\$	13,502,598 4.11%	\$	\$ 183,258,304 55.81%		
ated Costs**	\$	6 131,592,087			\$	18,973,071	S	\$ 112,619,017		
tion of Total		40.08%				5.78%		34.30%		

# Exhibit WSS-28

Gas Cost of Service Study Functional Assignment and Classification

## Cost of Service Study 12 Months Ended June 30, 2018

Description	1	Name	Vector		Total Company	Procurement Demand	Procurement Commodity	Storage Demand	Storage Commodity	Transmission Non- Storage Related Demand	Transmission Storage Related Demand
<u>Gas Plant a</u>	at Original Cost										
Undergrou	nd Storage Plant										
350-357	Underground Storage Plant	PT350	F003	\$	153,419,352			153,419,352	-	-	-
358	Asset Retire Obligation Gas Plant	PT350	F003	\$	-	-	-	-	-	-	-
Total Stora	ge Plant	PTST		\$	153,419,352 \$	- \$	- \$	153,419,352 \$	- \$	- \$	-
Transmissi											
365-372	Transmission	PT365	F005	\$	53,150,756	-	-	-	-	9,263,651	43,887,105
Distributio	n Plant										
374	Land and Land Rights	PT374	F008	\$	134,497	-	-	-	-	-	-
375	Structures & Improvements	PT375	F008		1,155,812			-	-	-	-
376	Mains	PT376	F009		427,054,945			-	-	-	-
378	Meas. & Reg. Sta. Equip General	PT378	F008		23,937,002	-	-	-	-	-	-
379	Meas. & Reg. Sta. Equip City Gate	PT379	F008		12,352,333	-	-	-	-	-	-
380	Services	PT380	F010		374,861,864	-	-	-	-	-	-
381	Meters	PT381	F011		57,176,384	-	-	-	-	-	-
382	Meter Installations	PT382	F011			-	-	-	-	-	-
383	House Regulators	PT383	F011		25,550,380		-	-	-	-	-
384	House Regulator Installations	PT384	F011				-	-	-	-	-
385	Industrial Meas. & Reg. Equip.	PT385	F011		2,260,538	-	-	-	-	-	-
387	Other Equipment	PT387	F011		1,928,759	-	-	-	-	-	-
388	Asset Retire Obligation Gas Plant-City Gate	PT388	F008		-	-	-	-	-	-	-
388	Asset Retire Obligation Gas Plant-Mains	PT388	F009		-	-	-	-	-	-	-
Sub-Total I	Distribution Plant	PTDSUB		\$	926,412,515 \$	- \$	- \$	- \$	- \$	- \$	-
U-T-D Subt	total	PTSUB		\$	1,132,982,623	-	-	153,419,352	-	9,263,651	43,887,105
117	Gas Stored Underground/Non-Current	PT117	F003	\$	11,788,845			11,788,845			
301-303	Gas Stored Underground/Non-Current Intangible Plant	PT117 PT301	PTSUB	3	11,788,845 387	-	-	11,788,845 52	-	- 3	- 15
392-396	General Plant	PT389	PTSUB		13,168,757	-	-	1,783,207	-	107,672	510,104
389-399	Common Utility Plant	PTCP	PTSUB		86,673,008	-	-	11,736,558	-	708,668	3,357,357
507-599	Common Curry I with	1101	11300		00,075,000	-	-	11,750,550	-	708,008	5,557,557
Total Plant	in Service	PTIS		\$	1,244,613,621	-	-	178,728,015	-	10,079,995	47,754,581

## Cost of Service Study 12 Months Ended June 30, 2018

					ribution Structures Dist	ribution Mains - Low Dist	ribution Mains - Low	Distribution Mains - Distribution Mains -		
Descriptio	n	Name	Vector	Distribution Commodity	& Equipment Demand	& Med. Pressure Demand	& Med. Pressure Customer	High Pressure Demand	High Pressure Customer	
Cas Plant	at Original Cost			· ·						
<u>Oas Flan</u> t										
	ind Storage Plant									
350-357	Underground Storage Plant	PT350	F003	-	-	-	-	-	-	
358	Asset Retire Obligation Gas Plant	PT350	F003	-	-	-	-	-	-	
Total Stora	ge Plant	PTST	\$	- \$	- \$	- \$	- \$	- \$	-	
Transmiss	ion Plant									
365-372	Transmission	PT365	F005	-	-	-	-	-	-	
Distributio	n Plant									
374	Land and Land Rights	PT374	F008	_	134,497	_	_	-	-	
375	Structures & Improvements	PT375	F008	-	1,155,812	-	_	-		
376	Mains	PT376	F009	_	-	146,471,966	238,345,218	24,676,321	17,561,440	
378	Meas. & Reg. Sta. Equip General	PT378	F008	-	23,937,002	-		-	-	
379	Meas. & Reg. Sta. Equip City Gate	PT379	F008	_	12,352,333	_	_	-	-	
380	Services	PT380	F010	-	-	-	_	-		
381	Meters	PT381	F011	_	-	_	_	-	-	
382	Meter Installations	PT382	F011	_	_	_	_	_		
383	House Regulators	PT383	F011	-		-	_	-		
384	House Regulator Installations	PT384	F011	_	_	_	_	_		
385	Industrial Meas. & Reg. Equip.	PT385	F011	_	_	_	_	_	_	
387	Other Equipment	PT387	F011	_		_	_	_		
388	Asset Retire Obligation Gas Plant-City Gate	PT388	F008	_	_	_	_	_	_	
388	Asset Retire Obligation Gas Plant-Mains	PT388	F009	-	-	-	-	-	-	
Sub-Total	Distribution Plant	PTDSUB	\$	- \$	37,579,644 \$	146,471,966 \$	238,345,218 \$	24,676,321 \$	17,561,440	
U-T-D Sub	total	PTSUB		-	37,579,644	146,471,966	238,345,218	24,676,321	17,561,440	
117	Gas Stored Underground/Non-Current	PT117	F003	-		-	-	-	-	
301-303	Intangible Plant	PT301	PTSUB	-	13	50	82	8	6	
392-396	General Plant	PT389	PTSUB	-	436,792	1,702,457	2,770,308	286,815	204,118	
389-399	Common Utility Plant	PTCP	PTSUB	-	2,874,837	11,205,084	18,233,375	1,887,735	1,343,448	
Total Plant	in Service	PTIS		-	40,891,286	159,379,558	259,348,982	26,850,879	19,109,012	

## Cost of Service Study 12 Months Ended June 30, 2018

Descriptio	'n	Name	Vector	Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
<u>Gas Plant</u>	at Original Cost						
Undergro	und Storage Plant						
350-357	Underground Storage Plant	PT350	F003	-	-	-	-
358	Asset Retire Obligation Gas Plant	PT350	F003	-	-	-	-
Total Stor	age Plant	PTST	\$	- \$	- \$	- \$	-
Transmis	sion Plant						
365-372	Transmission	PT365	F005	-	-	-	-
Distributi	on Plant						
374	Land and Land Rights	PT374	F008	-	-	-	-
375	Structures & Improvements	PT375	F008	-	-	-	-
376	Mains	PT376	F009			-	-
378	Meas. & Reg. Sta. Equip General	PT378	F008	-	-	-	-
379	Meas. & Reg. Sta. Equip City Gate	PT379	F008			-	-
380	Services	PT380	F010	374,861,864	-	-	-
381	Meters	PT381	F011	-	57,176,384	-	-
382	Meter Installations	PT382	F011		-	-	-
383	House Regulators	PT383	F011	-	25,550,380	-	-
384	House Regulator Installations	PT384	F011		-	-	-
385	Industrial Meas. & Reg. Equip.	PT385	F011	-	2,260,538	-	-
387	Other Equipment	PT387	F011	-	1,928,759	-	-
388	Asset Retire Obligation Gas Plant-City Gate	PT388	F008	-	-	-	-
388	Asset Retire Obligation Gas Plant-Mains	PT388	F009	-	-	-	-
Sub-Total	Distribution Plant	PTDSUB	\$	374,861,864 \$	86,916,062 \$	- \$	-
U-T-D Su	btotal	PTSUB		374,861,864	86,916,062	-	-
117	Gas Stored Underground/Non-Current	PT117	F003	-	-	-	-
301-303	Intangible Plant	PT301	PTSUB	128	30	-	-
392-396	General Plant	PT389	PTSUB	4,357,053	1,010,233	-	-
389-399	Common Utility Plant	PTCP	PTSUB	28,676,879	6,649,066	-	-
Total Plan	t in Service	PTIS		407,895,923	94,575,391	-	-

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Name	Vector	Total Company	Procurement Demand	Procurement Commodity	Storage Demand	Storage Commodity	Transmission Non- Storage Related Demand	Transmission Storage Related Demand
Gas Plant at Original Cost (Continued)									
Gas Frant at Original Cost (Continued)									
Construction Work in Progress									
Underground Storage	CWIPUS	F003	\$ 4,450,250	-	-	4,450,250	-	-	-
Transmission	CWIPTR	F005	6,876,704	-	-	-	-	1,198,542	5,678,163
Distribution Mains	CWIPDM	F009	5,653,869	-	-	-	-	-	-
Other Distribution	CWIPOD	PTDSUB	_	-	-	-	-	-	-
General	CWIPCO	PTSUB	119,481	-	-	16,179	-	977	4,628
Common		PTSUB	7,805,570	-	-	1,056,967	-	63,821	302,356
	CWIP		\$ 24,905,873 \$	- \$	- \$	5,523,396 \$	- \$	1,263,339 \$	5,985,147
	PTT		\$ 1,269,519,494	-	-	184,251,411	-	11,343,334	53,739,727

## Cost of Service Study 12 Months Ended June 30, 2018

			Dis Distribution	tribution Structures Distr & Equipment	ibution Mains - Low Distr & Med. Pressure	ibution Mains - Low & Med. Pressure	Distribution Mains - High Pressure	Distribution Mains - High Pressure	
Description	Name	Vector	Commodity	Demand	Demand	Customer	Demand	Customer	
Gas Plant at Original Cost (Continued)									
Construction Work in Progress									
Underground Storage	CWIPUS	F003	-	-		-	-		
Transmission	CWIPTR	F005	-	-	-	-	-	-	
Distribution Mains	CWIPDM	F009	-	-	1,939,173	3,155,502	326,695	232,500	
Other Distribution	CWIPOD	PTDSUB	-	-	-	-	-	-	
General	CWIPCO	PTSUB	-	3,963	15,446	25,135	2,602	1,852	
Common		PTSUB	-	258,901	1,009,104	1,642,055	170,005	120,988	
	CWIP	\$	- \$	262,864 \$	2,963,723 \$	4,822,692 \$	499,302 \$	355,339	
	PTT		-	41,154,150	162,343,281	264,171,674	27,350,181	19,464,351	

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Name	Vector	Services Customer	Meters Customer		
Gas Plant at Original Cost (Continued)						
Construction Work in Progress						
Underground Storage	CWIPUS	F003	-	-	-	-
Transmission	CWIPTR	F005	-	-	-	-
Distribution Mains	CWIPDM	F009	-	-	-	-
Other Distribution	CWIPOD	PTDSUB	-	-	-	-
General	CWIPCO	PTSUB	39,532	9,166	-	-
Common		PTSUB	2,582,573	598,799	-	-
	CWIP	\$	2,622,105	\$ 607,965	\$ -	s -
	PTT		410,518,028	95,183,356	-	-
				\$ 1,020,185,022		

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Name	Vector		Total Company	Procurement Demand	Procurement Commodity	Storage Demand	Storage Commodity	Transmission Non- Storage Related Demand	Transmission Storage Related Demand
Net Cost Rate Base										
Total Gas Utility Plant at Original Cost			\$	1,269,519,494 \$	- \$	- \$	184,251,411 \$	- \$	11,343,334 \$	53,739,727
Less:										
Reserve for Depreciation Underground Storage Transmission Distribution General & Intangible Common	DEPRUS DEPTR DEPRDI DEPRGE DEPRCO	PTST F005 DEPRDIS PT389 PTCP	\$	39,041,082 11,949,641 271,564,808 5,985,030 44,929,599	- - - -	- - - - -	39,041,082 - - 810,444 6,084,003	- - - -	2,082,704 	9,866,937 231,836 1,740,389
Total Depreciation Reserve	DEPR		\$	373,470,160 \$	- \$	- \$	45,935,530 \$	- \$	2,499,000 \$	11,839,161
Customer Advances For Construction Accum. Deferred Income Taxes PLUS:	CAD DIT	CADAL PTSUB	\$	53,441 221,284,688	-	-	29,964,584	-	1,809,299	8,571,662
Materials and Supplies Prepayments Gas Stored Underground Cash Working Capital	MSP PPY GSU CWC	PTSUB PTSUB F003 OMT	\$	323,951 2,521,950 24,895,211 9,932,409		128,499	43,867 341,502 24,895,211 574,635	1,398,816	2,649 20,620 - 150,464	12,549 97,690 712,833
Adjustments:										
Unamortized Debt Regulatory Customer Advances for Construction Depreciation Adjustment Net Cost Rate Base	NCRB	PTSUB PTSUB PTSUB PTSUB	\$ \$	712.384.727 \$	- - - 17.092 \$	- - - 128,499 \$			7.208.769 \$	34.151.975

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Name	Vector	Distribution Commodity	ribution Structures Distr & Equipment Demand	ribution Mains - Low Distr & Med. Pressure Demand	ibution Mains - Low & Med. Pressure Customer	Distribution Mains - High Pressure Demand	Distribution Mains - High Pressure Customer
<u>Net Cost Rate Base</u>								
Total Gas Utility Plant at Original Cost		\$	- \$	41,154,150 \$	162,343,281 \$	264,171,674 \$	27,350,181 \$	19,464,351
Less:								
Reserve for Depreciation Underground Storage Transmission Distribution General & Intangible Common	DEPRUS DEPTR DEPRDI DEPRGE DEPRCO	PTST F005 DEPRDIS PT389 PTCP	- - - -	- 4,825,224 198,516 1,490,260	- 48,761,020 773,745 5,808,498	- - 81,622,198 1,259,069 9,451,826	- 7,095,620 130,354 978,565	5,113,647 92,769 696,417
Total Depreciation Reserve	DEPR	\$	- \$	6,514,000 \$	55,343,262 \$	92,333,094 \$	8,204,539 \$	5,902,833
Customer Advances For Construction Accum. Deferred Income Taxes PLUS:	CAD DIT	CADAL PTSUB	-	7,339,742	9,761 28,607,679	15,884 46,551,594	1,644 4,819,572	1,170 3,429,954
Materials and Supplies Prepayments Gas Stored Underground Cash Working Capital	MSP PPY GSU CWC	PTSUB PTSUB F003 OMT	231,676	10,745 83,650 - 468,397	41,880 326,038 - 956,386	68,150 530,542 - 1,556,271	7,056 54,928 - 161,124	5,021 39,091 - 114,667
Adjustments:								
Unamortized Debt Regulatory Customer Advances for Construction Depreciation Adjustment		PTSUB PTSUB PTSUB PTSUB	- - -	- - -	- - -	- - -		- - -
Net Cost Rate Base	NCRB	\$	231,676 \$	27,863,200 \$	79,706,883 \$	127,426,065 \$	14,547,533 \$	10,289,174

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Name	Vector	Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
Net Cost Rate Base						
Total Gas Utility Plant at Original Cost		\$	410,518,028 \$	95,183,356 \$	- \$	-
Less:						
Reserve for Depreciation Underground Storage Transmission Distribution General & Intangible Common	DEPRUS DEPTR DEPRDI DEPRGE DEPRCO	PTST F005 DEPRDIS PT389 PTCP	- 102,772,954 1,980,224 14,865,535	21,374,144 459,138 3,446,746	- - -	- - - -
Total Depreciation Reserve	DEPR	\$	119,618,714 \$	25,280,028 \$	- \$	-
Customer Advances For Construction Accum. Deferred Income Taxes PLUS:	CAD DIT	CADAL PTSUB	24,981 73,214,883	16,975,718	-	-
Materials and Supplies Prepayments Gas Stored Underground Cash Working Capital	MSP PPY GSU CWC	PTSUB PTSUB F003 OMT	107,183 834,420 - 944,227	24,852 193,470 - 605,331	1,808,350	- - 103,640
Adjustments:						
Unamortized Debt Regulatory Customer Advances for Construction Depreciation Adjustment		PTSUB PTSUB PTSUB PTSUB	- - -	- - -	- - -	- - -
Net Cost Rate Base	NCRB	\$	219,545,280 \$	53,751,262 \$	1,808,350 \$	103,640

## Cost of Service Study 12 Months Ended June 30, 2018

Description	1	Name	Vector	Tota Company		Procurement Commodity	Storage Demand	Storage Commodity	Transmission Non- Storage Related Demand	Transmission Storage Related Demand
Labor Exp	enses									
807-813	Procurement Expenses	LB807	DMCM	614,676	72,163	542,513	-	-	-	-
Storage Ex Operation										
814	Operations Supervision and Engineer	LB814	OSE	536,969	-	<u>-</u>	124,734	412,235	-	_
815	Maps and Records	LB815	F003	-	-	-	-		-	-
816	Well Expenses	LB816	F003	26,000	-	-	26,000	-	-	-
817	Lines Expenses	LB817	F003	393,901		-	393,901	-	-	-
818	Compressor Station Exp - Payroll	LB818	F004	708,539		-	-	708,539	-	-
819	Compressor Station Fuel and Power	LB819	F004	-	-	-	-	-	-	-
820	Measurement and Regulator Station	LB820	F003	-	-	-	-	-	-	-
821	Purification of Natural Gas	LB821	F004	679,199	-	-	-	679,199	-	-
823	Gas losses	LB823	F004	-	-	-	-	-	-	-
824	Other Expenses	LB824	F004	-	-	-	-	-	-	-
825	Storage Well Royalities	LB825	F003	-	-	-	-	-	-	-
826	Rents	LB826	F003	-	-	-	-	-	-	-
Total Stora	ge Operation Labor	LBSO		\$ 2,344,608	\$ -	\$ - \$	544,635 \$	1,799,973 \$	-	\$ -
Storage Ex										
Maintenanc										
830	Maintenance Super and Eng.	LB830	MSE	410,327	-	-	176,230	234,097	-	-
831	Maintenance of Structures	LB831	F003	-	-	-	-	-	-	-
832	Maintenance of Resevoirs	LB832	F003	234,554		-	234,554	-	-	-
833	Maintenance of Lines	LB833	F003	78,000		-	78,000	-	-	-
834	Main of Compressor Station Equipment	LB834	F004	368,303		-	-	368,303	-	-
835	Main of Meas and Reg Sta. Equip	LB835	F003	19,000		-	19,000	-	-	-
836	Main of Purification Equip	LB836	F004	337,789		-	-	337,789	-	-
837	Main of Other Equipment	LB837	F003	200,000	-	-	200,000	-	-	-
Total Maint	tenance Labor	LBSM		\$ 1,647,973	\$ -	\$ - \$	707,784 \$	940,189 \$	-	\$ -
Total Stora	ge Labor	LBS		\$ 3,992,581	-	-	1,252,419	2,740,162	-	-

## Cost of Service Study 12 Months Ended June 30, 2018

				1	Distribution Structures Dist	tribution Mains - Low Dis	tribution Mains - Low	Distribution Mains -	Distribution Mains -
				Distribution	& Equipment	& Med. Pressure	& Med. Pressure	High Pressure	High Pressure
Description	n	Name	Vector	Commodity	Demand	Demand	Customer	Demand	Customer
Labor Exp	benses								
807-813	Procurement Expenses	LB807	DMCM	-	-	-	-	-	-
Storage Ex									
Operation									
814	Operations Supervision and Engineer	LB814	OSE	-	-	-	-	-	-
815	Maps and Records	LB815	F003	-	-	-	-	-	-
816	Well Expenses	LB816	F003	-	-	-	-	-	-
817	Lines Expenses	LB817	F003	-	-	-	-	-	-
818	Compressor Station Exp - Payroll	LB818	F004	-	-	-	-	-	-
819	Compressor Station Fuel and Power	LB819	F004	-	-	-	-	-	-
820	Measurement and Regulator Station	LB820	F003	-	-	-	-	-	-
821	Purification of Natural Gas	LB821	F004	-	-	-	-	-	-
823	Gas losses	LB823	F004	-	-	-	-	-	-
824	Other Expenses	LB824	F004	-	-	-	-	-	-
825	Storage Well Royalities	LB825	F003	-	-	-	-	-	-
826	Rents	LB826	F003	-	-	-	-	-	-
Total Stora	ge Operation Labor	LBSO	\$	- \$	- \$	- \$	- \$	- \$	-
Storage Ex									
Maintenanc									
830	Maintenance Super and Eng.	LB830	MSE						
830	Maintenance of Structures	LB831	F003	-	-	-	-	-	-
831	Maintenance of Resevoirs	LB831 LB832	F003	-	-	-	-	-	-
832	Maintenance of Lines	LB832 LB833	F003	-	-	-	-	-	-
833	Main of Compressor Station Equipment	LB835	F004	-	-	-	-	-	-
835	Main of Meas and Reg Sta. Equip	LB835	F003					_	
836	Main of Purification Equip	LB836	F004				-		
830	Main of Other Equipment	LB830 LB837	F004	-	-	-	-	-	-
857	Mail of Other Equipment	LB037	1005						
Total Main	tenance Labor	LBSM	\$	- \$	- \$	- \$	- \$	- \$	-
Total Stora	ige Labor	LBS		-	-	-	-	-	-
	-								

## Cost of Service Study 12 Months Ended June 30, 2018

Description		Name	Vector	Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
Description		Name	vector	Customer	Customer	Customer	Customer
Labor Exp	enses						
807-813	Procurement Expenses	LB807	DMCM	-	-	-	-
Storage Ex	penses						
Operation							
814	Operations Supervision and Engineer	LB814	OSE	-	-	-	-
815	Maps and Records	LB815	F003	-	-	-	-
816	Well Expenses	LB816	F003	-	-	-	-
817	Lines Expenses	LB817	F003	-	-	-	-
818	Compressor Station Exp - Payroll	LB818	F004	-	-	-	-
819	Compressor Station Fuel and Power	LB819 LB820	F004 F003	-	-	-	-
820	Measurement and Regulator Station Purification of Natural Gas			-	-	-	-
821 823	Gas losses	LB821 LB823	F004	-	-	-	-
823 824	Gas losses Other Expenses	LB823 LB824	F004 F004	-	-	-	-
824 825	Storage Well Royalities	LB824 LB825	F004 F003	-	-	-	-
825 826			F003	-	-	-	-
826	Rents	LB826	F003	-	-	-	-
Total Stora	ge Operation Labor	LBSO	\$	- \$	- \$	- \$	-
Storage Ex	pense						
Maintenanc	e						
830	Maintenance Super and Eng.	LB830	MSE	-	-	-	-
831	Maintenance of Structures	LB831	F003	-	-	-	-
832	Maintenance of Resevoirs	LB832	F003	-	-	-	-
833	Maintenance of Lines	LB833	F003	-	-	-	-
834	Main of Compressor Station Equipment	LB834	F004	-	-	-	-
835	Main of Meas and Reg Sta. Equip	LB835	F003	-	-	-	-
836	Main of Purification Equip	LB836	F004	-	-	-	-
837	Main of Other Equipment	LB837	F003	-	-	-	-
Total Maint	tenance Labor	LBSM	\$	- \$	- \$	- \$	-
Total Stora	ge Labor	LBS		-	-	-	-

## Cost of Service Study 12 Months Ended June 30, 2018

				Total	Procurement	Procurement	Storage	Storage	Transmission Non- Storage Related	Transmission Storage Related
Description	1	Name	Vector	Company	Demand	Commodity	Demand	Commodity	Demand	Demand
Labor Exp	enses (Continued)									
Transmissi	on									
850-867	Transmission Expenses	LB850	F005	\$ 2,082,630	-	-	-	-	362,982	1,719,648
<b>Distributio</b> Operation	n Expenses									
870	Operation Supr and Engr	LB870	DOES	\$ -	-	-	-	-	-	-
871	Dist Load Dispatching	LB871	F007	678,000	-	-	-	-	-	-
872	Compr. Station Labor and Exp.	LB872	F007	-	-	-	-	-	-	-
873	Compr. Station Fuel and Power	LB873	F007	-	-	-	-	-	-	-
874.01	Other Mains/Serv. Expenses	LB874.01	CADAL	944,124	-	-	-	-	-	-
874.02	Leak Survey-Mains	LB874.02	F009		-	-	-	-	-	-
874.03	Leak Survey - Service	LB874.03	F010	-	-	-	-	-	-	-
874.04	Locate Main per Request	LB874.04	CADAL	-	-	-	-	-	-	-
874.05	Check Stop Box Access	LB874.05	F010	-	-	-	-	-	-	-
874.06	Patrolling Mains	LB874.06	F009	-	-	-	-	-	-	-
874.07	Check/Grease Valves	LB874.07	F009	-	-	-	-	-	-	-
874.08	Opr. Odor Equipment	LB874.08	F007	-	-	-	-	-	-	-
874.09	Locate and Inspect Valve Boxes	LB874.09	F009	-	-	-	-	-	-	-
874.1	Cut Grass - Right of Way	LB874.10	F009	-	-	-	-	-	-	-
875	Meas and Reg Station Exp General	LB875	F008	\$ 695,000	-	-	-	-	-	-
876	Meas and Reg Station Exp Industrial	LB876	F011	\$ 339,000	-	-	-	-	-	-
877	Meas and Reg Station Exp City Gate	LB877	F008	\$ 53,000	-	-	-	-	-	-
878	Meter and House Reg. Expense	LB878	F011	\$ 656,175	-	-	-	-	-	-
879	Customer Installation Expense	LB879	F011	\$ 67,000	-	-	-	-	-	-
880	Other Expenses	LB880	PTDSUB	\$ 1,534,995	-	-	-	-	-	-
881	Rents	LB881	PTDSUB	\$ -	-	-	-	-	-	-
Total Opera	tions Distribution Labor	LBDO		\$ 4,967,294 \$	- \$	- \$	- \$	- \$	- 5	-
Total Opera	tions Transmission and Distribution Labor	LBTDO		\$ 7,049,924 \$	- \$	- \$	- \$	- \$	362,982	\$ 1,719,648

## Cost of Service Study 12 Months Ended June 30, 2018

Description		Name	Vector	Distri Distribution Commodity	bution Structures Distr & Equipment Demand	ibution Mains - Low Distri & Med. Pressure Demand	ibution Mains - Low & Med. Pressure Customer	Distribution Mains - High Pressure Demand	Distribution Mains - High Pressure Customer
Description	•	1 dunie	· cctor	commonly	Demand	Deminu	Customer	Demand	Customer
Labor Exp	enses (Continued)								
Transmissi	on								
850-867	Transmission Expenses	LB850	F005	-	-	-	-	-	-
<b>Distributio</b> Operation									
870	Operation Supr and Engr	LB870	DOES	-	-	-	-	-	-
871	Dist Load Dispatching	LB871	F007	678,000	-	-	-	-	-
872	Compr. Station Labor and Exp.	LB872	F007	-	-	-	-	-	-
873	Compr. Station Fuel and Power	LB873	F007	-	-	-	-	-	-
874.01	Other Mains/Serv. Expenses	LB874.01	CADAL	-	-	172,446	280,612	29,052	20,676
874.02	Leak Survey-Mains	LB874.02	F009	-	-	-	-	-	-
874.03	Leak Survey - Service	LB874.03	F010	-	-	-	-	-	-
874.04	Locate Main per Request	LB874.04	CADAL	-	-	-	-	-	-
874.05	Check Stop Box Access	LB874.05	F010	-	-	-	-	-	-
874.06	Patrolling Mains	LB874.06	F009	-	-	-	-	-	-
874.07	Check/Grease Valves	LB874.07	F009	-	-	-	-	-	-
874.08	Opr. Odor Equipment	LB874.08	F007	-	-	-	-	-	-
874.09	Locate and Inspect Valve Boxes	LB874.09	F009	-	-	-	-	-	-
874.1	Cut Grass - Right of Way	LB874.10	F009	-	-	-	-	-	-
875	Meas and Reg Station Exp General	LB875	F008	-	695,000	-	-	-	-
876	Meas and Reg Station Exp Industrial	LB876	F011	-	-	-	-	-	-
877	Meas and Reg Station Exp City Gate	LB877	F008	-	53,000	-	-	-	-
878	Meter and House Reg. Expense	LB878	F011	-	-	-	-	-	-
879	Customer Installation Expense	LB879	F011	-	-	-	-	-	-
880	Other Expenses	LB880	PTDSUB	-	62,267	242,693	394,920	40,887	29,098
881	Rents	LB881	PTDSUB	-	-	-	-	-	-
Total Opera	ations Distribution Labor	LBDO	\$	678,000 \$	810,267 \$	415,139 \$	675,532 \$	69,939 \$	49,774
Total Opera	ations Transmission and Distribution Labor	LBTDO	\$	678,000 \$	810,267 \$	415,139 \$	675,532 \$	69,939 \$	49,774

## Cost of Service Study 12 Months Ended June 30, 2018

Description	1	Name	Vector	Services Customer	Meters Customer		Customer Service Expense Customer
Labor Exp	enses (Continued)						
Transmissi	on						
850-867	Transmission Expenses	LB850	F005	-	-	-	-
Distributio Operation	n Expenses						
870	Operation Supr and Engr	LB870	DOES	-	-	-	-
871	Dist Load Dispatching	LB871	F007	-	-	-	-
872	Compr. Station Labor and Exp.	LB872	F007	-	-	-	-
873	Compr. Station Fuel and Power	LB873	F007	-	-	-	-
874.01	Other Mains/Serv. Expenses	LB874.01	CADAL	441,338	-	-	-
874.02	Leak Survey-Mains	LB874.02	F009	-	-	-	-
874.03	Leak Survey - Service	LB874.03	F010	-		-	-
874.04	Locate Main per Request	LB874.04	CADAL	-	-	-	-
874.05	Check Stop Box Access	LB874.05	F010	-		-	-
874.06	Patrolling Mains	LB874.06	F009	-	-	-	-
874.07	Check/Grease Valves	LB874.07	F009	-	-	-	-
874.08	Opr. Odor Equipment	LB874.08	F007	-		-	-
874.09	Locate and Inspect Valve Boxes	LB874.09	F009	-	-	-	-
874.1	Cut Grass - Right of Way	LB874.10	F009	-		-	-
875	Meas and Reg Station Exp General	LB875	F008	-		-	-
876	Meas and Reg Station Exp Industrial	LB876	F011	-	339,000	-	-
877	Meas and Reg Station Exp City Gate	LB877	F008	-		-	-
878	Meter and House Reg. Expense	LB878	F011	-	656,175	-	-
879	Customer Installation Expense	LB879	F011	-	67,000	-	-
880	Other Expenses	LB880	PTDSUB	621,118	144,013	-	-
881	Rents	LB881	PTDSUB	-	-	-	-
Total Opera	ations Distribution Labor	LBDO	\$	1,062,455	\$ 1,206,188	\$ -	\$ -
Total Opera	ations Transmission and Distribution Labor	LBTDO	\$	1,062,455	\$ 1,206,188	\$ -	s -

## Cost of Service Study 12 Months Ended June 30, 2018

Descriptio	n	Name	Vector	Total Company	Procurement Demand	Procurement Commodity	Storage Demand	Storage Commodity	Transmission Non- Storage Related Demand	Transmission Storage Related Demand
Labor Exp	<u>penses (Continued)</u>									
Maintenan	ce Expense Distribution									
885	Maintenance Supr and Engr	LB885	DMES	\$ -	-	-	-	-	-	-
886	Maintenance Structures	LB886	F008	-	-	-	-	-	-	-
887	Maintenance Mains	LB887	F009	3,914,029	-	-	-	-	-	-
888	Maintenance Comp. Station Equip.	LB888	F007	-	-	-	-	-	-	-
889	Maintenance Meas and Reg. General	LB889	F008	62,000	-	-	-	-	-	-
890	Maintenance Meas and Reg - Industrial	LB890	F011	168,000	-	-	-	-	-	-
891	Maintenance Meas and RegCity Gate	LB891	F008	175,000	-	-	-	-	-	-
892	Maintenance Services	LB892	F010	604,557	-	-	-	-	-	-
893	Maintenance Meters and House Reg.	LB893	F011	-	-	-	-	-	-	-
894	Maintenance Other Equipment	LB894	PTDSUB	129,000	-	-	-	-	-	-
Total Main	tenance Labor	LBDM		\$ 5,052,586 \$	- \$	- \$	- \$	- \$	- \$	-
Total Tran	smission & Distribution Labor	LBTD		\$ 12,102,510 \$	- \$	- \$	- \$	- \$	362,982 \$	1,719,648
Customer	Accounts Expense									
901	Supervision	LB901	F012	\$ 687,661	-	-	-	-	-	-
902	Meter Reading	LB902	F012	267,218	-	-	-	-	-	-
903	Customer Records and Collections	LB903	F012	2,423,677	-	-	-	-	-	-
904	Uncollectible Accounts	LB904	F012	-	-	-	-	-	-	-
905	Misc. Cust Account Expenses	LB905	F012	-	-	-	-	-	-	-
Total Custo	omer Accounts Labor	LBCA		\$ 3,378,555 \$	- \$	- \$	- \$	- \$	- \$	-
Customer	Service Expenses									
907-910	Customer Service	LB907	F013	\$ 224,138	-	-	-	-	-	-
Sales Expe 911-916	e <b>nses</b> Sales Expenses	LB911	F013	\$ -	-	-	-	-	-	-

## Cost of Service Study 12 Months Ended June 30, 2018

Description	n	Name	Vector	Distribution Commodity	stribution Structures Dist & Equipment Demand	ribution Mains - Low Distr & Med. Pressure Demand	ibution Mains - Low & Med. Pressure Customer	Distribution Mains - High Pressure Demand	Distribution Mains - High Pressure Customer
Labor Exp	enses (Continued)								
Maintenan	ce Expense Distribution								
885	Maintenance Supr and Engr	LB885	DMES	-	-	-	-	-	-
886	Maintenance Structures	LB886	F008	-	-	-	-	-	-
887	Maintenance Mains	LB887	F009	-		1,342,440	2,184,473	226,163	160,953
888	Maintenance Comp. Station Equip.	LB888	F007	-	-	-	-	-	-
889	Maintenance Meas and Reg. General	LB889	F008	-	62,000	-	-	-	-
890	Maintenance Meas and Reg - Industrial	LB890	F011	-	-	-	-	-	-
891	Maintenance Meas and RegCity Gate	LB891	F008	-	175,000	-	-	-	-
892	Maintenance Services	LB892	F010	-	-	-	-	-	-
893	Maintenance Meters and House Reg.	LB893	F011	-	-	-	-	-	-
894	Maintenance Other Equipment	LB894	PTDSUB	-	5,233	20,396	33,189	3,436	2,445
Total Main	tenance Labor	LBDM	\$	- \$	242,233 \$	1,362,835 \$	2,217,662 \$	229,599 \$	163,399
Total Trans	smission & Distribution Labor	LBTD	\$	678,000 \$	1,052,499 \$	1,777,975 \$	2,893,194 \$	299,538 \$	213,173
Customer .	Accounts Expense								
901	Supervision	LB901	F012	-	-	-	-	-	-
902	Meter Reading	LB902	F012	-	-	-	-	-	-
903	Customer Records and Collections	LB903	F012	-	-	-	-	-	-
904	Uncollectible Accounts	LB904	F012	-	-	-	-	-	-
905	Misc. Cust Account Expenses	LB905	F012	-	-	-	-	-	-
Total Custo	omer Accounts Labor	LBCA	\$	- \$	- \$	- \$	- \$	- \$	-
Customer	Service Expenses								
907-910	Customer Service	LB907	F013	-	-	-	-	-	-
Sales Expe	nses								
911-916	Sales Expenses	LB911	F013	-	-	-	-	-	-

## Cost of Service Study 12 Months Ended June 30, 2018

Descriptio	n	Name	Vector	Services Customer	Meters Customer	Customer Accounts Customer	
Labor Exp	enses (Continued)						
Maintenan	ce Expense Distribution						
885	Maintenance Supr and Engr	LB885	DMES	-	-	-	-
886	Maintenance Structures	LB886	F008	-	-	-	-
887	Maintenance Mains	LB887	F009	-	-	-	-
888	Maintenance Comp. Station Equip.	LB888	F007	-	-	-	-
889	Maintenance Meas and Reg. General	LB889	F008	-	-	-	-
890	Maintenance Meas and Reg - Industrial	LB890	F011	-	168,000	-	-
891	Maintenance Meas and RegCity Gate	LB891	F008	-	-	-	-
892	Maintenance Services	LB892	F010	604,557	-	-	-
893	Maintenance Meters and House Reg.	LB893	F011	-	-	-	-
894	Maintenance Other Equipment	LB894	PTDSUB	52,198	12,103	-	-
Total Main	tenance Labor	LBDM	\$	656,755	\$ 180,103	\$ -	\$ -
Total Trans	smission & Distribution Labor	LBTD	\$	1,719,211	\$ 1,386,291	\$ -	\$ -
Customer	Accounts Expense						
901	Supervision	LB901	F012	-	-	687,661	-
902	Meter Reading	LB902	F012	-	-	267,218	-
903	Customer Records and Collections	LB903	F012	-	-	2,423,677	-
904	Uncollectible Accounts	LB904	F012	-	-	-	-
905	Misc. Cust Account Expenses	LB905	F012	-	-	-	-
Total Custo	omer Accounts Labor	LBCA	\$	-	\$ -	\$ 3,378,555	\$ -
Customer	Service Expenses						
907-910	Customer Service	LB907	F013	-	-	-	224,138
Sales Expe	nses						
911-916	Sales Expenses	LB911	F013	-	-	-	-

## Cost of Service Study 12 Months Ended June 30, 2018

Description	on	Name	Vector	Total Company	Procurement Demand	Procurement Commodity	Storage Demand	Storage Commodity	Transmission Non- Storage Related Demand	Transmission Storage Related Demand
Labor Ex	spenses (Continued)									
Administ	rative & General									
920	Admin and General Salaries	LB920	LBSUB	\$6,056,882	21,518	161,770	373,453	817,077	108,236	512,774
921	Office Supplies and Expense	LB921	LBSUB	-		-	-	-	-	-
922	Admin. Expenses Transferred	LB922	LBSUB	(683,568)	(2,428)	(18,257)	(42,147)	(92,214)	(12,215)	(57,871)
923	Outside Services Employed	LB923	LBSUB	-	-	-	-	-	-	-
924	Property Insurance	LB924	PTT	-		-	-	-	-	-
925	Injuries and Damages	LB925	LBSUB	-	-	-	-	-	-	-
926	Employee Pensions and Benefits	LB926	LBSUB	-	-	-	-	-	-	-
927	Franchise Requirement	LB927	PTT	-		-	-	-	-	-
928	Regulatory Commission Fee	LB928	PTT	-	-	-	-	-	-	-
929	Duplicate Charges -Credit	LB929	LBSUB	-		-	-	-	-	-
930.1	General Advertising Expense	LB930.1	PTT	-		-	-	-	-	-
930.2	Misc. General Expense	LB930.2	LBSUB	-		-	-	-	-	-
931	Rents	LB931	PTT	-	-	-	-	-	-	-
935	Maintenance of General Plant	LB935	PT389	184,591	-	-	24,996	-	1,509	7,150
Total Adr	ninistrative and General Labor	LBAG		\$ 5,557,905 \$	19,089 \$	143,513 \$	356,302 \$	724,863 \$	97,530 \$	462,054
Total Lab	or Expense	LBTOT		\$ 25,870,365 \$	91,252 \$	686,026 \$	1,608,721 \$	3,465,025 \$	460,512 \$	2,181,702

## Cost of Service Study 12 Months Ended June 30, 2018

Distribution Structures Distribution Mains - Low Distribution Mains - L								Distribution Mains -	Distribution Mains -
Descriptio	n an	Name	Vector	Distribution Commodity	& Equipment Demand	& Med. Pressure Demand	& Med. Pressure Customer	High Pressure Demand	High Pressure Customer
Descriptio		Ivanie	vector	Commounty	Demanu	Demanu	Customer	Demanu	Customer
Labor Ex	penses (Continued)								
Administr	rative & General								
920	Admin and General Salaries	LB920	LBSUB	202,170	313,840	530,166	862,709	89,318	63,565
921	Office Supplies and Expense	LB921	LBSUB	-	-	-	-	-	-
922	Admin. Expenses Transferred	LB922	LBSUB	(22,816)	(35,419)	(59,834)	(97,364)	(10,080)	(7,174)
923	Outside Services Employed	LB923	LBSUB	-	-	-	-	-	-
924	Property Insurance	LB924	PTT	-	-	-	-	-	-
925	Injuries and Damages	LB925	LBSUB	-	-	-	-		
926	Employee Pensions and Benefits	LB926	LBSUB	-	-	-	-		
927	Franchise Requirement	LB927	PTT	-	-	-	-	-	-
928	Regulatory Commission Fee	LB928	PTT	-	-	-	-		
929	Duplicate Charges -Credit	LB929	LBSUB	-	-	-	-	-	-
930.1	General Advertising Expense	LB930.1	PTT	-	-	-	-		
930.2	Misc. General Expense	LB930.2	LBSUB	-	-	-	-		
931	Rents	LB931	PTT	-	-	-	-		
935	Maintenance of General Plant	LB935	PT389	-	6,123	23,864	38,832	4,020	2,861
Total Adm	inistrative and General Labor	LBAG	\$	179,353 \$	284,543 \$	494,197 \$	804,177 \$	83,258 \$	59,252
Total Labo	or Expense	LBTOT	\$	857,353 \$	1,337,043 \$	2,272,172 \$	3,697,371 \$	382,796 \$	272,425

## Cost of Service Study 12 Months Ended June 30, 2018

Descriptio	n	Name	Vector	Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
Labor Ex	penses (Continued)						
Administr	ative & General						
920	Admin and General Salaries	LB920	LBSUB	512,644	413,372	1,007,436	66,835
921	Office Supplies and Expense	LB921	LBSUB	-	-	-	-
922	Admin. Expenses Transferred	LB922	LBSUB	(57,856)	(46,652)	(113,697)	(7,543)
923	Outside Services Employed	LB923	LBSUB	-	-	-	-
924	Property Insurance	LB924	PTT	-	-	-	-
925	Injuries and Damages	LB925	LBSUB	-	-	-	-
926	Employee Pensions and Benefits	LB926	LBSUB	-	-	-	-
927	Franchise Requirement	LB927	PTT	-	-	-	
928	Regulatory Commission Fee	LB928	PTT	-	-	-	
929	Duplicate Charges -Credit	LB929	LBSUB	-	-	-	-
930.1	General Advertising Expense	LB930.1	PTT	-	-	-	
930.2	Misc. General Expense	LB930.2	LBSUB	-	-	-	-
931	Rents	LB931	PTT	-	-	-	
935	Maintenance of General Plant	LB935	PT389	61,074	14,161	-	-
Total Adm	inistrative and General Labor	LBAG	\$	515,862 \$	380,880	\$ 893,739	59,292
Total Labo	or Expense	LBTOT	\$	2,235,073 \$	1,767,171	\$ 4,272,294	283,429

## Cost of Service Study 12 Months Ended June 30, 2018

Description		Name	Vector	Total Company	Procurement Demand	Procurement Commodity	Storage Demand	Storage Commodity	Transmission Non- Storage Related Demand	Transmission Storage Related Demand
Operation &	& Maintenance Expenses									
807 & 813	Procurement Expenses	OM807	DMCM	\$ 356,999	41,912	315,087	-	-	-	-
Storage Exp Operation	penses									
814	Operations Supervision and Engineer	OM814	OSE	669,590	-	_	155,541	514,049	_	-
815	Maps and Records	OM815	F003	-		_	-	-	-	
816	Well Expenses	OM816	F003	38,570		_	38,570	-	-	
817	Lines Expenses	OM817	F003	908,360	-	-	908,360	-	-	-
818	Compressor Station Exp - Payroll	OM818	F004	3,082,282	-	-	· _	3,082,282	-	-
819	Compressor Station Fuel and Power	OM819	F004	631,000	-		-	631,000	-	-
820	Measurement and Regulator Station	OM820	F003	-		-	-	· -	-	
821	Purification of Natural Gas (1)	OM821	F004	1,439,653		-	-	1,439,653	-	
823	Gas losses (2)	OM823	F004	-	-	-	-	-	-	-
824	Other Expenses	OM824	F004	-	-	-	-	-	-	-
825	Storage Well Royalities	OM825	F003	136,735	-	-	136,735	-	-	-
826	Rents	OM826	F003	-	-	-	-	-	-	-
Total Operat	tion Expenses	OMOE		\$ 6,906,190 \$	- \$	- \$	1,239,206 \$	5,666,984 \$	- \$	-
Storage Exp										
Maintenanc										
830	Maintenance Super and Eng.	OM830	MSE	\$ 481,346	-	-	206,732	274,614	-	-
831	Maintenance of Structures	OM831	F003	-	-	-	-	-	-	-
832	Maintenance of Resevoirs	OM832	F003	655,057	-	-	655,057	-	-	-
833	Maintenance of Lines	OM833	F003 F004	148,661	-	-	148,661	-	-	-
834 835	Main of Compressor Station Equipment Main of Meas and Reg Sta. Equip	OM834 OM835	F004 F003	479,611 27,400	-	-	27,400	479,611	-	-
835		OM835 OM836	F003 F004	642,528	-	-			-	-
836	Main of Purification Equip	OM836 OM837	F004 F003	642,528 344,250	-	-	344,250	642,528	-	-
857	Main of Other Equipment	0101857	F005	544,250	-	-	344,230	-	-	-
Total Mainte	enance Expense	OMME		\$ 2,778,853 \$	- \$	- \$	1,382,100 \$	1,396,753 \$	- \$	-
Total Storag	e Expense	OMS		\$ 9,685,043	-	-	2,621,306	7,063,737	-	-

## Cost of Service Study 12 Months Ended June 30, 2018

					Distribution Structures Dist	ribution Mains - Low Dist	tribution Mains - Low	Distribution Mains -	Distribution Mains -
				Distribution	& Equipment	& Med. Pressure	& Med. Pressure	High Pressure	High Pressure
Description		Name	Vector	Commodity	Demand	Demand	Customer	Demand	Customer
Operation &	& Maintenance Expenses								
807 & 813	Procurement Expenses	OM807	DMCM	-	-	-	-	-	-
Storage Exp	penses								
Operation									
814	Operations Supervision and Engineer	OM814	OSE	-	-	-	-	-	-
815	Maps and Records	OM815	F003	-	-	-	-	-	-
816	Well Expenses	OM816	F003	-	-	-	-	-	-
817	Lines Expenses	OM817	F003	-	-	-	-	-	-
818	Compressor Station Exp - Payroll	OM818 OM819	F004 F004	-	-	-	-	-	-
819 820	Compressor Station Fuel and Power Measurement and Regulator Station	OM819 OM820	F004 F003	-	-	-	-	-	-
820 821	Purification of Natural Gas (1)	OM820 OM821	F003	-	-	-	-	-	-
821 823	Gas losses (2)	OM821 OM823	F004 F004	-	-	-	-	-	-
823	Other Expenses	OM823 OM824	F004	-	-	-	-	-	-
825	Storage Well Royalities	OM824 OM825	F004	-	-	-	-	-	-
826	Rents	OM825 OM826	F003	-		-			-
820	Rents	010120	1005	-	-	-	-	-	-
Total Opera	tion Expenses	OMOE	\$	- \$	- \$	- \$	- \$	- \$	-
Storage Ex	nonso								
Maintenanc									
830	Maintenance Super and Eng.	OM830	MSE	-	-	-	-	-	-
831	Maintenance of Structures	OM831	F003	-	-	-	-	-	-
832	Maintenance of Resevoirs	OM832	F003	-	-	-	-	-	-
833	Maintenance of Lines	OM833	F003	-	-	-	-	-	-
834	Main of Compressor Station Equipment	OM834	F004	-	-	-	-	-	-
835	Main of Meas and Reg Sta. Equip	OM835	F003	-	-		-	-	
836	Main of Purification Equip	OM836	F004	-	-		-	-	
837	Main of Other Equipment	OM837	F003	-	-	-	-	-	-
Total Mainte	enance Expense	OMME	\$	- \$	- \$	- \$	- \$	- \$	-
Total Storag	re Expense	OMS			_	_			
10101310182	e Expense	0/013		-	-	-	-	-	-

## Cost of Service Study 12 Months Ended June 30, 2018

				Services	Meters	Customer Accounts	Customer Service Expense
Description		Name	Vector	Customer	Customer	Customer	Customer
Operation &	& Maintenance Expenses						
807 & 813	Procurement Expenses	OM807	DMCM	-	-	-	-
Storage Exp Operation	benses						
814	Operations Supervision and Engineer	OM814	OSE	-	_	-	-
815	Maps and Records	OM815	F003		-	-	-
816	Well Expenses	OM816	F003		-	-	-
817	Lines Expenses	OM817	F003	-	-	-	-
818	Compressor Station Exp - Payroll	OM818	F004	-	-	-	-
819	Compressor Station Fuel and Power	OM819	F004	-	-	-	-
820	Measurement and Regulator Station	OM820	F003	-	-	-	-
821	Purification of Natural Gas (1)	OM821	F004	-	-	-	-
823	Gas losses (2)	OM823	F004		-	-	-
824	Other Expenses	OM824	F004		-	-	-
825	Storage Well Royalities	OM825	F003	-	-	-	-
826	Rents	OM826	F003	-	-	-	-
Total Operat	tion Expenses	OMOE	\$	- \$	- \$	- \$	-
Storage Exp							
Maintenanc							
830	Maintenance Super and Eng.	OM830	MSE	-	-	-	-
831	Maintenance of Structures	OM831	F003	-	-	-	-
832	Maintenance of Resevoirs	OM832	F003	-	-	-	-
833	Maintenance of Lines	OM833	F003	-	-	-	-
834	Main of Compressor Station Equipment	OM834	F004	-	-	-	-
835	Main of Meas and Reg Sta. Equip	OM835	F003	-	-	-	-
836	Main of Purification Equip	OM836	F004	-	-	-	-
837	Main of Other Equipment	OM837	F003	-	-	-	-
Total Mainte	enance Expense	OMME	\$	- \$	- \$	- \$	-
Total Storag	e Expense	OMS		-	-	-	-
Total Storag	e Expense	OMS		-	-	-	

## Cost of Service Study 12 Months Ended June 30, 2018

Description	1	Name	Vector	Total Company	Procurement Demand	Procurement Commodity	Storage Demand	Storage Commodity	Transmission Non- Storage Related Demand	Transmission Storage Related Demand
-								•		
Operation	& Maintenance Expenses (Continued)									
Transmissi	on									
850-867	Transmission Expenses	OM850	F005	\$ 3,862,617	-	-	-	-	673,216	3,189,401
Distributio Operation	n Expenses									
870	Operation Supr and Engr	OM870	DOES	\$ -	-	-	-	-	-	-
871	Dist Load Dispatching	OM871	F007	912,592	-	-	-	-	-	-
872	Compr. Station Labor and Exp.	OM872	F007			-	-	-	-	-
873	Compr. Station Fuel and Power	OM873	F007	-	-	-	-	-	-	-
874.01	Other Mains/Serv. Expenses	OM874.01	CADAL	3,602,301	-	-	-	-	-	-
874.02	Leak Survey-Mains	OM874.02	F009	-	-	-	-	-	-	-
874.03	Leak Survey - Service	OM874.03	F010	-	-	-	-	-	-	-
874.04	Locate Main per Request	OM874.04	CADAL	-	-	-	-	-	-	-
874.05	Check Stop Box Access	OM874.05	F010	-	-	-	-	-	-	-
874.06	Patrolling Mains	OM874.06	F009	-	-	-	-	-	-	-
874.07	Check/Grease Valves	OM874.07	F009	-	-	-	-	-	-	-
874.08	Opr. Odor Equipment	OM874.08	F007	-	-	-	-	-	-	-
874.09	Locate and Inspect Valve Boxes	OM874.09	F009	-	-	-	-	-	-	-
874.1	Cut Grass - Right of Way	OM874.10	F009		-	-	-	-	-	-
875	Meas and Reg Station Exp General	OM875	F008	1,161,507	-	-	-	-	-	-
876	Meas and Reg Station Exp Industrial	OM876	F011	490,681	-	-	-	-	-	-
877	Meas and Reg Station Exp City Gate	OM877	F008 F011	250,192	-	-	-	-	-	-
878 879	Meter and House Reg. Expense	OM878	F011 F011	1,371,331 161,930	-	-	-	-	-	-
	Customer Installation Expense	OM879			-	-	-	-	-	-
880 881	Other Expenses Rents	OM880 OM881	PTDSUB PTDSUB	4,011,065 6,755	-	-	-	-	-	-
881	Kenis	0101881	PIDSUB	0,733	-	-	-	-	-	-
Total Opera	ations Distribution Expense	OMDO		\$ 11,968,354	-	-	-	-	-	-
Total Trans	mission and Distribution Oper Exp	OMTDO		\$ 15,830,971 \$	- \$	- \$	- \$	- \$	673,216	3,189,401

## Cost of Service Study 12 Months Ended June 30, 2018

Description	_	Name	Vector	Distr Distribution Commodity	ibution Structures Dista & Equipment Demand	ribution Mains - Low Distr & Med. Pressure Demand	ibution Mains - Low & Med. Pressure Customer	Distribution Mains - High Pressure Demand	Distribution Mains - High Pressure Customer
Description	1	Name	vector	Commounty	Demanu	Demanu	Customer	Demanu	Customer
Operation	& Maintenance Expenses (Continued)								
Transmissi	ion								
850-867	Transmission Expenses	OM850	F005	-	-	-	-	-	-
Operation									
870	Operation Supr and Engr	OM870	DOES	-	-	-	-	-	-
871	Dist Load Dispatching	OM871	F007	912,592	-	-	-	-	-
872	Compr. Station Labor and Exp.	OM872	F007	-	-	-	-	-	-
873	Compr. Station Fuel and Power	OM873	F007	-	-	-	-		
874.01	Other Mains/Serv. Expenses	OM874.01	CADAL	-	-	657,969	1,070,674	110,849	78,888
874.02	Leak Survey-Mains	OM874.02	F009	-	-	-	-	-	-
874.03	Leak Survey - Service	OM874.03	F010	-	-	-	-	-	-
874.04	Locate Main per Request	OM874.04	CADAL	-	-	-	-	-	-
874.05	Check Stop Box Access	OM874.05	F010	-	-	-	-	-	-
874.06	Patrolling Mains	OM874.06	F009	-	-	-	-	-	-
874.07	Check/Grease Valves	OM874.07	F009	-	-	-	-	-	-
874.08	Opr. Odor Equipment	OM874.08	F007	-	-	-	-	-	-
874.09	Locate and Inspect Valve Boxes	OM874.09	F009	-	-	-	-	-	-
874.1	Cut Grass - Right of Way	OM874.10	F009	-	-	-	-	-	-
875	Meas and Reg Station Exp General	OM875	F008	-	1,161,507	-	-	-	-
876	Meas and Reg Station Exp Industrial	OM876	F011	-		-	-	-	-
877	Meas and Reg Station Exp City Gate	OM877	F008	-	250,192	-	-	-	-
878	Meter and House Reg. Expense	OM878	F011	-	-	-	-	-	-
879	Customer Installation Expense	OM879	F011	-	-	-		-	-
880	Other Expenses	OM880	PTDSUB	-	162,708	634,176	1,031,957	106,840	76,035
881	Rents	OM881	PTDSUB	-	274	1,068	1,738	180	128
Total Opera	ations Distribution Expense	OMDO		912,592	1,574,681	1,293,213	2,104,369	217,869	155,051
Total Trans	smission and Distribution Oper Exp	OMTDO	\$	912,592 \$	1,574,681 \$	1,293,213 \$	2,104,369 \$	217,869 \$	155,051

## Cost of Service Study 12 Months Ended June 30, 2018

Description	a	Name	Vector	Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
Operation	& Maintenance Expenses (Continued)						
Transmissi	ion						
850-867	Transmission Expenses	OM850	F005	-	-	-	-
Distributio Operation							
870	Operation Supr and Engr	OM870	DOES	-	-	-	-
871	Dist Load Dispatching	OM871	F007	-	-	-	-
872	Compr. Station Labor and Exp.	OM872	F007	-	-	-	-
873	Compr. Station Fuel and Power	OM873	F007	-	-	-	-
874.01	Other Mains/Serv. Expenses	OM874.01	CADAL	1,683,922	-	-	-
874.02	Leak Survey-Mains	OM874.02	F009	-	-	-	-
874.03	Leak Survey - Service	OM874.03	F010	-	-	-	-
874.04	Locate Main per Request	OM874.04	CADAL	-	-	-	-
874.05	Check Stop Box Access	OM874.05	F010	-	-	-	-
874.06	Patrolling Mains	OM874.06	F009	-	-	-	-
874.07	Check/Grease Valves	OM874.07	F009	-	-	-	-
874.08	Opr. Odor Equipment	OM874.08	F007	-	-	-	-
874.09	Locate and Inspect Valve Boxes	OM874.09	F009	-	-	-	-
874.1	Cut Grass - Right of Way	OM874.10	F009	-	-	-	
875	Meas and Reg Station Exp General	OM875	F008	-	-	-	
876	Meas and Reg Station Exp Industrial	OM876	F011	-	490,681	-	-
877	Meas and Reg Station Exp City Gate	OM877	F008	-	-	-	
878	Meter and House Reg. Expense	OM878	F011	-	1,371,331	-	-
879	Customer Installation Expense	OM879	F011	-	161,930	-	-
880	Other Expenses	OM880	PTDSUB	1,623,030	376,318	-	-
881	Rents	OM881	PTDSUB	2,733	634	-	-
Total Opera	ations Distribution Expense	OMDO		3,309,685	2,400,894	-	-
Total Trans	smission and Distribution Oper Exp	OMTDO	\$	3,309,685 \$	2,400,894 \$	- \$	-

## Cost of Service Study 12 Months Ended June 30, 2018

Descriptio	n	Name	Vector	Total Company	Procurement Demand	Procurement Commodity	Storage Demand	Storage Commodity	Transmission Non- Storage Related Demand	Transmission Storage Related Demand
Operation	& Maintenance Expenses (Continued)									
Maintenar	nce Expense Distribution									
885	Maintenance Supr and Engr	OM885	DMES	-	-	-	-	-	-	-
886	Maintenance Structures	OM886	F008	-	-	-	-	-	-	-
887	Maintenance Mains	OM887	F009	10,017,232	-	-	-	-	-	-
888	Maintenance Comp. Station Equip.	OM888	F007	-	-	-	-	-	-	-
889	Maintenance Meas and Reg. General	OM889	F008	166,690	-	-	-	-	-	-
890	Maintenance Meas and Reg - Industrial	OM890	F011	286,414	-	-	-	-	-	-
891	Maintenance Meas and RegCity Gate	OM891	F008	415,357	-	-	-	-	-	-
892	Maintenance Services	OM892	F010	1,072,829	-	-	-	-	-	-
893	Maintenance Meters and House Reg.	OM893	F011	15,198	-	-	-	-	-	-
894	Maintenance Other Equipment	OM894	PTDSUB	561,398	-	-	-	-	-	-
Total Mair	atenance Expenses	OMME		\$ 12,535,118 \$	- \$	- \$	- \$	- \$	- \$	-
Total Tran	smission & Distribution Expenses	OMDE		\$ 28,366,089 \$	- \$	- \$	- \$	- \$	673,216 \$	3,189,401
Customer	Accounts Expense									
901	Supervision	OM901	F012	1,016,772	-	-	-	-	-	-
902	Meter Reading	OM902	F012	2,000,723	-	-	-	-	-	-
903	Customer Records and Collections	OM903	F012	5,889,512	-	-	-	-	-	-
904	Uncollectible Accounts	OM904	F012	411,866	-	-	-	-	-	-
905	Misc. Cust Account Expenses	OM905	F012	1,012	-	-	-	-	-	-
Total Cust	omer Accounts Expense	OMCA		\$ 9,319,886 \$	- \$	- \$	- \$	- \$	- \$	-
Customer	Service Expenses									
907-910	Customer Service	OM907	F013	\$ 499,125	-	-	-	-	-	-
Sales Expo 911-916	e <b>nses</b> Sales Expenses	OM911	F013	\$ -	-	-	-	-	-	-

## Cost of Service Study 12 Months Ended June 30, 2018

Description	n	Name	Vector	Dist Distribution Commodity	ribution Structures Dist & Equipment Demand	ribution Mains - Low Distr & Med. Pressure Demand	ibution Mains - Low & Med. Pressure Customer	Distribution Mains - High Pressure Demand	Distribution Mains - High Pressure Customer
<b>Operation</b>	& Maintenance Expenses (Continued)								
Maintenan	ce Expense Distribution								
885	Maintenance Supr and Engr	OM885	DMES	-	-	-	-	-	-
886	Maintenance Structures	OM886	F008	-	-	-	-	-	-
887	Maintenance Mains	OM887	F009	-	-	3,435,726	5,590,754	578,821	411,931
888	Maintenance Comp. Station Equip.	OM888	F007	-	-	-	-	-	-
889	Maintenance Meas and Reg. General	OM889	F008	-	166,690	-	-	-	-
890	Maintenance Meas and Reg - Industrial	OM890	F011	-	-	-	-	-	-
891	Maintenance Meas and RegCity Gate	OM891	F008	-	415,357	-	-	-	-
892	Maintenance Services	OM892	F010	-	-	-	-	-	-
893	Maintenance Meters and House Reg.	OM893	F011	-	-	-	-	-	-
894	Maintenance Other Equipment	OM894	PTDSUB	-	22,773	88,761	144,435	14,954	10,642
Total Main	tenance Expenses	OMME	\$	- \$	604,820 \$	3,524,486 \$	5,735,190 \$	593,775 \$	422,573
Total Trans	smission & Distribution Expenses	OMDE	\$	912,592 \$	2,179,501 \$	4,817,699 \$	7,839,559 \$	811,644 \$	577,624
Customer	Accounts Expense								
901	Supervision	OM901	F012	-		-	-		-
902	Meter Reading	OM902	F012	-	-	-	-	-	-
903	Customer Records and Collections	OM903	F012	-	-	-	-	-	-
904	Uncollectible Accounts	OM904	F012	-	-	-	-	-	-
905	Misc. Cust Account Expenses	OM905	F012	-	-	-	-	-	-
Total Custo	omer Accounts Expense	OMCA	\$	- \$	- \$	- \$	- \$	- \$	-
Customer	Service Expenses								
907-910	Customer Service	OM907	F013	-	-	-	-	-	-
Sales Expe		01611	5012						
911-916	Sales Expenses	OM911	F013	-	-	-	-	-	-

## Cost of Service Study 12 Months Ended June 30, 2018

Description	1	Name	Vector	Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
<b>Operation</b>	& Maintenance Expenses (Continued)						
Maintenan	ce Expense Distribution						
885	Maintenance Supr and Engr	OM885	DMES	-	-	-	-
886	Maintenance Structures	OM886	F008	-	-	-	-
887	Maintenance Mains	OM887	F009	-	-	-	-
888	Maintenance Comp. Station Equip.	OM888	F007	-	-	-	-
889	Maintenance Meas and Reg. General	OM889	F008	-	-	-	-
890	Maintenance Meas and Reg - Industrial	OM890	F011	-	286,414	-	-
891	Maintenance Meas and RegCity Gate	OM891	F008	-	-	-	-
892	Maintenance Services	OM892	F010	1,072,829	-	-	-
893	Maintenance Meters and House Reg.	OM893	F011	-	15,198	-	-
894	Maintenance Other Equipment	OM894	PTDSUB	227,163	52,670	-	-
Total Main	tenance Expenses	OMME	\$	1,299,992	\$ 354,282	\$ -	s -
Total Trans	mission & Distribution Expenses	OMDE	\$	4,609,677	\$ 2,755,176	\$ -	\$ -
Customer	Accounts Expense						
901	Supervision	OM901	F012	-	-	1,016,772	-
902	Meter Reading	OM902	F012	-	-	2,000,723	-
903	Customer Records and Collections	OM903	F012	-	-	5,889,512	-
904	Uncollectible Accounts	OM904	F012	-	-	411,866	-
905	Misc. Cust Account Expenses	OM905	F012	-	-	1,012	-
Total Custo	omer Accounts Expense	OMCA	\$	-	\$ -	\$ 9,319,886	\$ -
Customer	Service Expenses						
907-910	Customer Service	OM907	F013	-	-	-	499,125
Sales Expe	nses						
911-916	Sales Expenses	OM911	F013	-	-	-	-

## Cost of Service Study 12 Months Ended June 30, 2018

Descripti	ion	Name	Vector	Total Company	Procurement Demand	Procurement Commodity	Storage Demand	Storage Commodity	Transmission Non- Storage Related Demand	Transmission Storage Related Demand
<u>Operation</u>	n & Maintenance Expenses (Continued)									
Administ	rative & General									
920	Admin and General Salaries	OM920	LBSUB	\$ 7,797,587	27,702	208,261	480,781	1,051,899	139,342	660,142
921	Office Supplies and Expense	OM921	LBSUB	1,753,271	6,229	46,827	108,103	236,517	31,331	148,432
922	Admin. Expenses Transferred	OM922	LBSUB	(1,218,695)	(4,330)	(32,549)	(75,142)	(164,403)	(21,778)	(103,174)
923	Outside Services Employed	OM923	LBSUB	4,461,617	15,851	119,163	275,093	601,875	79,729	377,719
924	Property Insurance	OM924	PTT	178,474	-	-	25,903	-	1,595	7,555
925	Injuries and Damages	OM925	LBSUB	918,880	3,264	24,542	56,656	123,957	16,420	77,792
926	Employee Pensions and Benefits	OM926	LBSUB	9,609,082	34,138	256,643	592,474	1,296,270	171,713	813,503
927	Franchise Requirement	OM927	PTT	-	-	-	-	-	-	-
928	Regulatory Commission Fee	OM928	PTT	194,514	-		28,231	-	1,738	8,234
929	Duplicate Charges -Credit	OM929	LBSUB	(597,722)	(2,123)	(15,964)	(36,854)	(80,633)	(10,681)	(50,603)
930.1	General Advertising Expense	OM930.1	PTT	-	-		-	-	-	
930.2	Misc. General Expense	OM930.2	LBSUB	593,100	2,107	15,841	36,569	80,009	10,599	50,212
931	Rents	OM931	PTT	316,976	-		46,004	-	2,832	13,418
935	Maintenance of General Plant	OM935	PT389	257,250	-	-	34,835	-	2,103	9,965
Total Adr	ministrative and General Expense	OMAGT		\$ 24,264,334 \$	82,837 \$	622,763 \$	1,572,652 \$	3,145,492 \$	424,943 \$	2,013,194
Total Ope	eration & Maintenance Expense	OMT		\$ 72,491,476 \$	124,749 \$	937,850 \$	4,193,958 \$	10,209,229 \$	1,098,159 \$	5,202,595

## Cost of Service Study 12 Months Ended June 30, 2018

				Dis	ribution Structures Dist	ribution Mains - Low Distr	ibution Mains - Low	Distribution Mains -	Distribution Mains -
				Distribution	& Equipment	& Med. Pressure	& Med. Pressure	High Pressure	High Pressure
Descriptio	on	Name	Vector	Commodity	Demand	Demand	Customer	Demand	Customer
Operation	a & Maintenance Expenses (Continued)								
Administr	ative & General								
920	Admin and General Salaries	OM920	LBSUB	260,272	404,036	682,532	1,110,645	114,987	81,833
921	Office Supplies and Expense	OM921	LBSUB	58,522	90,847	153,466	249,726	25,855	18,400
922	Admin. Expenses Transferred	OM922	LBSUB	(40,678)	(63,147)	(106,674)	(173,584)	(17,971)	(12,790)
923	Outside Services Employed	OM923	LBSUB	148,922	231,181	390,531	635,488	65,793	46,823
924	Property Insurance	OM924	PTT	-	5,786	22,823	37,138	3,845	2,736
925	Injuries and Damages	OM925	LBSUB	30,671	47,612	80,431	130,880	13,550	9,643
926	Employee Pensions and Benefits	OM926	LBSUB	320,737	497,899	841,095	1,368,664	141,700	100,844
927	Franchise Requirement	OM927	PTT	-	-	-	-	-	-
928	Regulatory Commission Fee	OM928	PTT	-	6,306	24,874	40,476	4,191	2,982
929	Duplicate Charges -Credit	OM929	LBSUB	(19,951)	(30,971)	(52,319)	(85,136)	(8,814)	(6,273)
930.1	General Advertising Expense	OM930.1	PTT	=	-	-	-	-	-
930.2	Misc. General Expense	OM930.2	LBSUB	19,797	30,732	51,915	84,478	8,746	6,224
931	Rents	OM931	PTT	-	10,275	40,534	65,959	6,829	4,860
935	Maintenance of General Plant	OM935	PT389	-	8,533	33,257	54,118	5,603	3,987
Total Adm	inistrative and General Expense	OMAGT	\$	778,291 \$	1,239,087 \$	2,162,465 \$	3,518,852 \$	364,313 \$	259,271
Total Ope	ration & Maintenance Expense	OMT	\$	1,690,883 \$	3,418,587 \$	6,980,164 \$	11,358,410 \$	1,175,957 \$	836,896

## Cost of Service Study 12 Months Ended June 30, 2018

Description	on	Name	Vector	Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
<u>Operation</u>	n & Maintenance Expenses (Continued)						
Administ	rative & General						
920	Admin and General Salaries	OM920	LBSUB	659,974	532,172	1,296,966	86,042
921	Office Supplies and Expense	OM921	LBSUB	148,394	119,658	291,620	19,346
922	Admin. Expenses Transferred	OM922	LBSUB	(103,148)	(83,174)	(202,705)	(13,448)
923	Outside Services Employed	OM923	LBSUB	377,623	304,498	742,097	49,232
924	Property Insurance	OM924	PTT	57,712	13,381	-	-
925	Injuries and Damages	OM925	LBSUB	77,772	62,712	152,837	10,139
926	Employee Pensions and Benefits	OM926	LBSUB	813,296	655,804	1,598,271	106,031
927	Franchise Requirement	OM927	PTT	-	-	-	-
928	Regulatory Commission Fee	OM928	PTT	62,899	14,584	-	-
929	Duplicate Charges -Credit	OM929	LBSUB	(50,590)	(40,794)	(99,419)	(6,596)
930.1	General Advertising Expense	OM930.1	PTT	-	-	-	-
930.2	Misc. General Expense	OM930.2	LBSUB	50,199	40,478	98,650	6,545
931	Rents	OM931	PTT	102,499	23,766	-	-
935	Maintenance of General Plant	OM935	PT389	85,115	19,735	-	-
Total Adr	ninistrative and General Expense	OMAGT	\$	2,281,744 \$	1,662,820 \$	3,878,318 \$	257,293
Total Ope	ration & Maintenance Expense	OMT	\$	6,891,422 \$	4,417,996 \$	13,198,203 \$	756,418
				\$	36,770,315		

## Cost of Service Study 12 Months Ended June 30, 2018

Description	n	Name	Vector		Total Company	Procurement Demand	Procurement Commodity	Storage Demand	Storage Commodity	Transmission Non- Storage Related Demand	Transmission Storage Related Demand
Depreciatio	on Expenses										
Undergrou	ind Storage										
350-357	Underground Storage Plant	DP350	F003	\$	3,577,970	-	-	3,577,970	-		-
358	Asset Retire Obligation Gas Plant	DP350	F003	\$	-	-	-	-	-	-	-
Total Under	rground Storage			\$	3,577,970	-	-	3,577,970	-	-	-
Transmissi	on										
365-372	Transmission Plant	DP365	F005	\$	1,086,759	-	-	-	-	189,411	897,347
Distributio		55554	5000	¢.							
374 375	Land & Land Rights	DP374	F008 F008	\$	36,434	-	-	-	-	-	-
375	Structures & Improvements Mains	DP375 DP376	F008 F009		8,512,130	-	-	-	-	-	-
378	Meas & Reg Station EqGen	DP378 DP378	F009 F008		664,445	-	-	-	-	-	-
378	Meas & Reg Station EqCity Gate	DP378 DP379	F008		448,793	-	-	-	-	-	-
380	Services	DP3/9 DP380	F010		12,286,773	-	-	-	-	-	-
381	Meters	DP380 DP381	F010		2,192,731	-	-	-	-	-	-
382	Meter Installations	DP382	F011		2,192,751				-		
383	House Regulators	DP383	F011		962,550	_	_				
384	House Regulator Installations	DP384	F011		-	_	_	_	_	_	
385	Industrial Meas & Reg Equipment	DP385	F011		52,324	-	-	-	-	-	-
387	Other Equipment	DP387	F011		38,167	-	-	-	-		-
388	Asset Retire Obligation Gas Plant-City Gate	DP388	F008		-	-	-	-	-	-	-
388	Asset Retire Obligation Gas Plant-Mains	DP388	F009		-	-	-	-	-	-	-
Total Distri	ibution			\$	25,194,348 \$	- \$	- \$	- \$	- \$	- \$	-
117	Gas Stored Underground	DP117	F003	\$	-	-	-	-	-	-	-
301-303	Intangible Plant	DP301	PTSUB		48	-	-	6	-	0	2
389-399	General Plant	DP389	PTSUB		401,460	-	-	54,363	-	3,282	15,551
Common U		DPCP	PTSUB		8,449,877	-	-	1,144,214	-	69,089	327,314
Common U	tility Plant Amortization	DPCP	PTSUB		-	-	-	-	-	-	-
Total Depre	eciation Expense	DEPREX		\$	38,710,461 \$	- \$	- \$	4,776,553 \$	- \$	261,783 \$	5 1,240,214
Regulatory	Credits and Accretion										
	Regulatory Credits	REGCR	PTSUB	\$	-	-	-	-	-	-	-
	Accretion	ACCRE	PTSUB	\$	_						_
	Accellon	ACCRE	F130B	φ	-	-	-	-	-	-	-
Amortizati	on of Investment Tax Credits	ITCAM	PTSUB	\$	(35,870)	-	-	(4,857)	-	(293)	(1,389)

## Cost of Service Study 12 Months Ended June 30, 2018

					Distribution Structures Dis	tribution Mains - Low Dis	tribution Mains - Low	Distribution Mains -	Distribution Mains -
				Distribution	& Equipment	& Med. Pressure	& Med. Pressure	High Pressure	High Pressure
Descriptio	n	Name	Vector	Commodity	Demand	Demand	Customer	Demand	Customer
Depreciati	on Expenses								
Undergrou	ind Storage								
350-357	Underground Storage Plant	DP350	F003	-	-	-	-	-	
358	Asset Retire Obligation Gas Plant	DP350	F003	-	-	-	-	-	-
Tetel Head	rground Storage								
I otal Unde	rground Storage			-	-	-	-	-	-
Transmiss									
365-372	Transmission Plant	DP365	F005	-	-	-	-	-	-
Distributio	on								
374	Land & Land Rights	DP374	F008	-	-	-		-	-
375	Structures & Improvements	DP375	F008	-	36,434	-	-	-	-
376	Mains	DP376	F009	-	-	2,919,504	4,750,737	491,853	350,038
378	Meas & Reg Station EqGen	DP378	F008	-	664,445	-	-	-	-
379	Meas & Reg Station EqCity Gate	DP379	F008	-	448,793	-	-	-	-
380	Services	DP380	F010	-	-	-	-	-	-
381	Meters	DP381	F011	-	-	-	-	-	-
382	Meter Installations	DP382	F011	-	-	-	-	-	-
383	House Regulators	DP383	F011	-	-	-	-	-	-
384	House Regulator Installations	DP384	F011	-	-	-	-	-	-
385	Industrial Meas & Reg Equipment	DP385	F011	-	-	-	-	-	-
387	Other Equipment	DP387	F011	-	-	-	-	-	-
388	Asset Retire Obligation Gas Plant-City Gate	DP388	F008	-	-	-	-	-	-
388	Asset Retire Obligation Gas Plant-Mains	DP388	F009	-	-	-	-	-	-
Total Distr	ibution		\$	-	\$ 1,149,673 \$	2,919,504 \$	4,750,737 \$	491,853 \$	350,038
117	Gas Stored Underground	DP117	F003	_	-	-	-	-	-
301-303	Intangible Plant	DP301	PTSUB	-	2	6	10	1	1
389-399	General Plant	DP389	PTSUB	-	13,316	51,901	84,455	8,744	6,223
Common U		DPCP	PTSUB	-	280,272	1,092,400	1,777,598	184,038	130,975
	Julity Plant Amortization	DPCP	PTSUB	-		-,	-,,		-
Total Depr	eciation Expense	DEPREX	\$	-	\$ 1,443,262 \$	4,063,811 \$	6,612,800 \$	684,635 \$	487,236
Pagulator	y Credits and Accretion								
Regulator	Cituits and Accitition								
	Regulatory Credits	REGCR	PTSUB	-	-	-	-	-	-
	Accretion	ACCRE	PTSUB	-	-	-	-	-	-
Amortizat	ion of Investment Tax Credits	ITCAM	PTSUB	-	(1,190)	(4,637)	(7,546)	(781)	(556)

## Cost of Service Study 12 Months Ended June 30, 2018

Descriptio	n	Name	Vector	Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
Depreciat	ion Expenses						
	und Storage						
350-357	Underground Storage Plant	DP350	F003	-	-	-	-
358	Asset Retire Obligation Gas Plant	DP350	F003	-	-	-	-
Total Und	erground Storage			-	-	-	-
Transmiss	ion						
365-372	Transmission Plant	DP365	F005	-	-	-	-
Distributi	Dn						
374	Land & Land Rights	DP374	F008	-	-	-	-
375	Structures & Improvements	DP375	F008	-	-	-	-
376	Mains	DP376	F009	-	-	-	-
378	Meas & Reg Station EqGen	DP378	F008	-	-	-	-
379	Meas & Reg Station EqCity Gate	DP379	F008	-	-	-	-
380	Services	DP380	F010	12,286,773	-	-	-
381	Meters	DP381	F011	-	2,192,731	-	-
382 383	Meter Installations	DP382 DP383	F011	-	-	-	-
383	House Regulators	DP383 DP384	F011 F011	-	962,550	-	-
385	House Regulator Installations Industrial Meas & Reg Equipment	DP384 DP385	F011	-	52,324	-	-
385	Other Equipment	DP385 DP387	F011	-	38,167	-	-
388	Asset Retire Obligation Gas Plant-City Gate	DP388	F008	_	-		
388	Asset Retire Obligation Gas Plant-Mains	DP388	F009	-	-	-	-
Total Dist	-	51000	\$	12,286,773 \$	3,245,772 \$	- \$	_
rotar bist	iouton		9	12,200,775 0	5,215,772 0	Ψ	
117	Gas Stored Underground	DP117	F003	-	-	-	-
301-303	Intangible Plant	DP301	PTSUB	16	4	-	-
389-399	General Plant	DP389	PTSUB	132,828	30,798	-	-
Common U	Jtility Plant	DPCP	PTSUB	2,795,750	648,227	-	-
Common U	Jtility Plant Amortization	DPCP	PTSUB	-	-	-	-
Total Dep	reciation Expense	DEPREX	\$	15,215,367 \$	3,924,800 \$	- \$	-
Regulator	y Credits and Accretion						
	Regulatory Credits	REGCR	PTSUB	-	-	-	-
	Accretion	ACCRE	PTSUB	-	-	-	-
Amortizat	ion of Investment Tax Credits	ITCAM	PTSUB	(11,868)	(2,752)	-	-

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Name	Vector	Total Company	Procurement Demand	Procurement Commodity	Storage Demand	Storage Commodity	Transmission Non- Storage Related Demand	Transmission Storage Related Demand
Taxes Other Than Income Taxes									
Taxes Other Than Income Taxes Unemployment Insurance	OTRE OTPP OTUN	PTT PTT LBTOT	11,113,566	- - -	- - -	1,612,965	- -	99,301	470,446
Federal Old Age & Survivor Insurance Public Service Commission Fee	OTFICA OTCF	LBTOT PTT	-	-	-	-	-	-	-
Miscellaneous	OTMISC	PTT	-	-	-	-	-	-	-
Total Taxes Other Than Income Taxes	OTT		\$ 11,113,566 \$	- \$	- \$	1,612,965 \$	- \$	99,301 \$	470,446
Interest Expenses	INT	PTT	\$ 12,736,800	-	-	1,848,552	-	113,805	539,158

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Name	Vector	Dis Distribution Commodity	tribution Structures Distr & Equipment Demand	ibution Mains - Low Distr & Med. Pressure Demand	ibution Mains - Low & Med. Pressure Customer	Distribution Mains - High Pressure Demand	Distribution Mains - High Pressure Customer
Taxes Other Than Income Taxes								
	OTRE	PTT	-	-	-	-		
Taxes Other Than Income Taxes	OTPP	PTT	-	360,270	1,421,178	2,312,599	239,428	170,394
Unemployment Insurance	OTUN	LBTOT	-	-	-	-	-	-
Federal Old Age & Survivor Insurance	OTFICA	LBTOT	-	-	-	-	-	-
Public Service Commission Fee	OTCF	PTT	-	-	-	-	-	-
Miscellaneous	OTMISC	PTT	-	-	-	-	-	-
Total Taxes Other Than Income Taxes	OTT	\$	- \$	360,270 \$	1,421,178 \$	2,312,599 \$	239,428 \$	170,394
Interest Expenses	INT	PTT	-	412,890	1,628,753	2,650,374	274,398	195,281

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Name	Vector	Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
Taxes Other Than Income Taxes						
	OTRE	PTT	-	-	-	-
Taxes Other Than Income Taxes	OTPP	PTT	3,593,737	833,250	-	-
Unemployment Insurance	OTUN	LBTOT	-	-	-	-
Federal Old Age & Survivor Insurance	OTFICA	LBTOT	-	-	-	-
Public Service Commission Fee	OTCF	PTT	-	-	-	-
Miscellaneous	OTMISC	PTT	-	-	-	-
Total Taxes Other Than Income Taxes	OTT	\$	3,593,737 \$	833,250 \$	- \$	-
Interest Expenses	INT	PTT	4,118,634	954,953	-	-

## Cost of Service Study 12 Months Ended June 30, 2018

	N. A.		Total	Procurement	Procurement	Storage	Storage	Transmission Non- Storage Related	Transmission Storage Related
Description	Name Vec	or	Company	Demand	Commodity	Demand	Commodity	Demand	Demand
Functional Assignment Vectors									
<u></u>									
Gas Supply Demand	F001		1.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Gas Supply Commodity	F002		1.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000
Storage Demand	F003		1.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000
Storage Commodity	F004		1.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000
Transmission Demand	F005		1.000000	0.000000	0.000000	0.000000	0.000000	0.174290	0.825710
Distribution Expense Commodity	F007		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Distribution Structures & Equipment	F008		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Distribution Mains	F009		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Services	F010		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Meters	F011		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Customer Accounts	F012		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Customer Service Expense	F013		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Transmission & Distribution Mains	TDMSUB	\$	480,205,701 \$	- \$	- \$	- \$	- \$	9,263,651 \$	43,887,105

## Cost of Service Study 12 Months Ended June 30, 2018

			Dist	ribution Structures Dist	ribution Mains - Low Dist	ribution Mains - Low	Distribution Mains -	Distribution Mains -
			Distribution	& Equipment	& Med. Pressure	& Med. Pressure	High Pressure	High Pressure
Description	Name	Vector	Commodity	Demand	Demand	Customer	Demand	Customer
Functional Assignment Vectors								
Gas Supply Demand	F001		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Gas Supply Commodity	F002		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Storage Demand	F003		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Storage Commodity	F004		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Transmission Demand	F005		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Distribution Expense Commodity	F007		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Distribution Structures & Equipment	F008		0.000000	1.000000	0.000000	0.000000	0.000000	0.000000
Distribution Mains	F009		0.000000	0.000000	0.342982	0.558114	0.057783	0.041122
Services	F010		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Meters	F011		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Customer Accounts	F012		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Customer Service Expense	F013		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Transmission & Distribution Mains	TDMSUB	\$	- \$	- \$	146,471,966 \$	238,345,218 \$	24,676,321 \$	17,561,440

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Name	Vector	Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
Functional Assignment Vectors						
Gas Supply Demand	F001		0.000000	0.000000	0.000000	0.000000
Gas Supply Commodity	F002		0.000000	0.000000	0.000000	0.000000
Storage Demand	F003		0.000000	0.000000	0.000000	0.000000
Storage Commodity	F004		0.000000	0.000000	0.000000	0.000000
Transmission Demand	F005		0.000000	0.000000	0.000000	0.000000
Distribution Expense Commodity	F007		0.000000	0.000000	0.000000	0.000000
Distribution Structures & Equipment	F008		0.000000	0.000000	0.000000	0.000000
Distribution Mains	F009		0.000000	0.000000	0.000000	0.000000
Services	F010		1.000000	0.000000	0.000000	0.000000
Meters	F011		0.000000	1.000000	0.000000	0.000000
Customer Accounts	F012		0.000000	0.000000	1.000000	0.000000
Customer Service Expense	F013		0.000000	0.000000	0.000000	1.000000
Transmission & Distribution Mains	TDMSUB	\$	- \$	- \$	- \$	-

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Name Vec	or	Total Company	Procurement Demand	Procurement Commodity	Storage Demand	Storage Commodity	Transmission Non- Storage Related Demand	Transmission Storage Related Demand
Internally Generated Functional Vectors									
Internally Generated Functional Fectors									
Sub-Total Distribution Plant	PTDS	лв	1.000000	-	-	-	-	-	-
Storage-Transmission-Distribution Subtotal	PTS	JB	1.000000	-	-	0.135412	-	0.008176	0.038736
Total Storage Plant	PT	ST	1.000000	-		1.000000	-	-	-
Transmission Plant	PT3	65	1.000000	-	-	-	-	0.174290	0.825710
General Plant	PT3	89	1.000000	-	-	0.135412	-	0.008176	0.038736
Total Distribution Plant	PTDS	JB	1.000000	-	-	-	-	-	-
Sub-Total CWIP	CW	ΤP	1.000000	-	-	0.221771	-	0.050725	0.240311
Total Operation and Maintenance Expenses	OM	4T	1.000000	0.001721	0.012937	0.057855	0.140834	0.015149	0.071768
Total Depreciation Reserve	DE	PR	1.000000	-	-	0.122997	-	0.006691	0.031700
Storage-Transmission -Distribution Plant Subtotal	PTS	JB	1.000000	-	-	0.135412	-	0.008176	0.038736
Total Labor Expenses	LBTO	T	1.000000	0.003527	0.026518	0.062184	0.133938	0.017801	0.084332
Transmission and Distribution Payroll	LB		1.000000	-		-	-	0.029992	0.142090
Transmission and Distribution Mains	TDMS	JB	1.000000	-	-	-	-	0.019291	0.091392
Storage Operation Expenses Labor Subtotal	OSE		1,807,639	-	-	419,901	1,387,738	-	-
Storage Maintenance Expenses Labor Subtotal	MSE		1,237,646	-	-	531,554	706,092	-	-
Mains & Services	CADAL		801,916,809	-	-	-	-	-	-
Demand/Commodity Percent of Purchased Gas Cost	DMCM		1.00000	11.74%	88.26%				
Distribution Operation Expenses Labor Subtotal	DOES		4,967,294	-	-	-	-	-	-
Distribution Maintenance Expenses Labor Subtotal	DMES		5,052,586	-	-	-	-	-	-
Subtotal Labor Expenses	LBSUB	\$	20,312,460 \$	72,163 \$	542,513 \$	1,252,419 \$	2,740,162 \$	362,982 \$	
Subtotal O&M Expenses	OMSUB	\$	48,227,142 \$	41,912 \$	315,087 \$	2,621,306 \$	7,063,737 \$	673,216 \$	3,189,401
Depreciation Reserve - Distribution	DEPRDIS	\$	239,031,181 \$	- \$	- \$	- \$	- \$	- \$	-

## Cost of Service Study 12 Months Ended June 30, 2018

					tribution Mains - Low Dist		Distribution Mains -	Distribution Mains -	
Description	Name	Vector	Distribution Commodity	& Equipment Demand	& Med. Pressure Demand	& Med. Pressure Customer	High Pressure Demand	High Pressure Customer	
Description	Ttank	vector	Commonly	Demanu	Demand	Custonici	Demand	Customer	
Internally Generated Functional Vectors									
Sub-Total Distribution Plant		PTDSUB	-	0.040565	0.158107	0.257278	0.026636	0.018956	
Storage-Transmission-Distribution Subtotal		PTSUB	-	0.033169	0.129280	0.210370	0	0	
Total Storage Plant		PTST	-	-	-				
Transmission Plant		PT365	-	-	-	-	-	-	
General Plant		PT389	-	0.033169	0.129280	0.210370	0	0	
Total Distribution Plant		PTDSUB	-	0.040565	0.158107	0.257278	0	0	
Sub-Total CWIP		CWIP	-	0.010554	0.118997	0.193637	0	0	
Total Operation and Maintenance Expenses		OMT	0.023325	0.047158	0.096289	0.156686	0	0	
Total Depreciation Reserve		DEPR	-	0.017442	0.148187	0.247230	0	0	
Storage-Transmission -Distribution Plant Subtotal		PTSUB	-	0.033169	0.129280	0.210370	0	0	
Total Labor Expenses		LBTOT	0.033140	0.051682	0.087829	0.142919	0	0	
Transmission and Distribution Payroll		LBTD	0.056021	0.086965	0.146910	0.239057	0	0	
Transmission and Distribution Mains		TDMSUB	-	-	0.305019	0.496340	0	0	
Storage Operation Expenses Labor Subtotal	OSE		-	-	-				
Storage Maintenance Expenses Labor Subtotal	MSE		-	-	-	-	-	-	
Mains & Services	CADAL		-	-	146,471,966	238,345,218	24,676,321	17,561,440	
Demand/Commodity Percent of Purchased Gas Cost	DMCM								
Distribution Operation Expenses Labor Subtotal	DOES		678,000	810,267	415,139	675,532	69,939	49,774	
Distribution Maintenance Expenses Labor Subtotal	DMES		-	242,233	1,362,835	2,217,662	229,599	163,399	
Subtotal Labor Expenses	LBSUB	\$	678,000 \$	1,052,499 \$	1,777,975 \$	2,893,194 \$			
Subtotal O&M Expenses	OMSUB	\$	912,592 \$	2,179,501 \$	4,817,699 \$	7,839,559 \$	811,644 \$		
Depreciation Reserve - Distribution	DEPRDIS	\$	- \$	4,247,160 \$	42,919,420 \$	71,843,810 \$	6,245,561 \$	4,501,029	

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Name	Vector	Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
Internally Generated Functional Vectors						
Sub-Total Distribution Plant		PTDSUB	0.404638	0.093820	-	-
Storage-Transmission-Distribution Subtotal		PTSUB	0	0	-	-
Total Storage Plant		PTST	-	-	-	-
Transmission Plant		PT365	-	-	-	-
General Plant		PT389	0	0	-	-
Total Distribution Plant		PTDSUB	0	0	-	-
Sub-Total CWIP		CWIP	0	0	-	-
Total Operation and Maintenance Expenses		OMT	0	0	0	0
Total Depreciation Reserve		DEPR	0	0	-	-
Storage-Transmission -Distribution Plant Subtotal		PTSUB	0	0	-	-
Total Labor Expenses		LBTOT	0	0	0	0
Transmission and Distribution Payroll		LBTD	0	0	-	-
Transmission and Distribution Mains		TDMSUB	-	-	-	-
Storage Operation Expenses Labor Subtotal	OSE		-	-	-	-
Storage Maintenance Expenses Labor Subtotal	MSE		-	-	-	-
Mains & Services	CADAL		374,861,864	-	-	-
Demand/Commodity Percent of Purchased Gas Cost	DMCM					
Distribution Operation Expenses Labor Subtotal	DOES		1,062,455	1,206,188	-	-
Distribution Maintenance Expenses Labor Subtotal	DMES		656,755	180,103	-	-
Subtotal Labor Expenses	LBSUB	\$	1,719,211	\$ 1,386,291	\$ 3,378,555	\$ 224,138
Subtotal O&M Expenses	OMSUB	\$	4,609,677	\$ 2,755,176	\$ 9,319,886	\$ 499,125
Depreciation Reserve - Distribution	DEPRDIS	\$	90,460,693	\$ 18,813,509	s -	s -

# Exhibit WSS-29

Gas Cost of Service Study Class Allocation

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Ref	Name	Allocation Vector		Total System		Residential (RGS)		Commercial (CGS)		Industrial (IGS)	l	As Available Gas Service (AAGS)		Firm Transportation Service (FT)
Plant in Service															
<b>Procurement Expenses</b> Demand Commodity Total Procurement Expenses	PTIS PTIS	PTISGSD PTISGSC	DEM01 COM01	\$ \$	- -	\$ \$	- - -	\$ \$	- -	\$ \$	- - -	5	-	\$ \$	- - -
<b>Storage</b> Demand Commodity Total Storage	PTIS PTIS	PTISSD PTISSC	DEM02 COM02	\$ \$	178,728,015 - 178,728,015		119,039,286 - 119,039,286		53,570,566 - 53,570,566		4,558,642 - 4,558,642		-	\$ \$	1,559,520 - 1,559,520
<b>Transmission</b> Demand Non-Storage Related Storage Related Total Transmission	PTIS PTIS	PTISTD PTISTC	DEM04 DEM03	\$ \$	10,079,995 47,754,581 57,834,575		5,472,514 31,806,268 37,278,783		2,501,058 14,313,592 16,814,650		247,446 1,218,030 1,465,476		-		1,803,666 416,690 2,220,357
Distribution Expenses Commodity	PTIS	PTISDEC	COM04	\$	-	\$	-	\$	-	\$	-	5	5 -	\$	-
Distribution Structures & Equipment Demand	PTIS	PTISDSD	DEM04	\$	40,891,286	\$	22,200,225	\$	10,145,986	\$	1,003,810	5	224,372	\$	7,316,893
Distribution Mains Low/Medium Pressure - Demand Low/Medium Pressure - Customer High Pressure - Demand High Pressure - Customer Total Distribution Mains	PTIS PTIS PTIS PTIS			\$ \$	159,379,558 259,348,982 26,850,879 19,109,012 464,688,431		102,373,766 239,181,948 14,577,570 17,618,543 373,751,826		46,787,037 19,952,466 6,662,266 1,469,732 74,871,501		4,327,269 212,955 659,143 16,043 5,215,410		147,331 357		5,013,380 1,613 4,804,569 4,338 9,823,900
Services Customer	PTIS	PTISSC	CUST02	\$	407,895,923	\$	303,436,555	\$	97,935,054	\$	2,733,366	5	61,309	\$	3,729,640
Meters Customer	PTIS	PTISMC	CUST03	\$	94,575,391	\$	63,557,579	\$	26,103,938	\$	2,145,267	5	60,546	\$	2,708,061
Customer Accounts Customer	PTIS	PTISCAC	CUST04	\$	-	\$	-	\$	-	\$	-	5	ş -	\$	-
Customer Service Customer	PTIS	PTISCSC	CUST05	\$	-	\$	-	\$	-	\$	-	5	s -	\$	-
Total		PLT		\$	1,244,613,621	\$	919,264,254	\$	279,441,695	\$	17,121,972	9	5 1,427,330	\$	27,358,370

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Ref	Name	Allocation Vector		Total System	Residential (RGS)	Commercial (CGS)	Industrial (IGS)	l	s Available Gas Service (AAGS)		Firm Transportation Service (FT)
<u>Rate Base</u>												
<b>Procurement Expenses</b> Demand Commodity Total Procurement Expenses	NCRB NCRB	RBGSD RBGSC	DEM01 COM01	\$ \$	17,092 128,499 145,592	11,302 78,401 89,703	5,165 40,726 45,892	511 7,829 8,340		1,543		- -
<b>Storage</b> Demand Commodity Total Storage	NCRB NCRB	RBSD RBSC	DEM02 COM02	\$ \$	134,206,512 1,398,816 135,605,328	89,386,364 907,417 90,293,781	40,226,032 431,830 40,657,861	3,423,076 59,569 3,482,645		-	\$ \$	1,171,040 - 1,171,040
<b>Transmission</b> Demand Non-Storage Related Storage Related Total Transmission	NCRB NCRB	RBTD RBTC	DEM04 DEM03	\$ \$	7,208,769 34,151,975 41,360,744	3,913,702 22,746,444 26,660,146	1,788,647 10,236,452 12,025,098	176,963 871,081 1,048,044		-		1,289,903 297,999 1,587,901
Distribution Expenses Commodity	NCRB	RBDEC	COM04	\$	231,676	\$ 102,062	\$ 53,017	\$ 10,191	\$	2,009	\$	64,397
Distribution Structures & Equipment Demand	NCRB	RBDSD	DEM04	\$	27,863,200	\$ 15,127,167	\$ 6,913,444	\$ 683,993	\$	152,886	\$	4,985,709
Distribution Mains Low/Medium Pressure - Demand Low/Medium Pressure - Customer High Pressure - Demand High Pressure - Customer Total Distribution Mains	NCRB NCRB NCRB NCRB	RBDMD RBDMC RBDMD RBDMC	DEM05a CUST01a DEM05 CUST01	\$ \$	79,706,883 127,426,065 14,547,533 10,289,174 231,969,654	51,197,869 117,517,386 7,897,979 9,486,636 186,099,870	23,398,539 9,803,255 3,609,548 791,372 37,602,714	2,164,099 104,631 357,117 8,638 2,634,485		79,823 192		2,507,228 793 2,603,067 2,336 5,113,423
Services Customer	NCRB	RBSC	CUST02	\$	219,545,280	\$ 163,321,229	\$ 52,712,414	\$ 1,471,203	\$	32,999	\$	2,007,436
Meters Customer	NCRB	RBMC	CUST03	\$	53,751,262	\$ 36,122,506	\$ 14,835,991	\$ 1,219,248	\$	34,411	\$	1,539,107
Customer Accounts Customer	NCRB	RBCAC	CUST04	\$	1,808,350	\$ 1,542,101	\$ 259,605	\$ 2,784	\$	62	\$	3,798
Customer Service Customer	NCRB	RBCSC	CUST05	\$	103,640	\$ 88,381	\$ 14,879	\$ 160	\$	4	\$	218
Total		RBT		\$	712,384,727	\$ 519,446,947	\$ 165,120,915	\$ 10,561,092	\$	782,745	\$	16,473,029

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Ref	Name	Allocation Vector		Total System		Residential (RGS)		Commercial (CGS)		Industrial (IGS)		Gas vice (GS)	e	Firm Transportation Service (FT)
								\$	78,417,515						
<b>Operation and Maintenance Expenses</b>															
Procurement Expenses	o) (77			<u>_</u>	101 510	<u>_</u>		÷				0			
Demand	OMT	OMGSD	DEM01	\$	124,749	\$	82,487	\$	37,698	\$	3,730	•	834	\$	-
Commodity	OMT	OMGSC	COM01	\$	937,850	¢	572,212	¢	297,240	¢	57,136	· · · · · · · · · · · · · · · · · · ·	262	¢	-
Total Procurement Expenses		OMGST		2	1,062,599	\$	654,699	\$	334,938	3	60,866	\$ 12,	096	\$	-
Storage												_			
Demand	OMT	OMSD	DEM02	\$	4,193,958	\$	2,793,327	\$	1,257,065	\$	106,971	\$	-	\$	36,595
Commodity	OMT	OMSC	COM02		10,209,229		6,622,766		3,151,699		434,764		-		-
Total Storage		OMST		\$	14,403,187	\$	9,416,093	\$	4,408,763	\$	541,736	\$	-	\$	36,595
Transmission															
Demand Non-Storage Related	OMT	OMTD	DEM04	\$	1,098,159	\$	596,200	\$	272,476	\$	26,958	\$6,	026	\$	196,499
Storage Related	OMT	OMTC	DEM03		5,202,595		3,465,115		1,559,386		132,698		-		45,396
Total Transmission		OMTRT		\$	6,300,754	\$	4,061,315	\$	1,831,862	\$	159,655	\$ 6,	026	\$	241,895
Distribution Expenses															
Commodity	OMT	OMDEC	COM04	\$	1,690,883	\$	744,901	\$	386,944	\$	74,380	\$ 14,	661	\$	469,997
Distribution Structures & Equipment															
Demand	OMT	OMDSD	DEM04	\$	3,418,587	\$	1,855,980	\$	848,223	\$	83,920	\$ 18,	758	\$	611,706
Distribution Mains															
Low/Medium Pressure - Demand	OMT	OMDMD	DEM05a	\$	6,980,164	\$	4,483,547	\$	2,049,078	\$	189,516	\$ 38,	457	\$	219,565
Low/Medium Pressure - Customer	OMT	OMDMC	CUST01a		11,358,410		10,475,178		873,835		9,327		-		71
High Pressure - Demand	OMT	OMDMD	DEM05		1,175,957		638,437		291,780		28,868	6,	453		210,420
High Pressure - Customer	OMT	OMDMD	CUST01		836,896		771,619		64,368		703		16		190
Total Distribution Mains				\$	20,351,427	\$	16,368,781	\$	3,279,061	\$	228,413	\$ 44,	926	\$	430,246
Services															
Customer	OMT	OMSC	CUST02	\$	6,891,422	\$	5,126,576	\$	1,654,618	\$	46,180	\$ 1,	036	\$	63,012
Meters															
Customer	OMT	OMMC	CUST03	\$	4,417,996	\$	2,969,030	\$	1,219,420	\$	100,214	\$ 2,	828	\$	126,504
Customer Accounts															
Customer	OMT	OMCAC	CUST04	\$	13,198,203	\$	11,254,990	\$	1,894,719	\$	20,317	\$	456	\$	27,722
Customer Service															
Customer	OMT	OMCSC	CUST05	\$	756,418	\$	645,048	\$	108,590	\$	1,164	\$	26	\$	1,589
-					,	*	,	-4-	,	~	-,-01			~	-,
Total		OMTT		\$	72,491,476	\$	53,097,411	\$	15,967,139	\$	1,316,846	\$ 100,	812	\$	2,009,268

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Ref	Name	Allocation Vector		Total System		Residential (RGS)		Commercial (CGS)		Industrial (IGS)	l	s Available Gas Service (AAGS)	Т	Firm Transportation Service (FT)
Payroll Expenses															
Procurement Expenses															
Demand	LBTOT	LBGSD	DEM01	\$	91,252	\$	60,338	\$	27,576	\$	2,728	\$		\$	-
Commodity	LBTOT	LBGSC	COM01	<u>_</u>	686,026	<i>_</i>	418,566		217,427		41,795		8,238	<i>•</i>	-
Total Procurement Expenses		LBGST		\$	777,278	\$	478,904	\$	245,003	\$	44,523	\$	8,848	\$	-
Storage															
Demand	LBTOT	LBSD	DEM02	\$	1,608,721	\$	1,071,466	\$	482,186	\$	41,032	\$	-	\$	14,037
Commodity	LBTOT	LBSC	COM02		3,465,025		2,247,775		1,069,690		147,560		-		-
Total Storage		LBST		\$	5,073,746	\$	3,319,241	\$	1,551,876	\$	188,592	\$	-	\$	14,037
Transmission															
Demand Non-Storage Related	LBTOT	LBTD	DEM04	\$	460,512	\$	250,016	\$	114,263	\$	11,305	\$	2,527	\$	82,402
Storage Related	LBTOT	LBTC	DEM03		2,181,702		1,453,092		653,927		55,647		-		19,037
Total Transmission		LBTRT		\$	2,642,214	\$	1,703,108	\$	768,189	\$	66,951	\$	2,527	\$	101,439
Distribution Expenses															
Commodity	LBTOT	LBDEC	COM04	\$	857,353	\$	377,698	\$	196,198	\$	37,714	\$	7,434	\$	238,310
Distribution Structures & Equipment															
Demand	LBTOT	LBDSD	DEM04	\$	1,337,043	\$	725,892	\$	331,748	\$	32,822	\$	7,336	\$	239,244
Distribution Mains															
Low/Medium Pressure - Demand	LBTOT	LBDMD	DEM05a	\$	2,272,172	\$	1,459,477	\$	667,013	\$	61,691	\$	12,519	\$	71,473
Low/Medium Pressure - Customer	LBTOT	LBDMD	CUST01a	φ	3,697,371	φ	3,409,863	φ	284,449	φ	3,036		12,519	φ	23
High Pressure - Demand	LBTOT	LBDMC	DEM05		382,796		207,823		94,980		9,397		2,100		68,496
High Pressure - Customer		LBDMC	CUST01		272,425		251,176		20,953		229		-,5		62
Total Distribution Mains				\$	6,624,763	\$	5,328,339	\$	1,067,395	\$	74,353			\$	140,053
S															
Services Customer	LBTOT	LBSC	CUST02	\$	2,235,073	¢	1,662,686	¢	536,637	¢	14,978	¢	336	¢	20,437
Customer	LDIOI	LDSC	003102	φ	2,235,075	φ	1,002,080	φ	550,057	φ	14,978	φ	550	φ	20,457
Meters															
Customer	LBTOT	LBMC	CUST03	\$	1,767,171	\$	1,187,594	\$	487,760	\$	40,085	\$	1,131	\$	50,601
Customer Accounts															
Customer	LBTOT	LBCAC	CUST04	\$	4,272,294	\$	3,643,271	\$	613,326	\$	6,577	\$	148	\$	8,974
Customer Service Customer	IDTOT	LBCSC	CUST05	\$	283,429	¢	241,699	¢	40,689	¢	436	¢	10	¢	595
Customer	LBIUI	LBUSU	005105	Э	265,429	\$	241,099	Ф	40,089	3	430	\$	10	э	545
Total		LBTT		\$	25,870,365	\$	18,668,431	\$	5,838,821	\$	507,030	\$	42,394	\$	813,689

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Ref Name	Allocation e Vector	I	Total System		Residential (RGS)		Commercial (CGS)		Industrial (IGS)		Available Gas Service (AAGS)		Firm Fransportation Service (FT)
Depreciation Expenses														
Procurement Expenses														
Demand	DEPREX DEG		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Commodity Total Procurement Expenses	DEPREX DEG DEG		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Storage Demand	DEPREX DESI	D DEM02	\$	4,776,553	\$	3,181,356	\$	1,431,687	\$	121,831	\$	-	\$	41,679
Commodity	DEPREX DESC		φ	-	φ	-	φ	-	φ	-	φ	-	Ψ	-
Total Storage	DEST	Γ	\$	4,776,553	\$	3,181,356	\$	1,431,687	\$	121,831	\$	-	\$	41,679
Transmission														
Demand Non-Storage Related	DEPREX DETI		\$	261,783	\$	142,124	\$	64,954	\$	6,426	\$	1,436	\$	46,842
Storage Related	DEPREX DETO		<i>•</i>	1,240,214	<i>•</i>	826,027	<i>•</i>	371,732		31,633		-	¢	10,822
Total Transmission	DET		\$	1,501,997	\$	968,151	\$	436,686	\$	38,059	\$	1,436	\$	57,664
Distribution Expenses														
Commodity	DEPREX DED	EC COM04	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Structures & Equipment														
Demand	DEPREX DED	SD DEM04	\$	1,443,262	\$	783,559	\$	358,104	\$	35,430	\$	7,919	\$	258,250
Distribution Mains														
Low/Medium Pressure - Demand	DEPREX DED		\$	4,063,811	\$	2,610,295	\$	1,192,961	\$	110,335	\$	22,390	\$	127,830
Low/Medium Pressure - Customer	DEPREX DED			6,612,800		6,098,587		508,742		5,430		-		41
High Pressure - Demand	DEPREX DED			684,635		371,694		169,872		16,807		3,757		122,505
High Pressure - Customer	DEPREX DED	MC CUST01	¢	487,236	¢	449,232	¢	37,475	¢	409	¢	9	¢	111
Total Distribution Mains			\$	11,848,481	\$	9,529,808	\$	1,909,050	\$	132,981	\$	26,155	\$	250,487
Services														
Customer	DEPREX DESC	C CUST02	\$	15,215,367	\$	11,318,815	\$	3,653,181	\$	101,960	\$	2,287	\$	139,123
Meters														
Customer	DEPREX DEM	C CUST03	\$	3,924,800	\$	2,637,587	\$	1,083,292	\$	89,027	\$	2,513	\$	112,382
Customer Accounts														
Customer	DEPREX DECA	AC CUST04	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Customer Service														
Customer	DEPREX DECS	SC CUST05	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total	DET		\$	38,710,461	ç	28,419,277	¢	8,872,001	ç	519,288	¢	40,311	¢	859,585
10(a)	DEI		Ф	30,/10,401	φ	20,417,2//	φ	0,072,001	Ф	519,288	\$	40,511	ф	037,303

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Ref Name	Allocation Vector		Total System		Residential (RGS)		Commercial (CGS)		Industrial (IGS)		Available Gas Service (AAGS)	Firm Transportation Service (FT)
Regulatory Credits													
Procurement Expenses													
Demand	REGCR DEGSD	DEM01	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Commodity	REGCR DEGSC	COM01		-		-		-		-		-	-
Total Procurement Expenses	DEGST		\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Storage													
Demand	REGCR DESD	DEM02	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Commodity	REGCR DESC	COM02		-		-		-		-		-	-
Total Storage	DEST		\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Transmission													
Demand Non-Storage Related	REGCR DETD	DEM04	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Storage Related	REGCR DETC	DEM03		-		-		-		-		-	-
Total Transmission	DETT		\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Distribution Expenses													
Commodity	REGCR DEDEC	COM04	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Distribution Structures & Equipment													
Demand	REGCR DEDSD	DEM04	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Distribution Mains													
Low/Medium Pressure - Demand	REGCR DEDMD	DEM05a	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Low/Medium Pressure - Customer	REGCR DEDMC	CUST01a	+	-	*	-		-		-	*	-	-
High Pressure - Demand	REGCR DEDMD			-		-		-		-		-	-
High Pressure - Customer	REGCR DEDMC	CUST01		-		-		-		-		-	-
Total Distribution Mains			\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Services													
Customer	REGCR DESC	CUST02	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Meters													
Customer	REGCR DEMC	CUST03	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Customer Accounts Customer	REGCR DECAC	CUST04	\$	_	\$		\$		\$		\$	_	\$ -
Customer	REOCK DECAC	003104	Ф	-	Ф	-	φ	-	¢	-	\$	-	ф -
Customer Service		0110700-	<u>_</u>		<i>.</i>		<i>•</i>		â				<b>^</b>
Customer	REGCR DECSC	CUST05	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
Total	RCR		\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Ref	Name	Allocation Vector		Total System		Residentia (RGS		Commercia (CGS		Industria (IGS)	1	vailable Gas Service (AAGS)		Firm ransportation Service (FT)
Accretion Expense															
Procurement Expenses															
Demand	ACCRE		DEM01	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Commodity Total Procurement Expenses	ACCRE	DEGSC	COM01	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
•															
Storage Demand	ACCRE	DESD	DEM02	\$		\$	_	\$		\$		\$	-	\$	_
Commodity	ACCRE		COM02	φ	-	φ	-	φ		φ	-	φ	-	φ	-
Total Storage		DEST		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transmission															
Demand Non-Storage Related	ACCRE	DETD	DEM04	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Storage Related	ACCRE		DEM03		-		-		-		-		-		-
Total Transmission		DETT		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Expenses															
Commodity	ACCRE	DEDEC	COM04	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Structures & Equipment															
Demand	ACCRE	DEDSD	DEM04	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Mains															
Low/Medium Pressure - Demand		DEDMD	DEM05a	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Low/Medium Pressure - Customer		DEDMC DEDMD	CUST01a DEM05		-		-		-		-		-		-
High Pressure - Demand High Pressure - Customer		DEDMD	CUST01		-				-		-				-
Total Distribution Mains	ACCIL	DEDINC	005101	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Services															
Customer	ACCRE	DESC	CUST02	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
				·											
Meters Customer	ACCRE	DEMC	CUST03	\$		\$	_	\$		\$		\$		\$	
Customer	ACCKE	DEMC	003105	Φ	-	φ	-	φ	-	φ	-	φ	-	φ	-
Customer Accounts	LOOPE	DEGLG	CLICTO (	¢		¢		¢		e		<i>•</i>		¢	
Customer	ACCRE	DECAC	CUST04	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Customer Service		DEGGG	0110700	¢		¢		ć		¢		¢		¢	
Customer	ACCRE	DECSC	CUST05	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total		ACC		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Ref Name	Allocation Vector		Total System	Reside	ential RGS)	Commercial (CGS)		Industrial (IGS)		ailable Gas Service (AAGS)	Firm Transportation Service (FT)
ITC Amortization												
Procurement Expenses Demand	ITCAM DEGSD	DEM01	\$	- \$	2	- \$	_	\$	_	\$	_	\$ -
Commodity	ITCAM DEGSD	COM01	ψ	- 4 -	,	- φ	_	Φ	-	Φ	-	
Total Procurement Expenses	DEGST		\$	- \$	5	- \$	-	\$	-	\$	-	\$-
Storage												
Demand	ITCAM DESD	DEM02	\$	(4,857) \$	6 (3	,235) \$	(1,456)	\$	(124)	\$	-	\$ (42)
Commodity Total Storage	ITCAM DESC DEST	COM02	\$	(4,857) \$	3	- ,235) \$	(1,456)	\$	(124)	\$	-	\$ (42)
C C	DEST		ψ	(4,007) 4	, (3	,233) \$	(1,450)	ψ	(124)	φ		\$ ( <del>1</del> 2)
Transmission	ITCAM DETD	DEMOA	¢	(293) \$	,	(150) @	(72)	¢	(7)	¢		¢ (52)
Demand Non-Storage Related Storage Related	ITCAM DETD ITCAM DETC	DEM04 DEM03	\$	(293) \$		(159) \$ (925)	(73) (416)		(7) (35)		(2)	\$ (52) (12)
Total Transmission	DETT	DEMOS	\$	(1,683) \$		,085) \$	· · · ·		(43)		(2)	
					`		. ,					
Distribution Expenses			<u>_</u>					<i>.</i>				÷.
Commodity	ITCAM DEDEC	COM04	\$	- \$		- \$	-	\$	-	\$	-	\$-
Distribution Structures & Equipment												
Demand	ITCAM DEDSD	DEM04	\$	(1,190) \$	5	(646) \$	(295)	\$	(29)	\$	(7)	\$ (213)
Distribution Mains												
Low/Medium Pressure - Demand	ITCAM DEDMD	DEM05a	\$	(4,637) \$	6 (2	,979) \$	(1,361)	\$	(126)	\$	(26)	\$ (146)
Low/Medium Pressure - Customer	ITCAM DEDMC	CUST01a		(7,546)		,959)	(581)		(6)		-	(0)
High Pressure - Demand	ITCAM DEDMD	DEM05		(781)		(424)	(194)		(19)		(4)	(140)
High Pressure - Customer	ITCAM DEDMC	CUST01		(556)		(513)	(43)		(0)		(0)	(0)
Total Distribution Mains			\$	(13,520) \$	6 (10	,875) \$	(2,178)	\$	(152)	\$	(30)	\$ (286)
Services												
Customer	ITCAM DESC	CUST02	\$	(11,868) \$	6 (8	,829) \$	(2,849)	\$	(80)	\$	(2)	\$ (109)
Meters												
Customer	ITCAM DEMC	CUST03	\$	(2,752) \$	6 (1	,849) \$	(760)	\$	(62)	\$	(2)	\$ (79)
Customer Accounts												
Customer	ITCAM DECAC	CUST04	\$	- \$	5	- \$	-	\$	-	\$	-	\$-
Customer Service												
Customer	ITCAM DECSC	CUST05	\$	- \$	5	- \$	-	\$	-	\$	-	\$-
Total	ITC		\$	(25.970)	()(	519) ¢	(0.000)	¢	(100)	¢	(12)	¢ (702)
10(a)	пс		э	(35,870) \$	6 (26	,518) \$	(8,028)	3	(489)	٩	(42)	\$ (793)

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Ref	Name	Allocation Vector		Total System		Residential (RGS)		Commercial (CGS)		Industrial (IGS)		Available Gas Service (AAGS)	Т	Firm ransportation Service (FT)
Other Taxes															
Procurement Expenses															
Demand	OTT	OTTGSD	DEM01	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Commodity	OTT	OTTGSC	COM01	¢	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total Procurement Expenses		OTTGST		\$	-	\$	-	\$	-	3	-	\$	-	\$	-
Storage															
Demand	OTT	OTTSD	DEM02	\$	1,612,965	\$	1,074,293	\$	483,458	\$	41,140	\$	-	\$	14,074
Commodity	OTT	OTTSC	COM02		-		-		-		-		-		-
Total Storage		OTTST		\$	1,612,965	\$	1,074,293	\$	483,458	\$	41,140	\$	-	\$	14,074
Transmission															
Demand Non-Storage Related	OTT	OTTTD	DEM04	\$	99,301	\$	53,911	\$	24,639	\$	2,438	\$	545	\$	17,768
Storage Related	OTT	OTTTC	DEM03		470,446		313,334		141,008		11,999		-		4,105
Total Transmission		OTTTT		\$	569,747	\$	367,245	\$	165,647	\$	14,437	\$	545	\$	21,873
Distribution Expenses															
Commodity	OTT	OTTDEC	COM04	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Structures & Equipment															
Demand	OTT	OTTDSD	DEM04	\$	360,270	\$	195,593	\$	89,390	\$	8,844	\$	1,977	\$	64,465
Distribution Mains															
Low/Medium Pressure - Demand	OTT	OTTDMD	DEM05a	\$	1,421,178	\$	912,861	\$	417,197	\$	38,586	\$	7,830	\$	44,704
Low/Medium Pressure - Customer	OTT	OTTDMC	CUST01a		2,312,599		2,132,771		177,915		1,899		-		14
High Pressure - Demand	OTT	OTTDMD	DEM05		239,428		129,987		59,407		5,878		1,314		42,842
High Pressure - Customer	OTT	OTTDMC	CUST01		170,394		157,103		13,106		143		3		39
Total Distribution Mains				\$	4,143,598	\$	3,332,722	\$	667,625	\$	46,505	\$	9,147	\$	87,599
Services															
Customer	OTT	OTTSC	CUST02	\$	3,593,737	\$	2,673,405	\$	862,850	\$	24,082	\$	540	\$	32,860
Meters															
Customer	OTT	OTTMC	CUST03	\$	833,250	\$	559,969	\$	229,987	\$	18,901	\$	533	\$	23,859
Customer Accounts		omma	or tomo t	<u>_</u>		<i>•</i>		<i>•</i>		<i>.</i>				<i>.</i>	
Customer	OTT	OTTCAC	CUST04	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Customer Service															
Customer	OTT	OTTCSC	CUST05	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total		OTTT		\$	11,113,566	\$	8,203,228	\$	2,498,956	s	153,910	\$	12,742	\$	244,731
1000		0111		φ	11,115,500	ψ	0,200,220	φ	2,770,750	φ	155,710	φ	12,742	φ	277,731

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Ref	Name	Allocation Vector		Total System		Residential (RGS)		Commercial (CGS)		Industrial (IGS)		Available Gas Service (AAGS)		Firm Transportation Service (FT)
<u>Interest Expense</u>															
Procurement Expenses															
Demand	INT	INTGSD	DEM01	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Commodity	INT	INTGSC	COM01	¢	-	¢	-	¢	-	¢	-	¢	-	¢	-
Total Procurement Expenses		INTGST		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Storage															
Demand	INT	INTSD	DEM02	\$	1,848,552	\$	1,231,202	\$	554,071	\$	47,149	\$	-	\$	16,130
Commodity	INT	INTSC	COM02		-		-		-		-		-		-
Total Storage		INTST		\$	1,848,552	\$	1,231,202	\$	554,071	\$	47,149	\$	-	\$	16,130
Transmission															
Demand Non-Storage Related	INT	INTTD	DEM04	\$	113,805	\$	61,786	\$	28,237	\$	2,794	\$	624	\$	20,364
Storage Related	INT	INTTC	DEM03		539,158		359,099		161,603		13,752		-		4,705
Total Transmission		INTTT		\$	652,964	\$	420,885	\$	189,841	\$	16,546	\$	624	\$	25,068
Distribution Expenses															
Commodity	INT	INTDEC	COM04	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Distribution Structures & Equipment															
Demand	INT	INTDSD	DEM04	\$	412,890	\$	224,162	\$	102,447	\$	10,136	\$	2,266	\$	73,881
Distribution Mains															
Low/Medium Pressure - Demand	INT	INTDMD	DEM05a	\$	1,628,753	\$	1,046,192	\$	478,132	s	44,222	S	8,974	\$	51,233
Low/Medium Pressure - Customer	INT	INTDMC	CUST01a	Ψ	2,650,374	φ	2,444,281	Ψ	203,901	Ŷ	2,176	Ŷ	-	Ψ	16
High Pressure - Demand	INT	INTDMD	DEM05		274,398		148,973		68,084		6,736		1,506		49,100
High Pressure - Customer	INT	INTDMC	CUST01		195,281		180,050		15,020		164		4		44
Total Distribution Mains				\$	4,748,807	\$	3,819,495	\$	765,137	\$	53,298	\$	10,483	\$	100,394
Services															
Customer	INT	INTSC	CUST02	\$	4,118,634	\$	3,063,880	\$	988,876	\$	27,600	\$	619	\$	37,659
					, .,		- , ,		,		.,				
Meters															
Customer	INT	INTMC	CUST03	\$	954,953	\$	641,758	\$	263,578	\$	21,661	\$	611	\$	27,344
Customer Accounts															
Customer	INT	INTCAC	CUST04	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Customer Service															
Customer	INT	INTCSC	CUST05	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
												-			
Total		INTT		\$	12,736,800	\$	9,401,382	\$	2,863,950	\$	176,389	\$	14,603	\$	280,476

## Cost of Service Study 12 Months Ended June 30, 2018

Description Ref	Name	Allocation Vector		Total System	Residential (RGS)	Commercial (CGS)	Industrial (IGS)		Firm Transportation Service (FT)
<u>Net Operating Income – Adjusted Forecast Period</u>									
<b>Operating Revenues</b> Sales and Transportation Interdepartmental Sales Forfeited Discounts Miscellaneous Revenue	REVMSR	REV01 REV01 REVFD REVMISC	\$	324,979,207 2,922,301 1,168,995 477,465	214,163,791 1,925,818 953,703 137,012	90,246,981 811,525 194,939 340,453	11,720,052 105,390 20,262	1,076,927 9,684 91 -	7,771,455 69,883 - -
Total Operating Revenues	TOR		\$	329,547,967 \$	217,180,325 \$	91,593,897 \$	11,845,704	\$ 1,086,703	\$ 7,841,338
<b>Pro-Forma Adjustments to Revenues</b> Adjustment to eliminate gas line tracker revenues Adjustment to eliminate gas supply cost recoveries Adj to eliminate GSC recoveries Interdepartmental Sales Removal of DSM Revenues Total Revenue Adjustments		REVGLT REVGSC REV01 REVADJ4	\$	(4,397,745) \$ (135,270,880) \$ (630,517) \$ (5,131,908) (145,431,050) \$	(2,965,728) \$ (84,917,418) \$ (415,516) \$ (2,013,224) (90,311,886) \$	(1,272,142) \$ (43,709,322) \$ (175,095) \$ (1,178,168) (46,334,727) \$	(127,900) (6,139,196) (22,739) (1) (6,289,836)	\$ (504,944) \$ \$ (2,089) \$ (10,395)	\$ - \$ (15,078) (1,930,120)
Total Adjusted Revenue	TREVADJ		\$	184,116,917 \$	126,868,439 \$	45,259,170 \$	5,555,867	\$ 537,300	\$ 5,896,140
Expenses Operation and Maintenance Expenses Depreciation and Amortization Expenses Other Expenses (ITC amortization, Reg Credits, Accretion) Other Taxes Total Operating Expenses	TOE		\$ \$	72,491,476 \$ 38,710,461 (35,870) 11,113,566 122,279,633 \$	53,097,411 \$ 28,419,277 (26,518) 8,203,228 89,693,397 \$	15,967,139 \$ 8,872,001 (8,028) 2,498,956 27,330,068 \$	1,316,846 519,288 (489) 153,910 1,989,554	40,311 (42) 12,742	859,585 (793) 244,731

## Cost of Service Study 12 Months Ended June 30, 2018

Description Ref	Name	Allocation Vector		Total System		Residential (RGS)		Commercial (CGS)	Industrial (IGS)	l	s Available Gas Service (AAGS)	Firm Transportation Service (FT)
Net Operating Income Adjusted Forecast Period (Co	<u>nt.)</u>											
Net Income Before Income Taxes			\$	61,837,284	\$	37,175,042	\$	17,929,102	\$ 3,566,313	\$	383,477 \$	2,783,349
Income Taxes		TXINC	\$	19,063,197		10,783,086		5,849,025	1,316,133		143,215	971,737
Net Operating Income (Pro-Forma)	TOM		\$	42,774,086	\$	26,391,955	\$	12,080,077	\$ 2,250,180	\$	240,262 \$	1,811,612
Unadjusted Net Cost Rate Base Depreciation Adjustment Cash Working Capital Adjustment Net Cost Rate Base		DET OMTT	\$ \$ \$	712,384,727 - - 712,384,727	\$ \$	519,446,947 - - 519,446,947	\$ \$	165,120,915 - - 165,120,915	\$ 10,561,092 - - 10,561,092	\$	- - 782,745 \$	- 16,473,029
Rate of Return Pro-Forma				6.00%		5.08%		7.32%	21.31%	•	30.69%	11.00%

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Ref	Name	Allocation Vector		Total System	Residential (RGS)	Commercial (CGS)	A Industrial (IGS)	s Available Gas Service (AAGS)	Firm Transportation Service (FT)	
Net Operating Income Proposed Rates											
Test Year Operating Income				\$	42,774,086 \$	26,391,955 \$	12,080,077 \$	2,250,180 \$	240,262 \$	1,811,612	
Proposed Increase Increase in Miscellaneous Charges - Interdepar	tmental Sal	les	REV01	\$	13,899,452 \$ (70,922)	10,631,026 \$ (46,738)	3,183,141 \$ (19,695)	1,705 \$ (2,558)	(71,575) (235)	155,155 (1,696)	
Incremental Income Taxes Incremental Uncollectable Accounts Expense Incremental Commission Fees			38.64% CUST04 REV01	ó	5,343,209 31,253 26,841	4,089,666 26,651 17,689	1,222,325 4,487 7,454	(329) 48 968	(27,747) 1 89	59,295 66 642	
Net Operating Income Adjusted for Increase					51,201,313	32,842,237	14,009,258	2,248,640	196,109	1,905,068	
Net Cost Rate Base (Same as Above)				\$	712,384,727 \$	519,446,947 \$	165,120,915 \$	10,561,092 \$	782,745 \$	16,473,029	
Rate of Return Proposed					7.19%	6.32%	8.48%	21.29%	25.05%	11.56%	

## Cost of Service Study 12 Months Ended June 30, 2018

		Allocation		Residential	Commercial	Industrial	As Available Gas Service	Firm Transportation Service
Description	Ref N	ame Vector	System	(RGS)	(CGS)	(IGS)	(AAGS)	(FT)
Allocation Factors								
Commodity								
Procurement Expenses	C	OM01	31,987,085	19,516,322	10,137,906	1,948,741	384,116	-
				0.610131	0.316937	0.060923	0.012008	-
Storage	C	OM02	20,188,041	13,096,059	6,232,265	859,717		-
Transmission	C	OM03	20,188,041	13,096,059	6,232,265	859,717	-	-
Distribution	С	OM04	44,300,973	19,516,322	10,137,906	1,948,741	384,116	12,313,888
Adjusted Deliveries			44,300,973	19,516,322	10,137,906	1,948,741	384,116	12,313,888
Demand								
Procurement Expenses	D	EM01	466,311	308,337	140,917	13,942	3,116	-
Storage	D	EM02	11,840,000	7,885,866	3,548,831	301,991		103,312
-				0.666036	0.299732	0.025506		0.008726
Transmission Storage Related	D	EM03	11,840,000	7,885,866	3,548,831	301,991	-	103,312
Distribution Structures	D	EM04	567,935	308,337	140,917	13,942	3,116	101,624
High Pressure Distribution Mains	D	EM05	567,935	308,337	140,917	13,942	3,116	101,624
Low/Medium Pressure Distribution Mains	D	EM05a	480,031	308,337	140,917	13,033	2,645	15,100
Customer			/	/		- ,	,	- ,
High Pressure Distrib Mains	С	UST01	321,597	296,513	24,735	270	6	73
Low/Med Pres. Distrib Mains	С	UST01a	321,514	296,513	24,735	264	-	2
Services	С	UST02	257,660,226	191,675,197	61,863,742	1,726,616	38,728	2,355,944
Meters	С	UST03	145,264,687	97,622,349	40,094,790	3,295,060	92,996	4,159,492
Customer Count (Average)			321,669	296,376	24,947	268	6	73
Customer Accounts	С	UST04	347,546	296,376	49,893	535	12	730
Customer Service		UST05	347,546	296,376	49,893	535	12	730
Forfeited Discounts	R	EVFD	993,014	810,132	165,593	17,212	78	

## Cost of Service Study 12 Months Ended June 30, 2018

Description	Ref	Name	Allocation Vector		Total System	Residential (RGS)	Commercial (CGS)	Industrial (IGS)	I	as Available Gas Service (AAGS)	Tr	Firm ansportation Service (FT)
Allocation Factors Continued												
Taxable Income												
Net Income Before Income Tax		NIBIT		\$ 61	,837,284	\$ 37,175,042	\$ 17,929,102	\$ 3,566,313	\$	383,477	\$	2,783,349
Interest Expense Interest Adjustment		INT		\$ 12. \$	,736,800 -	\$ 9,401,382	\$ 2,863,950	\$ 176,389	\$	- 14,603	\$	280,476
Taxable Income		TXINC		\$ 49	,100,483	\$ 27,773,660	\$ 15,065,152	\$ 3,389,924	\$	368,874	\$	2,502,874
Total Distribution Expense		DISTRT		\$ 36	,770,315	\$ 27,065,266	\$ 7,388,266	\$ 533,108	\$	82,209	\$	1,701,466
Number of Customers					321,597	296,513	24,735	270		6		73
Services Cost				257	,660,226	\$ 191,675,197 646.73	\$ 61,863,742 1,239.92	\$ 1,726,616 3,227.32		38,728 3,227.32	\$	2,355,944 3,227.32
Actual Revenue DSM Allocation Miscellaneous Revenue Allocation GSC Revenue Removal of GLT Revenue Pro-Forma Adjustments		REV01 REVADJ4 REVMISC REVGSC REVGLT PROFO		5, 135, (4,	,979,207 ,131,908 332,763 ,270,880 ,397,745) ,431,050)	214,163,791 2,013,224 95,489 84,917,418 (2,965,728) (90,311,886)	90,246,981 1,178,168 237,274 43,709,322 (1,272,142) (46,334,727)	11,720,052 1 6,139,196 (127,900) (6,289,836)	)	1,076,927 10,395 504,944 (31,974) (549,403)		7,771,455 1,930,120 (1,945,198)
High Pressure System		RBTHP		24	,836,706	17,384,615	4,400,920	365,755		80,015		2,605,402

# **Exhibit WSS-30**

Gas Cost of Service Study Storage Allocation

# Calculation of Maximum Class Demands On February 27th Design Day (4 Degrees) for Determination of Demand Allocation Factors

	Total	Residential Rate RGS	Commercial Rate CGS	Industrial Rate IGS	Rate FT 5 Percent Balancing
Calculated Daily Requirements at 4 Degrees (61 HDDs)	426,596	282,452	130,790	10,029	3,325
Percentage of Total		66.21%	30.66%	2.35%	0.78%

## Allocation of Underground Storage

	Storage Withdrawals	Residential Rate RGS	Commercial Rate CGS	Industrial Rate IGS	Rate FT 5 Percent Balancing	
Total Allocated Withdrawals Thru February 28th	8,670,408	5,787,279	2,577,034	227,506	78,589	
Balance of Working Gas Allocated on the Basis of 4 Degree Feb. 28th	3,169,592	2,098,587	971,797	74,485	24,723	
Total Working Gas Cycled	11,840,000	7,885,866	3,548,831	301,991	103,312	
Total Allocation Factor For Underground Storage	1.000000	0.666036	0.299732	0.025506	0.008726	