**BEFORE THE KANSAS CORPORATION COMMISSION**

**OF THE STATE OF KANSAS**

| | | |
|---|---|---|
| In the Matter of the Application of Southern Pioneer Electric Company for Approval to Make Certain Changes in its Charged for Electric Service. | ) ) ) | Docket No. 20-SPEE-169-RTS |

# PREFILED DIRECT TESTIMONY OF

# RICHARD J. MACKE
# VICE PRESIDENT, ECONOMICS, RATES, AND BUSINESS PLANNING
# POWER SYSTEM ENGINEERING, INC.

## ON BEHALF OF

## SOUTHERN PIONEER ELECTRIC COMPANY

October 10, 2019

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**RICHARD J. MACKE**
**VICE PRESIDENT, RATES AND FINANCIAL PLANNING**
**POWER SYSTEM ENGINEERING, INC.**

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**SOUTHERN PIONEER ELECTRIC COMPANY**

## PART I - QUALIFICATIONS

**Q. Please state your name and business address.**

A. My name is Richard J. Macke. My business address is 10710 Town Square Drive NE, Suite 201, Minneapolis, Minnesota 55449.

**Q. What is your profession?**

A. I am a Vice President and lead the Economics, Rates, and Business Planning Department at Power System Engineering, Inc. ("PSE"), which is headquartered at 1532 W. Broadway, Madison, Wisconsin 53713.

**Q. Please describe the business activities of PSE.**

A. PSE is a consulting firm serving electric utilities across the country, but primarily in the Midwest. Our headquarters is in Madison, Wisconsin with regional offices in Indianapolis, Indiana; Topeka, Kansas; Lexington, Kentucky; Minneapolis, Minnesota; Marietta, Ohio; and Sioux Falls, South Dakota. PSE is involved in: power supply, transmission and distribution system planning; distribution, substation and transmission design; construction contracting and supervision; retail and wholesale rate and cost of service ("COS") studies; economic feasibility studies; merger and acquisition feasibility analysis; load forecasting; financial and operating consultation; telecommunication and network design, mapping/GIS; and system automation including Supervisory Control and Data Acquisition ("SCADA"), Demand Side Management ("DSM"), metering, and outage management systems.

**Q. Please describe your responsibilities with PSE.**

A. I lead and direct staff in Indiana, Kansas, Minnesota, and Wisconsin who provide economic, financial, and rate-related consulting services to investor-owned, cooperative and municipal utilities as well as regulators and industry associations. These services include:

- Cost of Service Studies.
- Capital Credit Allocations.
- Demand Response.
- Distributed Generation Rates.
- Energy Efficiency.
- Financial Forecasting.
- Individual Customer Profitability.
- Large Power Contract Rates/Proposals.
- Line Extension Policies/Charges.
- Load Management Analysis.
- Load Forecasting.
- Market and Load Research.
- Merger Analysis.
- Pole Attachment Charges.
- Policy and Board Audits.
- Power Cost Adjustments.
- Rate Consolidation.
- Retail Rate Design and Analysis.
- Special Fees and Charges.
- Statistical Performance Measurement (Benchmarking).
- Value of Service.

**Q. What is your educational background?**

A. I graduated from Bethel University in St. Paul, Minnesota in 1996 with a Bachelor of Arts degree in Business, which included an emphasis in Finance and Marketing. In 2007, I received my Master of Business Administration degree, with an emphasis in Finance and Strategic Management, from the University of Minnesota in Minneapolis, Minnesota. I have also attended numerous industry seminars/courses on cost of service, pricing, valuation, distributed generation, etc.

**Q. What is your professional background?**

A. From 1996 to 1998, I was employed by PSE in its Minneapolis, Minnesota office as a Financial Analyst in the Utility Planning and Rates Department. My work responsibilities primarily were focused on retail rate studies, including revenue requirements and bundled/unbundled COS studies. I also provided analyses used to support testimony, mergers and acquisitions, and financial forecasting.

From 1998 to 1999, I was employed as a Senior Analyst by Energy & Resource Consulting Group, LLC in Denver, Colorado, a financial, engineering, and management consulting firm. I performed consulting services related to electric, gas, and water rate studies. As part of the Legend Consulting Advisor Team contracted by the City Council of the City of New Orleans, Louisiana, I assisted in various electric and gas utility matters. I also provided general financial, management, and public policy support to clients.

I rejoined PSE in 1999; and from 1999 to 2002, I held the position of Rate and Financial Analyst in the Rates and Financial Planning Department. From 2002 to March 2008, I held the position of Senior Rate and Financial Analyst in the Utility Planning and Rate Division. My responsibilities have included performing complex financial analyses, such as rate studies consisting of determination of revenue requirements, bundled and unbundled COS analysis, and rate design. Other responsibilities included performing analysis of special rates and programs, key account analyses, financial forecasting, merger and acquisition analysis, activity-based costing, policy development and evaluation, and other financial analyses for various PSE clients. Additional responsibilities included strategic planning, litigation support, regulatory compliance, capital expenditure and operational assessments, and advisement. From April 2008 to June 2010, I held the position of Leader, Rates and Financial Planning. In July 2010, I was named Vice President, Rates and Financial Planning. Since June 2011, I have held the position of Vice President, Economics, Rates, and Business Planning. In this capacity, I continue to provide, amongst other things: 1) rate, financial, and economic consulting services to clients, 2) management and leadership to the Economics, Rates, and Business Planning Department, and 3) management and leadership at the corporate level to PSE through participation on the Executive Committee and Board of Directors.

**Q. Have you previously presented testimony before the Kansas Corporation Commission ("KCC" or "Commission")?**

A. Yes. I submitted testimony on behalf of: Pioneer Electric Cooperative, Inc. in Docket No. 09-PNRE-563-RTS; Wheatland Electric Cooperative, Inc. in Docket No. 09-WHLE-681-RTS; Mid-Kansas Electric Company, LLC ("Mid-Kansas") in Docket Nos. 09-MKEE-969-RTS, 11-MKEE-439-RTS, 12-MKEE-491-RTS, 12-MKEE-380-RTS, 13-MKEE-452-MIS, and 16-MKEE-023-TAR; Southern Pioneer Electric Company ("Southern Pioneer" ) in Docket Nos. 14-SPEE-507-RTS, 15-SPEE-161-RTS, 15-SPEE-519-RTS, 16-SPEE-497-RTS, 16-SPEE-501-TAR, 17-SPEE-476-TAR, and 18-SPEE-477-RTS; Prairie Land Electric Cooperative, Inc. in Docket No. 16-PLCE-490-TAR; Victory Electric Cooperative Association, Inc. in Docket No. 16-VICE-494-TAR; and Western Cooperative Electric Association in Docket No. 16-WSTE-496-TAR.

**Q. Do you have any other relevant experience?**

A. Yes. I have directed well over 100 rate and COS studies and numerous other rate and financial related projects. Many times, these projects were conducted for self-regulated electric utilities. I have also performed such analyses for state-regulated cooperatives in Iowa, Kansas, Michigan, Minnesota, New Hampshire, and Texas.

I have also conducted seminars and made presentations to utilities, consumers, and industry groups on a variety of topics including: COS, rate design, rate change communications, line extension policies, mergers and acquisitions, DSM pilot programs, conservation and energy efficiency, distributed generation rates, and industry trends.

## PART II - SUMMARY OF DIRECT TESTIMONY

**Q. What is the purpose of your testimony in this proceeding?**

A. The purpose of my testimony is to present my analysis of the Class COS study and certain proposed rates for the Southern Pioneer Electric Company ("Southern Pioneer" or "Company").

**Q. Are you sponsoring any exhibits?**

A. Yes. I have included the following exhibits detailing the analysis completed:

Exhibit PSE-1 - Curriculum Vitae - Richard J. Macke.

Exhibit PSE-4 - Class Cost of Service Analysis.

Exhibit PSE-5 - LED Lighting Analysis.

Exhibit PSE-6 - Grid Access Charge Analysis.

Exhibit PSE-7 - Statement of Operations - Proposed Rates.

Exhibit PSE-8 - Comparison of Present and Proposed Rate Schedules.

**Q. Have the exhibits been prepared by you or by others under your supervision?**

A. Yes.

## PART III - CLASS COST OF SERVICE ANALYSIS

**Q. Please explain the Class COS study analysis you prepared for Southern Pioneer.**

A. I prepared the retail Class COS analysis to evaluate the cost of providing service to Southern Pioneer's retail rate classes and to provide information used in evaluating and designing retail rates. The basic objective of a Class COS is to identify the cost of providing service to each rate class as a function of load and service characteristics. The methodology employed is often referred to as the "fully allocated average embedded" COS approach, meaning that 1) costs are allocated on an average system-wide basis and 2) embedded or accounting costs as recorded on the utility's books are used in the analysis. I believe that this is generally the most

appropriate technique to use in allocating cost responsibility to the various classes and developing rate design data.

**Q. Please describe the Class COS you prepared.**

A. Exhibit PSE-4 includes the Class COS analysis. The detailed calculations and assumptions that go into the analysis are organized as follows:

| Pages | Description |
|---|---|
| 1-3 | Cost of Service Summary |
| 4-5 | Classification of Plant in Service |
| 6-11 | Classification of Revenue Requirements |
| 12-13 | Adjusted Statement of Operations |
| 14-17 | Summary of Classification Factors |
| 18 | Summary of Allocation of Revenue Requirements to Rate Classes |
| 19 | Allocation of Plant in Service to Rate Classes |
| 20-22 | Allocation of Revenue Requirements to Rate Classes |
| 23 | Rate Class Weighting Factors |
| 24 | Summary of Class Demands |
| 25-27 | Calculation of Class Demand Characteristics |
| 28-29 | Development of Allocation Factors. |

**Q. Please explain the general procedure for conducting a Class COS study.**

A. The basic procedure used to determine the cost responsibility of each consumer classification is as follows:

Step 1 - Classify the plant account records into basic cost causative categories.

Step 2 - Classify the Test Year expenses and margin requirement into the same cost causative categories.

Step 3 - Develop allocation factors for each rate class.

Step 4 - Allocate costs to the various rate classes using the class allocation factors developed for each cost causative category.

**Q. Please explain the process of classification into cost causative categories.**

A. Plant investments, Test Year expenses, and margin requirement are classified into the following cost causative categories:

1. Direct - Plant and costs which are directly attributable to one specific customer classification. Expense associated with security and street lighting is an example of a Direct Expense.
2. Consumer - Plant and costs that are directly related to the number of customers and which do not vary significantly with the demand imposed on the system or the amount of energy consumed. Metering and customer accounting expenses best illustrate this type of expense.
3. Capacity - Plant and costs which result from providing and maintaining in readiness for operation facilities required to meet the peak demand whether it be the system peak, circuit peak, or individual customer service peak. At least a portion of the expense of owning, operating, and maintaining a three-phase backbone feeder (100 percent in this study) fall within this category as does the demand charge and transmission costs from the purchased power rate/bills.
4. Energy - Costs which are related to the amount of energy used. The major items in this category are the Energy Charge and Energy Cost Adjustment ("ECA") in the wholesale purchased power rate.

Each of these general cost causative categories is further subdivided as follows:

| Direct | Consumer | Capacity | Energy |
|---|---|---|---|
| As Assigned | Secondary & Service<br>Meter<br>Customer Accounting | Power Supply<br>Transmission<br>Distribution Substation<br>Primary Line<br>Line Transformer | Power Supply |

**Q. Please explain the methodology used in assigning plant accounts to cost causative categories.**

A. The cost causative classification of the various electric plant accounts is presented on pages 4 and 5 of Exhibit PSE-4. The methodology used in assigning the plant accounts to the cost causative categories is discussed as follows:

1. Intangible Plant (Acct. 301 to 303) - The Intangible Plant accounts were prorated to the cost categories in the same relationship as the distribution plant allocations, as discussed below.
2. Transmission Plant (Acct. 350-359) - The Transmission Plant accounts were assigned to the Capacity component.
3. Distribution Plant was classified as following:
   - Land, Structures, Station and Battery (Accts. 360 to 363) - The Land and Land Rights, Structures and Improvements, Station Equipment, and Battery accounts were classified as Capacity related since the facilities represented by the investment are generally dictated by capacity considerations.
   - Primary Line and Devices (Accts. 364, 365, 366, 367) - The Primary Line and Device accounts were assigned to the Capacity component.
   - Line Transformers (Acct. 368) - Classification of the Line Transformer account was assigned to the Capacity component.

- Services and Meters (Accts. 369 and 370) - Because the investment in Services and Meters is basically independent of usage level, it was assigned entirely to the Consumer component.
- Consumer Premise (Acct. 371) - The investment in installations on Consumer's Premises was assigned to the Capacity component (Primary Line).
- Street Lighting (Acct. 373) - Investment in street or security lighting facilities was assigned directly to the Lighting Class (i.e. direct-assigned).

4. General Plant Accounts (Accts. 389 to 399) - The General Plant accounts were assigned to the cost causative categories in the same relationship as the total distribution plant allocations. Because the assignment of the investment in general plant has minimal impact on the classification of Test Year expenses, which ultimately is used to determine class COS responsibility, a more detailed analysis of general plant investment was not warranted.

**Q. Please explain how revenue requirements were classified.**

A. The Adjusted Operating Statement shown in Exhibit PSE-4, pages 12 and 13, forms the basis for the revenue requirements included in the COS analysis.[1] Actual expenses by account for the historical 12-month period were used to establish the pattern of the Test Year cost breakdown to the various accounts.

The various components of the revenue requirements were classified to the four basic cost causative categories as presented on pages 6 through 11 of Exhibit PSE-4. The factors used in

[1] Adjusted Operating Statement used in the retail COS is based on the same Operating Statement as developed in the Revenue Requirements portion of the analysis contained in Exhibit PSE-2, with the following appropriate adjustments performed in order to reflect the revenue requirements included in the retail COS: (1) elimination of revenue and expenses associated with the non-adjustable special rates (Real-Time Pricing, or RTP, and Transmission Level Service, or STR), as well as (2) subtraction of the revenues and expenses related to the wholesale Local Access Delivery Service (performed using results as approved in the 18-SPEE-477-RTS Docket).

the expense classification are summarized on pages 14 through 17 of Exhibit PSE-4. The process and rationale for that methodology is discussed below:

1. Purchased Power (Acct. 555) - The demand and energy charge portions of the cost of Purchased Power were assigned to the Capacity and Energy components, respectively.
2. Transmission Operation and Maintenance (Acct. 560-573) - These accounts were assigned to the Capacity component.
3. Distribution Operation and Maintenance (Accts. 580 - 598) - Distribution expense accounts that are related to specific plant accounts (Accts. 582, 583, 584, 585, 586, 587, 591, 592, 593, 594, 595, 596, and 597) were classified in proportion to the corresponding plant accounts. These expenses result from operating and maintaining the distribution plant and thus may be considered plant related. The remaining distribution expense accounts (Accts. 580, 581, 588, 589, 590, and 598) were prorated based on the sum of the previously assigned distribution expense accounts. These accounts basically represent overhead or general distribution expenses.
3. Consumer Accounting (Accts. 901 - 905) - Consumer Accounting expenses were assigned in total to the Consumer component since this expense is basically independent of energy usage or capacity requirements. Instead, these accounts are related to the number of consumers.
4. Consumer Service and Information and Sales (Accts. 907 - 916) - Consumer Service and Information and Sales expenses are also considered consumer-related expenses.
5. Administrative and General or "A&G" (Accts. 920 - 932) - A&G expenses are common costs for which there exists no obvious relationship to the functional categories. Thus, we have assigned portions to all four basic cost categories (with 10 percent supporting

the Power Supply function, around 5 percent - the Transmission function, and the remainder assigned in proportion to the total of all other expenses).[2]

6. Depreciation and Amortization (Accts. 403 - 407) - Depreciation and Amortization expense was allocated in proportion to the total plant account assignments.

7. Property Taxes (Acct. 408) - Property Taxes are allocated to various accounts in the general ledger. The COS, therefore, classifies these expenses as part of the other general ledger accounts.

8. Other Taxes, Other Interest, and Other Deductions - Other Taxes, Other Interest, and Other Deductions expenses are related to income taxes and have therefore been classified as revenue-related.

9. Net Operating Income (Margin Requirement) - Since margin is comprised of interest expense and debt service payments, which is a function of plant investment, it is reasonable to classify this cost in proportion to the total plant assignments. This approach most nearly parallels the method used to determine target margin requirements (i.e., DSC method).

**Q. In the above you identify that distribution primary line and line transformer plant and revenue requirements were classified as being capacity related. Can you please explain this further?**

A. Yes. Often in retail COS studies, the plant and revenue requirements related to distribution primary lines and line transformers is split between the Consumer and Capacity cost causative categories. This is done utilizing either the minimum-size or zero-intercept method. Both methods quantify the amount of plant and revenue requirement that is caused by simply having

[2] Assigning 4.96 percent of A&G expenses to the transmission function mimics the allocation of the A&G in the 34.5kV Formula-Based Rate as last approved by the Commission in the 18-SPEE-477-RTS Docket.

consumers, and that which is caused by serving the peak load requirements of those consumers. Both methods are also contained in and described in the National Association of Regulatory Utility Commissioners' (NARUC) Cost Allocation Manuals. This approach was considered for this study; however, classifying a portion of distribution primary line and line transformer plant and related revenue requirement to the Consumer component would show a very significant under-recovery from the residential class and a very significant increase needed in the residential monthly consumer charge. Although, in my opinion, this approach can be supported and is appropriate for distribution utilities such as Southern Pioneer, the impact on the results was determined to be too significant to implement at this time. To avoid this type of an abrupt change, the regulatory concept of gradualism was employed, and distribution primary line and line transformer plant and revenue requirement was classified fully to the capacity component, which is consistent with prior studies submitted to the Commission in Southern Pioneer rate applications. A gradual movement to the alternative, consumer-weighted method may be considered in the future.

**Q. If the Class COS were to classify a portion of distribution plant and revenue requirement as Consumer-related by using the minimum-size or zero-intercept method, how would the results be affected?**

A. The results would end up allocating significantly more costs to relatively low capacity per consumer rate classes (i.e., Residential) and away from high capacity per consumer classes (i.e., General Service Large) and would indicate the need for a substantial increase in the consumer related charge (i.e., Customer Charge) in Southern Pioneer's rate schedules.

**Q. Please discuss the allocation of the revenue requirement to rate classes.**

A. The allocation of the revenue requirement to each rate class is presented on page 18 of Exhibit PSE-4. The allocations are based on various allocation factors that reflect certain cost

causative drivers as discussed below:

1. Direct Cost Allocation - Costs specifically associated with street or security lighting facilities (investment and O&M) directly assigned to the Lighting Class are an example of a Direct cost allocation.
2. Consumer Costs Allocations - Generally speaking, Consumer related costs were allocated to the various classes based on the total number of consumers in each class. However, several adjustments were made in the general allocation procedure to reflect differences in the cost of providing basic service. Weighting factors were developed on page 23 of Exhibit PSE-4 to recognize the higher cost of three-phase service versus standard single-phase service for each subcategory of consumer related cost. A "weighting factor" of 0.02 was used to allocate the consumer expense related to providing basic service to an individual security or street light. Because these lights make use of facilities and services which have been primarily provided for under other rate schedules, it may be argued that it costs no more to prepare a bill for a consumer with a security light than for one without. However, it seems only fair that the lighting classes should be required to pay a token portion of the consumer related expense; hence, the 0.02 weighting factor.
3. Capacity Cost Allocations - Three different allocation factors were developed for the Capacity component. (See pages 24 to 27 of Exhibit PSE-4 for the development of class demand allocators)[3]:

[3] Actual metered hourly data from the Company's Advanced Metering Infrastructure ("AMI") system was used to develop class demands.

a. Line transformer capacity related costs were allocated in accordance with the non-coincidental peak demand of each consumer in each class as this definition of demand most closely approximates transformer capacity requirements.

b. Distribution primary line and substation capacity costs were allocated using the average monthly non-coincidental class demand.

c. Purchased power demand charges were allocated in accordance with the average monthly coincidental class demands by Summer and Winter season which is consistent with how Southern Pioneer is billed for purchased capacity from its power supplier.

d. Transmission capacity related costs were allocated using the non-coincidental class demand.

4. Energy Cost Allocations - Energy related costs were allocated based on total energy sales in each rate class adjusted for line loss.

Allocation factors for each category are developed on pages 28 and 29 of Exhibit PSE-4.

**Q. Please summarize the results of the retail Class COS study you performed for Southern Pioneer.**

A. Results obtained from the Class COS analysis are summarized in Tables 1, 2, and 3 on the following pages. Table 1 provides a comparison of the calculated cost of providing service to each rate class with the revenue generated under the present rates by that class. The "Difference" and "As Percent" columns in the table represent the amount by which present rates would need to be adjusted to exactly align with the cost of service for each rate class.

**Table 1**
**Retail Class Cost of Service Summary**
**Under Present Rates**

| Rate Class | Present Rate Revenue | Cost of Service | Difference | As Percent |
|---|---|---|---|---|
| | ($) | ($) | ($) | (%) |
| Residential Service General Use 18-RS | 16,003,561 | 17,527,740 | 1,524,179 | 9.5 |
| Residential Space Heating 18-RS | 797,668 | 909,511 | 111,844 | 14.0 |
| General Service Small 18-GSS | 1,868,895 | 1,927,675 | 58,779 | 3.1 |
| General Service Large 18-GSL | 17,615,005 | 16,156,340 | (1,458,665) | (8.3) |
| General Service Space Heating Rider No 1 | 561,184 | 664,688 | 103,505 | 18.4 |
| Industrial Service 18-IS | 3,632,451 | 3,540,983 | (91,468) | (2.5) |
| Municipal Power Service 18-M-I | 200,559 | 239,654 | 39,095 | 19.5 |
| Water Pumping Service 18-WP | 652,696 | 639,129 | (13,568) | (2.1) |
| Irrigation Service 18-IP-I | 361,316 | 357,255 | (4,062) | (1.1) |
| Temporary Service 18-CS | 12,351 | 9,822 | (2,529) | (20.5) |
| Lighting | 1,116,717 | 846,621 | (270,097) | (24.2) |
| TOTAL | 42,822,404 | 42,819,417 | (2,987) | |

Table 2 shows a breakdown of the COS by cost category for each class.

**Table 2**
**Class Allocation Summary**

| Rate Class | Power Supply | | Trans-mission | Distribution | | Total COS |
|---|---|---|---|---|---|---|
| | Capacity | Energy | | Consumer | Capacity | |
| | ($) | ($) | ($) | ($) | ($) | ($) |
| Residential Service General Use 18-RS | 2,739,430 | 3,986,371 | 2,908,827 | 2,495,881 | 5,397,232 | 17,527,740 |
| Residential Space Heating 18-RS | 125,052 | 215,952 | 148,878 | 118,461 | 301,168 | 909,511 |
| General Service Small 18-GSS | 236,575 | 423,409 | 268,045 | 568,072 | 431,574 | 1,927,675 |
| General Service Large 18-GSL | 2,765,789 | 4,864,192 | 3,183,045 | 374,356 | 4,968,960 | 16,156,340 |
| General Service Space Heating Rider No 1 | 109,865 | 187,003 | 127,891 | 16,214 | 223,716 | 664,688 |
| Industrial Service 18-IS | 557,257 | 1,136,847 | 640,904 | 14,388 | 1,191,586 | 3,540,983 |
| Municipal Power Service 18-M-I | 30,586 | 52,647 | 33,045 | 37,442 | 85,933 | 239,654 |
| Water Pumping Service 18-WP | 82,105 | 195,601 | 90,973 | 36,784 | 233,666 | 639,129 |
| Irrigation Service 18-IP-I | 57,550 | 87,932 | 50,379 | 21,378 | 140,016 | 357,255 |
| Temporary Service 18-CS | 1,300 | 1,873 | 1,572 | 1,200 | 3,877 | 9,822 |
| Lighting | 42,322 | 147,241 | 67,946 | 396,127 | 192,985 | 846,621 |
| TOTAL | 6,747,832 | 11,299,067 | 7,521,504 | 4,080,302 | 13,170,712 | 42,819,417 |

Table 3 provides total costs by class expressed in terms of $/customer/month (consumer component) and ¢/kWh (capacity and energy components).

**Table 3**
**Rate Design Factors**

| Rate Class | Power Supply | | Trans-mission | Distribution | | Total COS |
|---|---|---|---|---|---|---|
| | Capacity | Energy | | Consumer | Capacity | |
| | (¢/kWh) | (¢/kWh) | (¢/kWh) | ($/mo.) | (¢/kWh) | (¢/kWh) |
| Residential Service General Use 18-RS | 2.56 | 3.73 | 2.72 | 17.39 | 5.05 | 16.40 |
| Residential Space Heating 18-RS | 2.16 | 3.73 | 2.57 | 17.39 | 5.20 | 15.71 |
| General Service Small 18-GSS | 2.08 | 3.73 | 2.36 | 18.78 | 3.80 | 16.98 |
| General Service Large 18-GSL | 2.12 | 3.73 | 2.44 | 22.15 | 3.81 | 12.39 |
| General Service Space Heating Rider No 1 | 2.19 | 3.73 | 2.55 | 22.15 | 4.46 | 13.26 |
| Industrial Service 18-IS | 1.83 | 3.73 | 2.10 | 70.88 | 3.91 | 11.62 |
| Municipal Power Service 18-M-I | 2.17 | 3.73 | 2.34 | 22.31 | 6.09 | 16.98 |
| Water Pumping Service 18-WP | 1.57 | 3.73 | 1.73 | 43.43 | 4.46 | 12.19 |
| Irrigation Service 18-IP-I | 2.44 | 3.73 | 2.14 | 43.45 | 5.94 | 15.15 |
| Temporary Service 18-CS | 2.59 | 3.73 | 3.13 | 17.39 | 7.72 | 19.56 |
| Lighting | 1.07 | 3.73 | 1.72 | 0.35 | 4.89 | 21.45 |
| SYSTEM AVERAGE | 2.23 | 3.73 | 2.48 | 14.28 | 4.35 | 14.13 |

**Q. Please summarize your observations about the COS results.**

A. As is typical, the Class COS study shows various level of cross-class subsidies between the rates. For the major revenue producing rate classes, the over or under recovery versus the Class COS is plus or minus 10 percent, while there are some "smaller" rate classes with variances greater than this. At this point, it is important to distinguish between the Class COS study and rate design -- the latter of which should consider not only the Class COS results but also other industry-accepted ratemaking principles.

## PART IV - RATE DESIGN

**Q. How should the results of a Class COS be applied?**

A. It is vital to recognize some of the inherent limitations of a Class COS study. First, it must be emphasized that a Class COS analysis, while basically an engineering and economic

evaluation, is an art; not an exact science. There are many different methodologies, techniques, and assumptions that have been and will continue to be advocated by rate analysts. Because the various philosophies and assumptions can significantly affect the results of the analysis, the results should be treated as providing an indication of the general range of class cost responsibility; not as precise values.

Second, a Class COS analysis is of necessity directed at determining the cost imposed by a rate class on the system rather than at determining the cost imposed by individual consumers within each classification. The cost responsibility of a specific, individual consumer may or may not be entirely consistent with the cost allocations made to their assigned consumer classification. Furthermore, the study does not address the problem of maintaining relatively smooth transitions between the various rate classes or subclasses of consumers which may be eligible to receive service under more than one rate schedule.

Third, a Class COS analysis does not address itself to many of the other legitimate objectives of rate design such as consumer acceptance or the avoidance of excessively abrupt changes from the historical rate policies. In addition, it does not recognize the desire to keep each rate schedule competitive, in as much as possible, with the corresponding rate schedule of neighboring utilities or the need to keep the rate structure simple so that it is easily administered and understood by consumers.

With the above limitations in mind, a Class COS study may be used as a general guide for assigning cost responsibility (i.e., revenue requirements) to each of the rate classes in a manner which avoids unjustifiable price discrimination. The study also provides information useful in designing the individual rate schedules and provides support for justifying rate differentials to retail customers.

**Q. What objectives have you considered in developing the proposed rates?**

A. There are many legitimate objectives that influence the design of rates. Some of the more important ones are as follows:

1. The proposed rates must develop the requisite total revenue.
2. The proposed rates should reflect the cost of providing service. Subsidization between classes or subclasses should be minimized if not eliminated.
3. The rate design should be simple and concise to facilitate consumer acceptance and administration.
4. Abrupt departures from historical rate practices and levels should be avoided.
5. The rate structure should be acceptable to the ratepayers.
6. Where there is a possibility of a consumer being eligible to receive service under more than one rate schedule, the transition should be made as smoothly as possible.
7. The rates should promote the efficient use of energy and system capacity.
8. Whenever possible, the rate schedule should be competitive with those of neighboring utilities and alternative energy sources.

It is generally not possible to fully accomplish all the above objectives in developing rates. Compromises must be made.

**Q. Are you testifying in support of any rate design requests in this application?**

A. Yes. I am testifying in support of rate design requests concerning the current rates and two new rates. The new rates being requested are for light emitting diode ("LED") rates and for a Grid Access Charge ("GAC") for consumers opting to participate in Southern Pioneer's Net Metering ("NM") tariff.

## A. Rate Change Request - Current Rates

**Q. Please describe the rate design request concerning the current Southern Pioneer rates.**

A. The request is for a three-year transition plan to address two major concepts -- both aimed at bringing rates closer in line with the Class COS, gradually. First, the rate changes during this transition period will help reduce the level of cross-class subsidies; second, the rate changes will improve the rate design to reduce the extent of intra-class subsidies. The transition plan is designed as revenue-neutral, which means that the total rate revenue to Southern Pioneer is the same throughout each year of the 3-year transition plan – assuming constant Test Year billing determinants.

Table 4 below shows the rate schedule revenue by rate class under the requested three-year transition plan.

**Table 4**
**Proposed Rate Schedule Revenue**

| Rate Class | Present Rates[1] | Proposed Rates[2] | | |
|---|---|---|---|---|
| | | Year 1 | Year 2 | Year 3 |
| | ($) | ($) | ($) | ($) |
| Residential Service (19-RS) | | | | |
| General Use | 16,002,466 | 16,174,693 | 16,346,921 | 16,519,148 |
| Space Heating | 797,613 | 805,788 | 813,962 | 822,136 |
| General Service Small (19-GSS) | 1,868,767 | 1,889,656 | 1,910,545 | 1,931,434 |
| General Service Large (19-GSL) | 17,613,799 | 17,410,495 | 17,207,190 | 17,003,886 |
| General Service Space Heating (Rider No. 1) | 561,145 | 561,145 | 561,145 | 561,145 |
| Industrial Service (19-IS) | 3,632,202 | 3,632,202 | 3,632,202 | 3,632,202 |
| Industrial Service-Primary Discount | - | - | - | - |
| Real -Time Pricing (13-RTP) | 33,528 | 33,528 | 33,528 | 33,528 |
| Transmission Level Service (18-STR) | 26,258,290 | 26,258,290 | 26,258,290 | 26,258,290 |
| Municipal Power Service (19-M-I) | 200,545 | 202,559 | 204,573 | 206,586 |
| Water Pumping Service (19-WP) | 652,651 | 652,651 | 652,651 | 652,651 |
| Irrigation Service (19-IP-I) | 361,292 | 361,292 | 361,292 | 361,292 |
| Temporary Service (19-CS) | 12,350 | 12,350 | 12,350 | 12,350 |
| Lighting | 1,116,641 | 1,116,641 | 1,116,641 | 1,116,641 |
| **Total Retail Rates** | 69,111,289 | 69,111,289 | 69,111,289 | 69,111,289 |
| Local Access Delivery Service | 2,142,184 | 2,142,184 | 2,142,184 | 2,142,184 |
| **Total All Rates** | 71,253,473 | 71,253,473 | 71,253,473 | 71,253,473 |

As shown in Table 4, the total revenue from retail rates is the same across all years of the proposed rate transition plan. Table 5 below shows the change in revenue by rate class. Notice that while some rates are increasing, others decrease so that there is no net change in rate schedule revenue; again, this is also illustrated in Table 4.

**Table 5**
**Change in Rate Schedule Revenue**

| Rate Class | Annual Revenue Change | | |
|---|---|---|---|
| | Year 1 | Year 2 | Year 3 |
| | ($) | ($) | ($) |
| Residential Service (19-RS) | | | |
| General Use | 172,228 | 172,228 | 172,228 |
| Space Heating | 8,174 | 8,174 | 8,174 |
| General Service Small (19-GSS) | 20,889 | 20,889 | 20,889 |
| General Service Large (19-GSL) | (203,304) | (203,304) | (203,304) |
| General Service Space Heating (Rider No. 1) | - | - | - |
| Industrial Service (19-IS) | - | - | - |
| Industrial Service-Primary Discount | - | - | - |
| Real -Time Pricing (13-RTP) | - | - | - |
| Transmission Level Service (18-STR) | - | - | - |
| Municipal Power Service (19-M-I) | 2,014 | 2,014 | 2,014 |
| Water Pumping Service (19-WP) | - | - | - |
| Irrigation Service (19-IP-I) | - | - | - |
| Temporary Service (19-CS) | - | - | - |
| Lighting | - | - | - |
| **Total Retail Rates** | - | - | - |
| Local Access Delivery Service | - | - | - |
| **Total All Rates** | - | - | - |

**Q. Is it correct from Table 5 above that the request is for an increase in the Residential Service ("RS"), General Service Small ("GSS"), and Municipal Power Service ("M-I") rates and a corresponding decrease to the General Service Large ("GSL") rate?**

A. Yes. The Class COS results, as previously discussed, do show that relative to the allocated cost of providing service, the RS, GSS, and M-I rates are currently under-recovering, while the GSL rate is over-recovering. Resolving issues like this can be challenging, especially when

there is not an overall rate change being requested. The three-year rate transition plan, while it does not completely resolve the issue due to a desire to avoid rate shock, does move the rates and rate designs closer to the Class COS results which will improve fairness and price signals.

**Q. What rate design changes are being requested for the RS rate?**

A. The RS rate, according to the Class COS, has a Customer Charge that is too low. The Customer Charge is currently only $13.77 per month; whereas the Class COS shows a consumer-related cost of $17.39 per month. I would also point out again that this is also using a Class COS methodology (as was previously discussed) that produces a relatively low consumer-related cost.[4] The three-year transition plan will gradually move the present Customer Charge up to the Class COS result in equal steps. Each step will increase the Customer Charge by $1.20 per month until the charge gets to $17.37 per month -- which is barely short of the $17.39 consumer-related cost in the Class COS for the RS class. No other rate design changes are being requested for the RS rate.

**Q. What is the bill impact from the requested RS rate?**

A. As noted, the three-year transition plan includes a $1.20 per month increase in the Customer Charge for each of the next three years. Because there are no other changes requested for this rate, that $1.20 per month is the total bill impact of this request. This makes the change easy to communicate, explain, and implement while being predictable for customers. It also is somewhat certain for both Southern Pioneer and the customer since it will not fluctuate with the sales/consumption which can be volatile due to weather.

[4] The cost per month would be much higher using one of the alternative Class COS methodologies previously described.

**Q. What rate design changes are being requested for the GSS rate?**

A. The request for the GSS rate is to increase the Energy Charge (a.k.a., Delivery Charge). According to the Class COS, the Customer Charge is adequate at its current level; and the Energy Charge is under-recovering. Increasing the Energy Charge in equal steps represents a gradual change that will have relatively minor bill impacts. The bill impacts will depend on the level of usage; but at the average usage level of 210 kWh per month, it amounts to less than $0.40 per month.

**Q. What rate design changes are being requested for the M-I rate?**

A. The M-I rate currently adopts the RS Customer Charge -- and the request is to continue this such that the Customer Charge increases requested for the RS rate would also apply to the M-I rate. Beyond this, no other rate changes are requested for the M-I rate.

**Q. What rate design changes are being requested for the GSL rate?**

A. According to the Class COS, the GSL rate is over-recovering; and the request is for a decrease that will offset the increases from the other rates. The Class COS also indicates that the Energy Charge (a.k.a., Delivery Charge) is high relative to the cost. This means that the rate is over-recovering from customers that use a large amount of energy relative to their demand (i.e., high load factor customers). A gradual reduction of the Energy Charge is requested and will relieve these customers somewhat and will help make the rate more attractive to industry with high load factors. All GSL customers will experience a bill reduction from the requested change; however, those with higher load factors will experience a somewhat larger percentage reduction.

**Q. You also mentioned that Southern Pioneer is requesting two new rates or charges. Please explain further.**

A. First, the Company is requesting that the Commission approve rates that it can use to serve LED lighting being deployed for customers in its service areas. Second, Southern Pioneer is requesting the Commission approve an update to its NM to include the addition of the GAC that would be applicable to customers that decide in the future to install behind the meter distributed generation ("DG") facilities.

## B. Rate Change Request - LED Lighting

**Q. The first request you identified is for the Commission to approve rates that Southern Pioneer can use to serve LED lighting. Please explain.**

A. Southern Pioneer, along with most electric utilities across the country, provides electric service to various types of outdoor lighting such as security and street lighting. Lighting technologies have changed over the years; currently, most electric utilities are increasingly serving LED lights. LED lights have a variety of benefits over existing Mercury Vapor ("MV"), High Pressure Sodium ("HPS"), or Metal Halide ("MH") technologies, at least for certain applications. This includes lower energy usage per lumen and a longer bulb life (i.e., hours). While the upfront price to purchase an LED light remains somewhat higher than the other technologies, those prices have dropped significantly. Southern Pioneer's lighting rates are based upon serving MV and HPS lights. It is therefore recommending a new set of lighting rates that it can use to serve various sizes of LED lights to accommodate the preferences of its customers.

**Q. How is Southern Pioneer proposing to price service provided to LED lights?**

A. The LED lighting for private area and cobra head street lighting would be priced at the rates currently in place for the equivalent HPS lights. The rate is applied as a monthly charge based

upon the wattage of the lights. The wattage of the lights is directly related to the cost of serving the lights.

In order to establish the rates for LED lights, a separate cost analysis was prepared. (Please reference Exhibit PSE-5 for the details and analysis). This LED lighting analysis utilizes the Class COS results and accounts for the difference in cost for the lights and the lower energy requirements. The LED Cost column in the following Table 6 below, shows the calculated costs for LED equivalent lights. As shown, there is not a significant difference between the rates calculated for LED and the current lighting rates being billed.

**Table 6**
**Southern Pioneer Electric Company**
**LED Lighting Analysis - Summary**

| Light Type | HPS Equivalent | LED Cost [1] | Proposed HPS Tariff Rate [1] | Proposed LED Tariff Rate [1] |
|---|---|---|---|---|
| 48 W LED - Existing Pole | 100 W HPS | $ 12.74 | $ 12.09 | $ 12.09 |
| 108 W LED - Existing Pole | 200 W HPS | $ 18.69 | $ 19.92 | $ 19.92 |
| 215 W LED - Existing Pole | 400 W HPS | $ 30.88 | $ 28.27 | $ 28.27 |
| 48 W LED - New Wood Pole [2] | 100 W HPS | | $ 19.33 | $ 19.33 |
| 108 W LED - New Wood Pole [2] | 200 W HPS | | $ 26.28 | $ 26.28 |
| 215 W LED - New Wood Pole [2] | 400 W HPS | | $ 35.60 | $ 35.60 |
| 108 W LED - New Steel Pole [2] | 200 W HPS | | $ 39.02 | $ 39.02 |
| 215 W LED - New Steel Pole [2] | 400 W HPS | | $ 49.85 | $ 49.85 |

[1] Per light, excluding ECA and PTS and assuming company-owned lights.
[2] Incremental cost of new Wood or Steel Pole is assumed to be the same for either LED or HPS lights

The LED lighting that would replace MH and HPS lights currently used for flood lighting has a calculated cost that is considerably lower than the current or proposed flood lighting rates as is illustrated in Table 7 below. It is therefore recommended that the Proposed LED Tariff Rate be based on the LED Cost as calculated.

**Table 7**
**Southern Pioneer Electric Company**
**LED Flood Lighting Analysis - Summary**

| Light Type | HPS/MH Equivalent | LED Cost [1] | Proposed HPS Tariff Rate [1] | Proposed LED Tariff Rate [1] |
|---|---|---|---|---|
| 43 W LED - Existing Pole | 150 W HPS | $ 15.34 | $ 22.28 | $ 15.34 |
| 140 W LED - Existing Pole | 400 W HPS | $ 22.48 | $ 42.42 | $ 22.48 |
| 459 W LED - Existing Pole | 1000 W MH | $ 44.49 | $ 67.56 | $ 44.49 |
| 43 W LED - New Wood Pole [2] | 150 W HPS | | $ 24.92 | $ 17.98 |
| 140 W LED - New Wood Pole [2] | 400 W HPS | | $ 44.47 | $ 24.53 |
| 459 W LED - New Wood Pole [2] | 1000 W MH | | $ 87.41 | $ 64.34 |

[1] Per light, excluding ECA and PTS and assuming company-owned lights.
[2] Incremental cost of new Wood or Steel Pole is assumed to be the same for either LED or HPS lights

## C. Rate Change Request - Grid Access Charge

**Q. The second request you identified is for a charge that would be applicable to Southern Pioneer NM tariff customers. Please explain.**

A. Correct. The requested GAC would apply to Southern Pioneer's customers that install a DG system in the future -- so there would be no Test Year revenue impact to the Company for this change and no immediate impact of the GAC on Southern Pioneer's current customers served under its NM tariff. Concerning existing customers on the NM tariff, Southern Pioneer is proposing to grandfather them such that the GAC will not apply to them until January 1, 2030, or to the extent permitted by law, which is consistent with the Commission's directive in Docket No. 16-GIME-403-GIE. [5]

The goal of this request is not revenue driven. Instead, it serves the following purposes: 1) to provide a price signal to customers that may be evaluating DG investment in the future and 2) to ensure that customer installations of DG do not negatively affect the costs borne by customers that do not install DG.

[5] *Final Order*, ¶ 29 (issued Sept. 21, 2017).

**Q. What is the requested GAC and how will it be applied?**

A. The GAC will be charged per kW of installed DG capacity in addition to base tariff charges and at the rates shown in Table 8 below for each applicable rate schedule.

**Table 8**

**DG Grid Access Charge - Summary**

| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
|---|---|---|---|---|---|---|---|
| **Line** | **Description** | **Residential General Service (18-RS)** | **General Service Small (18-GSS)** | **General Service Large (18-GSL)** | **Industrial Service (18-IS)** | **Irrigation (18-IP-I)** | **Notes** |
| 1 | **Grid Access Charge** | | | | | | |
| 2 | Year 1 | $ 7.36 | $ 4.97 | $ 1.89 | $ 1.36 | $ 4.79 | per kW (DC) |
| 3 | Year 2 | $ 7.36 | $ 5.21 | $ 1.89 | $ 1.36 | $ 4.79 | per kW (DC) |
| 4 | Year 3 | $ 7.36 | $ 5.42 | $ 1.89 | $ 1.36 | $ 4.79 | per kW (DC) |
| 5 | **Not-to-Exceed** * | $ - | $ - | $ - | $ - | $ - | |
| 6 | Year 1 | $ 41.00 | $ 14.00 | $ 110.00 | $ 1,540.00 | $ 173.00 | per month |
| 7 | Year 2 | $ 41.00 | $ 15.00 | $ 110.00 | $ 1,540.00 | $ 173.00 | per month |
| 8 | Year 3 | $ 41.00 | $ 15.00 | $ 110.00 | $ 1,540.00 | $ 173.00 | per month |

* Equivalent to 5.6 kW DG installation for RS, 2.8 kW for GSS, 58.1 kW for GSL, 1,129.9 kW for IS, 36.1 kW for IP (DC)

For example, if a residential customer installs a 6 kW solar array (which is a typical size for a residential customer), in Year 1 of the three-year transition plan, they would be billed a GAC determined as follows:

1. 6 kW DC solar array x $7.36 GAC per kW DC GAC = $44.16 charge.
2. Not-to-Exceed amount for residential of $41.00 per month.
3. Residential DG customer billed $41.00 for GAC.

**Q. How does the requested GAC provide a price signal to customers that may be evaluating an investment in a DG system?**

A. As will be discussed further, Southern Pioneer incurs significant costs to own, operate, and maintain the grid (i.e., sub transmission and distribution systems). Consistent with long-standing, industry-accepted, cost of service principles, these costs exist based upon 1) the number and location of customers served (i.e., customer-related) and/or 2) the peak

capacity/demand requirements of the grid. So, if a customer installs DG and thus reduces the amount of energy that Southern Pioneer delivers over its grid, the cost of the grid itself is not affected (i.e., is not reduced, stays the same). Southern Pioneer's current rate structure does not adequately convey this since it collects some or all demand-related fixed costs in an energy charge. Separating the fixed, demand-related costs into a GAC is a way to correct for this without making an abrupt change to the other rates which could affect thousands of customers.

**Q. How does the requested GAC address cost shifting that could otherwise result from serving residential DG customers under a two-part (i.e., Customer Charge and Energy Charge) rate structure?**

A. As the Commission stated in its Docket No. 16-GIME-403-GIE Final Order,

> "22. Second, the Commission finds the current two-part residential rate design is problematic for utilities and residential private DG customers because DG customers use the electric grid as a backup system resulting in their consuming less energy than non-DG customers, which results in DG customers not paying the same proportion of fixed costs as non-DG customers.[60] The Commission finds DG customers are thus being subsidized by non-DG customers.[61]
>
> 23. Third, the Commission finds the following rate design options are appropriate for residential private DG customers, to allow utilities to better recover the costs of providing service to that class or sub-class of customers:
>
> a. A cost of service based three-part rate consisting of a customer charge, demand charge, and energy charge;[62]
> b. A grid charge based upon either the DG output or nameplate rating;[63] or
> c. A cost of service-based customer charge that is tiered based upon a customer's capacity requirements.[64]"
>
> (pages 8-9 of referenced Commission Order)

To resolve this subsidy finding by the Commission, the GAC is calculated to recover the fixed costs of Southern Pioneer that would not otherwise be paid by DG customers under the existing and proposed rate design. I have set this out in Exhibit PSE-6.

The calculation of the GAC is to identify the distribution fixed costs that are not being collected by Southern Pioneer's fixed or demand charges. This is done by calculating the

annual distribution fixed costs being recovered under each of the applicable rate tariffs and then subtracting the revenues from the Customer and Demand Charges.[6] The difference is the amount of distribution fixed costs that are, by design, being recovered through the variable energy rate component(s). This dollar amount is divided by the annual sales to arrive at the $ per kWh rate. This result is then converted to a $ per kW DC GAC charge by applying the DG capacity factor.

**Q. Could Southern Pioneer have corrected the price signal for DG by some other means?**

A. In my opinion, currently, there is not a better option for dealing with Southern Pioneer's concerns regarding fairness to all customers and providing a better price signal to customers that consider installing DG. I have worked with other utilities on this issue on dozens of occasions as they are also dealing with this issue of fairness, cost recovery, and price signals in their rate design. The potential alternatives available include: 1) creating a separate rate class for DG customers or 2) changing the rate design for all customers. Neither of these are very good options for Southern Pioneer, and I can understand why the GAC is preferred.

The first option of separating DG customers into their own rate class(es) is problematic because, for the Test Year, there were only five customers with DG in the Test Year, with four of them being residential and one being small general service. Creating a separate rate class for four or one customer is not common practice. The resulting rate or costs would be very specific to the cost and usage characteristics of those few customers and may not be appropriate to additional customers that may be added to the rate in the future.

Changing the rate design for all customers is something that could be considered. However, such a change would likely include either a substantial increase to the Customer

[6] Southern Pioneer's General Service Large, Industrial, and Irrigation rate tariffs have a demand charge which assists in the collection of fixed costs. The calculation therefore reduces the fixed costs that would otherwise go into the determination of the GAC for these rate classifications.

Charge and/or the addition/increase of a Demand Charge. Either of these would provide a better price signal related to fixed and demand cost recovery; however, it could cause "rate shock" for thousands of customers.

The requested GAC balances many objectives and provides the following benefits:

1. No immediate impact on existing DG customers.
2. No immediate impact on Southern Pioneer's revenues.
3. Provides a better price signal to customers to support DG investment decisions while avoiding a dramatic rate design change, such as increased Fixed Charge or additional/increased Demand Charge.
4. Avoids the risks of developing a DG-specific rate based upon a few customers.
5. Protects against cost-shifting that would otherwise occur from DG installations under Southern Pioneer's existing rates structures, such as the two-part rate structure used to serve customers under its residential and small commercial service rates.
6. Is a simple and stable rate approach.

**Q. Does this conclude your Direct Testimony?**

A. Yes, it does.

# RICHARD J. MACKE

## VICE PRESIDENT, ECONOMICS, RATES, AND BUSINESS PLANNING

### SUMMARY OF EXPERIENCE AND EXPERTISE

- Over 23 years of experience in electric utility consulting.
- Specialized expertise in financial advisement with particular emphasis on: cost of service analyses, wholesale and retail rate design, strategic planning, mergers and acquisitions, and financial modeling.
- Frequent speaker at industry events and utility board, commission, and staff meetings.
- Expert witness in regulatory cases concerning rates and distributed generation policies.

### PROFESSIONAL EXPERIENCE

**Power System Engineering, Inc. - Minneapolis, MN (1999-present)**

**Vice President, Economics, Rates, and Business Planning (June 2011-present)**
**Vice President, Rates and Financial Planning (July 2010-May 2011)**
**Various Other Positions (1999-June 2010)**

As Vice President of the Economics, Rates, and Business Planning Department at PSE, responsibilities include managing the firm's economic and rate practice areas and providing senior level consulting services to clients in the areas of cost of service, rate design, financial planning and forecasting, merger and acquisition analysis, and support. Additional responsibilities include strategic planning, litigation support, expert witness, regulatory compliance, capital expenditure, and operational assessments and advisement.

**Energy & Resource Consulting Group, LLC - Denver, CO (1998-1999)**

**Senior Analyst**

Senior Analyst for financial, engineering, and management consulting firm. Performed consulting services related to electric, gas, and water rate studies. Part of the Financial and Engineering Advisor Team contracted to the City Council of the City of New Orleans, LA to assist in various electric and gas utility matters. Provided expert testimony and participated in various regulatory proceedings involving the City Council, the Public Utilities Commission of Texas, and the Public Utilities Commission of Nevada. Provided general financial, management, and public policy support to clients.

**Power System Engineering, Inc. - Blaine, MN (1996-1998)**

**Financial Analyst**

Financial Analyst in Utility Planning and Rates Division. Emphasis on retail rate studies, including revenue requirements, and bundled/unbundled cost of service studies. Provided analysis used to support testimony, mergers and acquisitions cases, and financial forecasting.

# RICHARD J. MACKE

## EDUCATION

University of Minnesota, Minneapolis, MN
Masters of Business Administration, 2007
Bethel University, St. Paul, MN
Bachelor of Arts Degree in Business, Minor in Economics, 1996

## PRESENTATIONS AND PUBLICATIONS

### Presentations at Industry Meetings

| Topic | Organization | Conference | Location | Date |
|---|---|---|---|---|
| *Legislative Interim Study Committee* | | | | |
| *Trends in Rate Design - Panel* | Minnesota Rural Electric Association | 2019 Energy Issues Summit | St. Cloud, MN | 7/2019 |
| *Electric Vehicle Development and Rate Trends* | Iowa Association of Electric Cooperatives | 2019 Accountants Conference | Des Moines, IA | 5/2019 |
| *Electric Vehicle Development and Rate Trends* | Iowa Association of Electric Cooperatives | 2019 CEO Conference | Des Moines, IA | 4/2019 |
| *Cost of Service and Rate Design Seminar* | PSE/Minnesota Rural Electric Association | Spring 2018 Seminar | Bloomington, MN | 4/2018 |
| *Cost of Service and Rate Design Seminar* | PSE/Kansas Electric Cooperatives | Fall 2017 Seminar | Salina, KS | 10/2017 |
| *Evolving Rate Structures* | Wisconsin Electric Cooperative Assoc. | Fall Manager's Meeting | Wisconsin Dells, WI | 10/2017 |
| *Rate Design and Cost of Service Seminar* | PSE/KEC | Fall 2017 Seminar | Salina, KS | 10/2017 |
| *Cost of Service: Transforming Theory into Reality* | APPA | Business and Finance Conference | Nashville, TN | 9/2017 |
| *Anti-Demand Charges: The Case for Peak-Time Rebate (PTR) Programs* | EUCI | Residential Demand Charges Conference | Charleston, SC | 7/2017 |
| *Power Cost Adjustment (PCA)* | Iowa Association of Electric Cooperatives | Managers and Board President's Summer Conference | Okoboji, IA | 7/2017 |
| *Distributed Generation Rate Design* | Kansas Rural Electric Cooperatives | Manager's Association Spring Meeting | Wichita, KS | 6/2017 |
| *NEM Policy Update and DG Rate Design* | Kansas Electric Cooperatives, Inc. | Regulatory Review and Tax Committee | Salina, KS | 3/2017 |
| *Rate Impact of Net Metering* | Generation and Transmission Finance and Accountants Assoc. | G&T Finance and Accounting Conference | Charleston, SC | 6/2016 |
| *Net Metering and Fixed Cost Recovery* | Iowa Association of Electric Cooperatives | Manager's Spring Conference | Des Moines, IA | 4/2016 |
| *Net Metering Deep Dive* | Minnesota Rural Electric Assoc. | Annual Meeting | St. Paul, MN | 3/2016 |
| *Retail Rate Design and Industry Update* | Association of Missouri Electric Cooperatives | Manager's Fall Conference | Branson, MO | 9/2015 |
| *Rate Design and Cost of Service Seminar* | Power System Engineering, Inc. | Fall 2015 Seminar | Lexington, KY | 9/2015 |

| | | | | |
|---|---|---|---|---|
| *Distributed Generation WI Survey Results* | Dairyland Power Cooperative | Solar Workshop | Plover, WI | 9/2015 |
| *Consumer-Owned Generation* | Hoosier Energy | 2015 Board Strategic Issues Forum | French Lick, IN | 8/2015 |
| *Retail Rate Design and DG* | National Rural Electric Cooperative Assoc. | CEO Close-Up Conference | St. Petersburg, FL | 1/2015 |
| *Evolution of Retail Rate Design* | National Rural Electric Cooperative Assoc. | NRECA Issues Summit | Indianapolis, IN | 10/2014 |
| *Net Metering and Retail Rate Design* | Kansas Electric Cooperatives | Accountant's Meeting | Wichita, KS | 10/2014 |
| *DG Rate Considerations* | Wisconsin Electric Cooperative Assoc. | Emerging Energy Issues Summit | Wisconsin | 8/2014 |
| *Rate Design and Cost of Service Seminar* | Power System Engineering, Inc. | Spring 2014 Seminar | Indianapolis, IN | 5/2014 |
| *Rate Trends and Facilities Charges* | South Dakota Rural Electric Assoc. | Accountant's Fall Conference | Mitchell, SD | 10/2013 |
| *Rate Design and Cost of Service Seminar* | Power System Engineering, Inc. | Fall 2013 Seminar | Bloomington, MN | 10/2013 |
| *Tackling New Trends in Rates and Facilities Charges* | Rural Electric Managers Assoc. | Fall Financial Manager's Conf. | Duluth, MN | 8/2013 |
| *Dynamic Pricing* | National Rural Electric Cooperative Assoc. | Accounting, Finance and Tax Meeting | New Orleans, LA | 7/2013 |
| *Rate Trends* | Wisconsin Electric Cooperative Assoc. | Manager's Meeting | Warrens, WI | 7/2013 |
| *Standby Rates* | Iowa Association of Electric Cooperatives | Manager's Spring Conference | Des Moines, IA | 4/2013 |

**Publications**

Macke, Richard; Butz, Thomas; and Sonju, Erik. "Distributed Energy Resources: Trends and Impacts on G&Ts and Their Member Cooperatives." National Rural Electric Association, July 2019.

Macke, Richard and Butz, Thomas. "The Value of Distributed Solar Generation." National Rural Electric Association, 2016.

Mbiad, Garry and Macke, Richard. "Cooperative Rate Structures - Seven Case Studies." National Rural Electric Association, 2016.

Macke, Richard. "Survey: Electric Cooperative Fixed Cost Recovery." Power System Engineering, Inc., 2014.

Mbiad, Garry and Macke, Richard. "NRECA Cooperative Solar Case Studies." National Rural Electric Association, 2014.

Macke, Richard. "G&T DER Whitepaper." Power System Engineering, Inc., 2013.

Macke, Richard, Fenrick, Steve, and Getachew, Lullit. "Performance Based Regulation for Electric and Gas Distributors." Power System Engineering, Inc., 2011.

# RICHARD J. MACKE

## EXPERT TESTIMONY

| Case or Jurisdiction | Docket No. | Description |
|---|---|---|
| Kansas | 18-SPEE-477-RTS | Southern Pioneer Electric Company, Annual Filing for approval to make certain changes to its charges for electric services, pursuant to the Debt Service Coverage Formula Based Ratemaking Plan approved in Docket No. 13-MKEE-452-MIS and 34.5kV Formula Based Ratemaking Plan approved in Docket No. 16-MKEE-023-TAR. Testimony filed on behalf of Southern Pioneer. |
| Kansas | 16-GIME-403-GIE | Kansas Electric Cooperatives and Southern Pioneer Electric Company, in the matter of the General Investigation to Examine Issues Surrounding Rate Design for Distributed Generation Customers. Testimony filed in support of Stipulation and Agreement on behalf of both entities. |
| Kansas | 16-PLCE-490-TAR | Prairie Land Electric Cooperative, Inc., application for approval to update its Local Access Delivery Service Tariff pursuant to the 34.5kV Formula Based Rate Plan approved in Docket No. 16-MKEE-023-TAR. Testimony filed on behalf of Prairie Land. |
| Kansas | 16-SPEE-501-TAR | Southern Pioneer Electric Company, Annual Filing for approval to make certain changes to its charges for electric services pursuant to the 34.5kV Formula Based Rate Plan approved in Docket No. 16-MKEE-023-TAR. Testimony filed on behalf of Southern Pioneer. |
| Kansas | 16-VICE-494-TAR | The Victory Electric Cooperative Association, Inc., application for approval to update its Local Access Delivery Service Tariff pursuant to the 34.5kV Formula Based Rate Plan approved in Docket No. 16-MKEE-023-TAR. Testimony filed on behalf of Victory. |
| Kansas | 16-WSTE-496-TAR | Western Cooperative Electric Association, Inc., application for approval to update its Local Access Delivery Service Tariff pursuant to the 34.5kV Formula Based Rate Plan approved in Docket No. 16-MKEE-023-TAR. Testimony filed on behalf of Western. |
| Kansas | 16-MKEE-023-TAR | Mid-Kansas Electric Company, application for approval of individual 34.5kV formula-based rates. Testimony filed on behalf of Mid-Kansas, Southern Pioneer, Victory, and Western. |
| Kansas | 15-SPEE-519-RTS | Southern Pioneer Electric Company, Annual Filing for approval to make certain changes to its charges for electric services, pursuant to the Debt Service Coverage Formula Based Ratemaking Plan approved in Docket No. 13-MKEE-452-MIS. Testimony filed on behalf of Southern Pioneer. |
| Kansas | 15-SPEE-161-RTS | Southern Pioneer Electric Company, application for approval to make certain changes to its Local Access Charge Rate. Testimony filed on behalf of Southern Pioneer. |
| Kansas | 14-SPEE-507-RTS | Southern Pioneer Electric Company, Annual Filing for approval to make certain changes to its charges for electric services pursuant to the Debt Service Coverage Formula Based Ratemaking Plan Approved in Docket No. 13-MKEE-452-MIS. Testimony filed on behalf of Southern |

| | | |
|---|---|---|
| | | Pioneer. |
| Kansas | 13-MKEE-452-MIS | Mid-Kansas Electric Company, LLC, application for approval of a Debt Service Coverage Ratemaking Pilot Plan. Testimony filed on behalf of its member-owner, Southern Pioneer Electric Company. |
| Kansas | 11-MKEE-380-RTS | Mid-Kansas Electric Company, LLC, application for revised rates, tariffs, and rate design changes. Testimony filed on behalf of its member-owner, Southern Pioneer Electric Company. |
| Kansas | 11-MKEE-491-RTS | Mid-Kansas Electric Company, LLC, application for revised rates, tariffs, and rate design changes. Testimony filed on behalf of its member-owner, Western Cooperative Electric Assn., Inc. |
| Kansas | 11-MKEE-439-RTS | Mid-Kansas Electric Company, LLC, application for revised rates, tariffs, and rate design changes. Testimony filed on behalf of its member-owner, Wheatland Electric Cooperative, Inc. |
| Kansas | 09-MKEE-969-RTS | Mid-Kansas Electric Company, LLC, application for approval to make certain changes in the charges for electric services. Testimony filed on behalf of Mid-Kansas and its member-owners: Lane-Scott Electric Cooperative, Inc.; Prairie Land Electric Cooperative, Inc.; Southern Pioneer Electric Company; Victory Electric Cooperative Association, Inc.; Western Cooperative Electric Association, Inc.; and Wheatland Electric Cooperative, Inc. |
| Kansas | 09-PNRE-563-RTS | Pioneer Electric Cooperative, Inc., application to increase rates. Testimony filed on behalf of Pioneer. |
| Kansas | 09-WHLE-681-RTS | Wheatland Electric Cooperative, Inc., application to increase rates. Testimony filed on behalf of Wheatland. |
| Kentucky | 2016-00365 | Farmers Rural Electric Cooperative Corporation, application for matter of adjustment of rates. Testimony filed on behalf of Farmers. |
| Maryland | S.B. 771 | Testified before Maryland State Senate in support of Senate Bill 771. |
| Maryland | H.B. 996 | Testified before Maryland House of Delegates in support of House Bill 996. |
| Minnesota | E-111/GR-03-261 | Dakota Electric Association, application to increase rates. Testimony filed on behalf of Dakota. |
| South Carolina | 2014-246-E | Testimony in support of the Settlement Agreement submitted by the parties to the Commission as the generic net metering methodology required by S.C. Code §58-40- 20(F)(4) of Act 236 on behalf of Central Electric Power Cooperative, Inc. and the Electric Cooperatives of South Carolina. |
| South Dakota | Regarding Senate Bill 66 | South Dakota Legislative Interim Study Committee - Electric Services in an Annexed Area. Presented oral testimony to the Legislative Committee at August 28, 2019 meeting. Testimony on behalf of South Dakota Rural Electric Association. |
| Texas | 2150 | North Star Steel, appropriateness of settlement rates being charged by Entergy Gulf States, Inc. Testimony filed on behalf of North Star Steel before the Public Utilities Commission of Texas. |

**Cost of Service Summary**
**Revenue Requirements Summary -- BUNDLED**

| Line No. | Description | Total | Residential Service General Use 18-RS | Residential Space Heating 18-RS | General Service Small 18-GSS | General Service Large 18-GSL | General Service Space Heating Rider No 1 | Industrial Service 18-IS | Municipal Power Service 18-M-I | Water Pumping Service 18-WP | Irrigation Service 18-IP-I | Temporary Service 18-CS | Lighting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Revenue Requirements** | | | | | | | | | | | | |
| 2 | Revenue Requirements | 42,819,417 | 17,531,674 | 909,744 | 1,928,483 | 16,151,815 | 664,716 | 3,540,287 | 239,747 | 639,130 | 357,274 | 9,822 | 846,724 |
| 3 | | | | | | | | | | | | | |
| 4 | **Present Rates** | | | | | | | | | | | | |
| 5 | Revenue-Present Rates | 42,819,472 | 16,002,466 | 797,613 | 1,868,767 | 17,613,799 | 561,145 | 3,632,202 | 200,545 | 652,651 | 361,292 | 12,350 | 1,116,641 |
| 6 | Revenue Credits | 2,932 | 1,096 | 55 | 128 | 1,206 | 38 | 249 | 14 | 45 | 25 | 1 | 76 |
| 8 | | 42,822,404 | 16,003,561 | 797,668 | 1,868,895 | 17,615,005 | 561,184 | 3,632,451 | 200,559 | 652,696 | 361,316 | 12,351 | 1,116,717 |
| 9 | | | | | | | | | | | | | |
| 10 | Difference | (2,987) | 1,528,113 | 112,076 | 59,588 | (1,463,190) | 103,532 | (92,164) | 39,188 | (13,566) | (4,042) | (2,529) | (269,993) |
| 11 | As Percent of Rate Schedule Revenue | | 9.55% | 14.05% | 3.19% | (8.31%) | 18.45% | (2.54%) | 19.54% | (2.08%) | (1.12%) | (20.48%) | (24.18%) |
| 12 | | | | | | | | | | | | | |

**Cost of Service Summary**
**Class Allocation Summary -- BUNDLED**

| Line No. | Category | Total | Residential Service General Use 18-RS | Residential Space Heating 18-RS | General Service Small 18-GSS | General Service Large 18-GSL | General Service Space Heating Rider No 1 | Industrial Service 18-IS | Municipal Power Service 18-M-I | Water Pumping Service 18-WP | Irrigation Service 18-IP-I | Temporary Service 18-CS | Lighting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | **Power Supply** | | | | | | | | | | | | |
| 14 | Direct | | | | | | | | | | | | |
| 15 | Wholesale Cost | | | | | | | | | | | | |
| 16 | Allocated Cost | | | | | | | | | | | | |
| 17 | Subtotal | | | | | | | | | | | | |
| 18 | Capacity Related | | | | | | | | | | | | |
| 19 | Wholesale Cost | 6,648,636 | 2,699,160 | 123,213 | 233,097 | 2,725,131 | 108,250 | 549,066 | 30,137 | 80,898 | 56,704 | 1,281 | 41,700 |
| 20 | Allocated Cost | 100,928 | 40,974 | 1,870 | 3,538 | 41,368 | 1,643 | 8,335 | 457 | 1,228 | 861 | 19 | 633 |
| 21 | Subtotal | 6,749,564 | 2,740,133 | 125,084 | 236,635 | 2,766,499 | 109,893 | 557,401 | 30,594 | 82,126 | 57,565 | 1,301 | 42,333 |
| 22 | Energy Related | | | | | | | | | | | | |
| 23 | Wholesale Cost | 11,132,967 | 3,927,770 | 212,778 | 417,185 | 4,792,686 | 184,254 | 1,120,135 | 51,873 | 192,725 | 86,639 | 1,845 | 145,076 |
| 24 | Allocated Cost | 169,001 | 59,624 | 3,230 | 6,333 | 72,754 | 2,797 | 17,004 | 787 | 2,926 | 1,315 | 28 | 2,202 |
| 25 | Subtotal | 11,301,968 | 3,987,395 | 216,008 | 423,518 | 4,865,440 | 187,051 | 1,137,139 | 52,661 | 195,651 | 87,955 | 1,873 | 147,279 |
| 26 | Sub. Power Supply | 18,051,532 | 6,727,528 | 341,092 | 660,153 | 7,631,939 | 296,944 | 1,694,539 | 83,255 | 277,777 | 145,519 | 3,174 | 189,612 |
| 27 | **Transmission** | | | | | | | | | | | | |
| 28 | Direct | | | | | | | | | | | | |
| 29 | Capacity | 4,365,670 | 1,688,356 | 86,413 | 155,580 | 1,847,519 | 74,231 | 371,997 | 19,180 | 52,803 | 29,241 | 912 | 39,437 |
| 30 | Energy | | | | | | | | | | | | |
| 31 | Allocated Cost | 3,158,133 | 1,221,360 | 62,511 | 112,547 | 1,336,499 | 53,699 | 269,103 | 13,875 | 38,198 | 21,153 | 660 | 28,529 |
| 32 | Sub. Transmission | 7,523,803 | 2,909,716 | 148,924 | 268,127 | 3,184,018 | 127,930 | 641,100 | 33,055 | 91,000 | 50,394 | 1,573 | 67,966 |
| 33 | **Distribution** | | | | | | | | | | | | |
| 34 | Direct | 376,772 | | | | | | | | | | | 376,772 |
| 35 | Consumer | 3,715,492 | 2,503,429 | 118,820 | 569,787 | 375,485 | 16,263 | 14,433 | 37,556 | 36,898 | 21,444 | 1,204 | 20,174 |
| 36 | Capacity | 13,151,818 | 5,391,002 | 300,909 | 430,415 | 4,960,373 | 223,579 | 1,190,215 | 85,882 | 233,455 | 139,917 | 3,872 | 192,200 |
| 37 | Energy | | | | | | | | | | | | |
| 38 | Sub. Distribution | 17,244,082 | 7,894,430 | 419,729 | 1,000,202 | 5,335,858 | 239,842 | 1,204,648 | 123,438 | 270,353 | 161,361 | 5,075 | 589,146 |
| 39 | | | | | | | | | | | | | |
| 40 | **Total** | 42,819,417 | 17,531,674 | 909,744 | 1,928,483 | 16,151,815 | 664,716 | 3,540,287 | 239,747 | 639,130 | 357,274 | 9,822 | 846,724 |

**Cost of Service Summary**
**Rate Design Factors -- BUNDLED**

| Line No. | Category | Units | Total | Residential Service General Use 18-RS | Residential Space Heating 18-RS | General Service Small 18-GSS | General Service Large 18-GSL | General Service Space Heating Rider No 1 | Industrial Service 18-IS | Municipal Power Service 18-M-I | Water Pumping Service 18-WP | Irrigation Service 18-IP-I | Temporary Service 18-CS | Lighting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41 | **Costs Broken Down by Function** | | | | | | | | | | | | | |
| 42 | **Power Supply** | | | | | | | | | | | | | |
| 43 | Direct | | | | | | | | | | | | | |
| 44 | Wholesale Cost | $/Mo./cons | | | | | | | | | | | | |
| 45 | Allocated Cost | $/Mo./cons | | | | | | | | | | | | |
| 46 | Subtotal | | | | | | | | | | | | | |
| 47 | Capacity Related | | | | | | | | | | | | | |
| 48 | Wholesale Cost | ¢/kWh | 2.19 | 2.53 | 2.13 | 2.05 | 2.09 | 2.16 | 1.80 | 2.13 | 1.54 | 2.41 | 2.55 | 1.06 |
| 49 | Allocated Cost | ¢/kWh | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.04 | 0.04 | 0.02 |
| 50 | Subtotal | ¢/kWh | 2.23 | 2.56 | 2.16 | 2.08 | 2.12 | 2.19 | 1.83 | 2.17 | 1.57 | 2.44 | 2.59 | 1.07 |
| 51 | Energy Related | | | | | | | | | | | | | |
| 52 | Wholesale Cost | ¢/kWh | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 |
| 53 | Allocated Cost | ¢/kWh | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 |
| 54 | Subtotal | ¢/kWh | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 |
| 55 | Sub. Power Supply | ¢/kWh | 5.96 | 6.29 | 5.89 | 5.82 | 5.85 | 5.92 | 5.56 | 5.90 | 5.30 | 6.17 | 6.32 | 4.80 |
| 56 | **Transmission** | | | | | | | | | | | | | |
| 57 | Direct | ¢/kWh | | | | | | | | | | | | |
| 58 | Capacity | ¢/kWh | 1.44 | 1.58 | 1.49 | 1.37 | 1.42 | 1.48 | 1.22 | 1.36 | 1.01 | 1.24 | 1.82 | 1.00 |
| 59 | Energy | ¢/kWh | | | | | | | | | | | | |
| 60 | Allocated Cost | ¢/kWh | 1.04 | 1.14 | 1.08 | 0.99 | 1.02 | 1.07 | 0.88 | 0.98 | 0.73 | 0.90 | 1.31 | 0.72 |
| 61 | Sub. Transmission | ¢/kWh | 2.48 | 2.72 | 2.57 | 2.36 | 2.44 | 2.55 | 2.10 | 2.34 | 1.74 | 2.14 | 3.13 | 1.72 |
| 62 | **Distribution** | | | | | | | | | | | | | |
| 63 | Direct | $/Mo./cons | 1.45 | | | | | | | | | | | 6.52 |
| 64 | Consumer | $/Mo./cons | 14.33 | 17.44 | 17.44 | 18.84 | 22.22 | 22.22 | 71.10 | 22.38 | 43.56 | 43.58 | 17.44 | 0.35 |
| 65 | Capacity | ¢/kWh | 4.34 | 5.04 | 5.20 | 3.79 | 3.80 | 4.46 | 3.90 | 6.08 | 4.45 | 5.93 | 7.71 | 4.87 |
| 66 | Energy | ¢/kWh | | | | | | | | | | | | |
| 67 | Sub. Distribution | ¢/kWh | 5.69 | 7.39 | 7.25 | 8.81 | 4.09 | 4.78 | 3.95 | 8.74 | 5.15 | 6.84 | 10.11 | 14.92 |
| 68 | Total | ¢/kWh | 14.13 | 16.40 | 15.71 | 16.99 | 12.38 | 13.26 | 11.61 | 16.98 | 12.19 | 15.15 | 19.56 | 21.45 |
| 69 | **Costs Broken Down by Classification** | | | | | | | | | | | | | |
| 70 | Direct | $/Mo./cons | 1.45 | | | | | | | | | | | 6.52 |
| 71 | Consumer | $/Mo./cons | 14.33 | 17.44 | 17.44 | 18.84 | 22.22 | 22.22 | 71.10 | 22.38 | 43.56 | 43.58 | 17.44 | 0.35 |
| 72 | Capacity | ¢/kWh | 9.05 | 10.33 | 9.93 | 8.24 | 8.37 | 9.20 | 7.84 | 10.59 | 7.75 | 10.51 | 13.43 | 7.66 |
| 73 | Energy | ¢/kWh | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 |
| 74 | Total | | 14.13 | 16.40 | 15.71 | 16.99 | 12.38 | 13.26 | 11.61 | 16.98 | 12.19 | 15.15 | 19.56 | 21.45 |

**Classification of Plant in Service -- BUNDLED**

| Line No. | Acct. No. | Description | Class. Factor | Total | Power Supply Energy | Power Supply Capacity | Transmission Energy | Transmission Capacity | Dist. Substation Capacity | Dist. Substation Cons. | Primary Line Capacity | Primary Line Cons. | Line Transf. Capacity | Line Transf. Cons. | Second. & Serv. Cons. | Meter Cons. | Acct. & Serv. Cons. | Revenue |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | **Intangible Plant** | | | | | | | | | | | | | | | | |
| 2 | 301 | Organization | PLNT | | | | | | | | | | | | | | | |
| 3 | 302 | Franchises and consents | PLNT | | | | | | | | | | | | | | | |
| 4 | 303 | Miscellaneous intangible plant | PLNT | | | | | | | | | | | | | | | |
| 5 | 301-303 | Subtotal | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | **Production Plant** | | | | | | | | | | | | | | | | |
| 8 | 310-346 | Production Plant | PROD1 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | **Transmission Plant** | | | | | | | | | | | | | | | | |
| 11 | 350-359 | Transmission Plant | TRAN1 | 29,310,492 | | | | 29,310,492 | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | **Distribution Plant** | | | | | | | | | | | | | | | | |
| 14 | 360 | Land | LAND | 16,306 | | | | | 16,306 | | | | | | | | | |
| 15 | 361 | Structures | SUB | 59,605 | | | | | 59,605 | | | | | | | | | |
| 16 | 362 | Station | SUB | 11,003,925 | | | | | 11,003,925 | | | | | | | | | |
| 17 | 363 | Battery | SUB | | | | | | | | | | | | | | | |
| 18 | 364 | Poles, towers | PRI-OH | 15,057,486 | | | | | | | 15,057,486 | | | | | | | |
| 19 | 365 | OH Cond | PRI-OH | 12,961,782 | | | | | | | 12,961,782 | | | | | | | |
| 20 | 366 | UG Conduit | PRI-UG | | | | | | | | | | | | | | | |
| 21 | 367 | UG Cond | PRI-UG | 2,975,788 | | | | | | | 2,975,788 | | | | | | | |
| 22 | 368 | Transf | TRF | 7,667,021 | | | | | | | | | 7,667,021 | | | | | |
| 23 | 369 | Services | SERV | 1,633,235 | | | | | | | | | | | 1,633,235 | | | |
| 24 | 370 | Meters | MTR | 5,910,592 | | | | | | | | | | | | 5,910,592 | | |
| 25 | 371 | Cons Premise | ICON | 345,457 | | | | | | | 345,457 | | | | | | | |
| 26 | 372 | Leased Prop | LICON | | | | | | | | | | | | | | | |
| 27 | 373 | St. Light | STL | 1,477,369 | | | | | | | | | | | | | | |
| 28 | 360-373 | Subtotal | | 59,108,566 | | | | | 11,079,835 | | 31,340,514 | | 7,667,021 | | 1,633,235 | 5,910,592 | | |
| 29 | | | | | | | | | | | | | | | | | | |
| 30 | | **General Plant** | | | | | | | | | | | | | | | | |
| 31 | 389 | Land & Land Rights | PLNT | 272,812 | | | | 90,436 | 34,186 | | 96,699 | | 23,656 | | 5,039 | 18,237 | | |
| 32 | 390 | Structures and Improve. | PLNT | 6,807,460 | | | | 2,256,640 | 853,046 | | 2,412,933 | | 590,291 | | 125,744 | 455,062 | | |
| 33 | 391 | Office Furniture & Equip. | PLNT | 722,811 | | | | 239,608 | 90,576 | | 256,203 | | 62,677 | | 13,351 | 48,318 | | |
| 34 | 392 | Transportation & Equipment | PLNT | 3,998,692 | | | | 1,325,547 | 501,078 | | 1,417,353 | | 346,736 | | 73,862 | 267,303 | | |
| 35 | 393 | Stores Equipment | PLNT | 368,215 | | | | 122,062 | 46,141 | | 130,515 | | 31,929 | | 6,801 | 24,614 | | |
| 36 | 394 | Tool, Shop & Garage Equip. | PLNT | 64,829 | | | | 21,490 | 8,124 | | 22,979 | | 5,621 | | 1,197 | 4,334 | | |
| 37 | 395 | Laboratory Equipment | PLNT | 291,250 | | | | 96,548 | 36,497 | | 103,235 | | 25,255 | | 5,380 | 19,469 | | |
| 38 | 396 | Power Operated Equipment | PLNT | 122,810 | | | | 40,711 | 15,389 | | 43,531 | | 10,649 | | 2,268 | 8,210 | | |
| 39 | 397 | Communication Equipment | PLNT | 344,385 | | | | 114,162 | 43,155 | | 122,069 | | 29,862 | | 6,361 | 23,021 | | |
| 40 | 398 | Miscellaneous Equipment | PLNT | 146,092 | | | | 48,429 | 18,307 | | 51,783 | | 12,668 | | 2,699 | 9,766 | | |
| 41 | 399 | Other tangible property | PLNT | | | | | | | | | | | | | | | |
| 42 | 389-399 | Subtotal | | 13,139,357 | | | | 4,355,634 | 1,646,499 | | 4,657,301 | | 1,139,344 | | 242,704 | 878,333 | | |
| 43 | | | | | | | | | | | | | | | | | | |
| 44 | | **Total Plant** | | 101,558,415 | | | | 33,666,126 | 12,726,335 | | 35,997,815 | | 8,806,365 | | 1,875,939 | 6,788,925 | | |

**Classification of Plant in Service -- BUNDLED**

| Line No. | Acct. No. | Description | Class. Factor | Total | Residential Service General Use 18-RS Direct | Residential Space Heating 18-RS Direct | General Service Small 18-GSS Direct | General Service Large 18-GSL Direct | General Service Space Heating Rider No 1 Direct | Industrial Service 18-IS Direct | Municipal Power Service 18-M-I Direct | Water Pumping Service 18-WP Direct | Irrigation Service 18-IP-I Direct | Temporary Service 18-CS Direct | Lighting Direct |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | **Intangible Plant** | | | | | | | | | | | | | |
| 2 | 301 | Organization | PLNT | | | | | | | | | | | | |
| 3 | 302 | Franchises and consents | PLNT | | | | | | | | | | | | |
| 4 | 303 | Miscellaneous intangible plant | PLNT | | | | | | | | | | | | |
| 5 | 301-303 | Subtotal | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | **Production Plant** | | | | | | | | | | | | | |
| 8 | 310-346 | Production Plant | PROD1 | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | **Transmission Plant** | | | | | | | | | | | | | |
| 11 | 350-359 | Transmission Plant | TRAN1 | 29,310,492 | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | **Distribution Plant** | | | | | | | | | | | | | |
| 14 | 360 | Land | LAND | 16,306 | | | | | | | | | | | |
| 15 | 361 | Structures | SUB | 59,605 | | | | | | | | | | | |
| 16 | 362 | Station | SUB | 11,003,925 | | | | | | | | | | | |
| 17 | 363 | Battery | SUB | | | | | | | | | | | | |
| 18 | 364 | Poles, towers | PRI-OH | 15,057,486 | | | | | | | | | | | |
| 19 | 365 | OH Cond | PRI-OH | 12,961,782 | | | | | | | | | | | |
| 20 | 366 | UG Conduit | PRI-UG | | | | | | | | | | | | |
| 21 | 367 | UG Cond | PRI-UG | 2,975,788 | | | | | | | | | | | |
| 22 | 368 | Transf | TRF | 7,667,021 | | | | | | | | | | | |
| 23 | 369 | Services | SERV | 1,633,235 | | | | | | | | | | | |
| 24 | 370 | Meters | MTR | 5,910,592 | | | | | | | | | | | |
| 25 | 371 | Cons Premise | ICON | 345,457 | | | | | | | | | | | |
| 26 | 372 | Leased Prop | LICON | | | | | | | | | | | | |
| 27 | 373 | St. Light | STL | 1,477,369 | | | | | | | | | | | 1,477,369 |
| 28 | 360-373 | Subtotal | | 59,108,566 | | | | | | | | | | | 1,477,369 |
| 29 | | | | | | | | | | | | | | | |
| 30 | | **General Plant** | | | | | | | | | | | | | |
| 31 | 389 | Land & Land Rights | PLNT | 272,812 | | | | | | | | | | | 4,558 |
| 32 | 390 | Structures and Improve. | PLNT | 6,807,460 | | | | | | | | | | | 113,744 |
| 33 | 391 | Office Furniture & Equip. | PLNT | 722,811 | | | | | | | | | | | 12,077 |
| 34 | 392 | Transportation & Equipment | PLNT | 3,998,692 | | | | | | | | | | | 66,813 |
| 35 | 393 | Stores Equipment | PLNT | 368,215 | | | | | | | | | | | 6,152 |
| 36 | 394 | Tool, Shop & Garage Equip. | PLNT | 64,829 | | | | | | | | | | | 1,083 |
| 37 | 395 | Laboratory Equipment | PLNT | 291,250 | | | | | | | | | | | 4,866 |
| 38 | 396 | Power Operated Equipment | PLNT | 122,810 | | | | | | | | | | | 2,052 |
| 39 | 397 | Communication Equipment | PLNT | 344,385 | | | | | | | | | | | 5,754 |
| 40 | 398 | Miscellaneous Equipment | PLNT | 146,092 | | | | | | | | | | | 2,441 |
| 41 | 399 | Other tangible property | PLNT | | | | | | | | | | | | |
| 42 | 389-399 | Subtotal | | 13,139,357 | | | | | | | | | | | 219,542 |
| 43 | | | | | | | | | | | | | | | |
| 44 | | **Total Plant** | | 101,558,415 | | | | | | | | | | | 1,696,911 |

**Classification of Revenue Requirements -- BUNDLED**

| Line No. | Acct. No. | Description | Class. Factor | Total | Power Supply Energy | Power Supply Capacity | Transmission Energy | Transmission Capacity | Dist. Substation Capacity | Dist. Substation Cons. | Primary Line Capacity | Primary Line Cons. | Line Transf. Capacity | Line Transf. Cons. | Second. & Serv. Cons. | Meter Cons. | Acct. & Serv. Cons. | Revenue |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | **Power Supply** | | | | | | | | | | | | | | | | |
| 2 | | **Production** | | | | | | | | | | | | | | | | |
| 3 | 500-557 | Fuel | FUEL | | | | | | | | | | | | | | | |
| 4 | 500-557 | Non-Fuel O&M - Demand | PROD1 | | | | | | | | | | | | | | | |
| 5 | 500-557 | Non-Fuel O&M - Energy | PROD1 | | | | | | | | | | | | | | | |
| 6 | | Subtotal - Production | | | | | | | | | | | | | | | | |
| 7 | | **Purchases** | | | | | | | | | | | | | | | | |
| 8 | 555 | Direct Assign. Chgs (Cr.) | | | | | | | | | | | | | | | | |
| 9 | 555 | Substation Charges | SUB | | | | | | | | | | | | | | | |
| 10 | 555 | Demand Charges | PURKW-1 | | | | | | | | | | | | | | | |
| 11 | 555 | Summer - MKEC | PURKW-2 | 3,024,070 | | 3,024,070 | | | | | | | | | | | | |
| 12 | 555 | Winter - MKEC | PURKW-3 | 3,624,566 | | 3,624,566 | | | | | | | | | | | | |
| 16 | 555 | Energy Charges | PURKWH-1 | 11,132,967 | 11,132,967 | | | | | | | | | | | | | |
| 17 | 555 | ECA Charges | PURKWH-2 | | | | | | | | | | | | | | | |
| 18 | 555 | Contract Energy | PURKWH-3 | | | | | | | | | | | | | | | |
| 19 | 555 | Revenue Related Charges | REV | | | | | | | | | | | | | | | |
| 20 | | Subtotal - Purchases | | 17,781,603 | 11,132,967 | 6,648,636 | | | | | | | | | | | | |
| 21 | 500-557 | Total Power Supply | | 17,781,603 | 11,132,967 | 6,648,636 | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | **Transmission** | | | | | | | | | | | | | | | | |
| 24 | 560-573 | Operation & Maintenance | TRAN1 | 548,530 | | | | 548,530 | | | | | | | | | | |
| 26 | 555 | Transmission - MKEC | TRAN3 | 3,817,140 | | | | 3,817,140 | | | | | | | | | | |
| 27 | 555 | Transmission - SEPC | TRAN4 | | | | | | | | | | | | | | | |
| 28 | 555 | Transmission - KEPCo | TRAN5 | | | | | | | | | | | | | | | |
| 29 | | Total Transmission | | 4,365,670 | | | | 4,365,670 | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | | |
| 31 | | **Distribution** | | 45,133 | | | | | | | | | | | | | | |
| 32 | 580 | Oper. Super & Eng. | EX1 | 503,968 | | | | | 95,282 | | 320,922 | | | | | 78,091 | | |
| 33 | 581 | Load Dispatch | EX1 | | | | | | | | | | | | | | | |
| 34 | 582 | Oper. Station | SUB | 485,632 | | | | | 485,632 | | | | | | | | | |
| 35 | 583 | Oper. OH Line | PRI-OH | 1,322,742 | | | | | | | 1,322,742 | | | | | | | |
| 36 | 584 | Oper. UG Line | PRI-UG | 248,803 | | | | | | | 248,803 | | | | | | | |
| 37 | 585 | Oper. St. Lighting | STL | 49,298 | | | | | | | | | | | | | | |
| 38 | 586 | Oper. Meters | MTR | 398,015 | | | | | | | | | | | | 398,015 | | |
| 39 | 587 | Oper. Cons. Install | ICON | 64,125 | | | | | | | 64,125 | | | | | | | |
| 40 | 588 | Oper. Misc. Oper. | EX1 | 1,122,510 | | | | | 212,226 | | 714,804 | | | | | 173,937 | | |
| 41 | 589 | Rents | EX1 | | | | | | | | | | | | | | | |
| 42 | 590 | Main. Super. & Eng. | EX2 | 193,957 | | | | | 22,282 | | 163,533 | | 741 | | | 517 | | |
| 43 | 591 | Main. Structure | SUB | | | | | | | | | | | | | | | |
| 44 | 592 | Main. Station | SUB | 146,099 | | | | | 146,099 | | | | | | | | | |
| 45 | 593 | Main. OH Line | PRI-OH | 1,059,327 | | | | | | | 1,059,327 | | | | | | | |
| 46 | 594 | Main. UG Line | PRI-UG | 12,917 | | | | | | | 12,917 | | | | | | | |
| 47 | 595 | Main. Line Transf. | TRF | 4,859 | | | | | | | | | 4,859 | | | | | |
| 48 | 596 | Main. St. Lighting | STL | 45,133 | | | | | | | | | | | | | | |
| 49 | 597 | Main. Meters | MTR | 3,390 | | | | | | | | | | | | 3,390 | | |
| 50 | 598 | Main. Misc. Dist. | EX2 | 239,993 | | | | | 27,571 | | 202,348 | | 917 | | | 640 | | |
| 51 | 580-598 | Subtotal | | 5,900,769 | | | | | 989,092 | | 4,109,522 | | 6,518 | | | 654,590 | | |

**Classification of Revenue Requirements -- BUNDLED**

| Line No. | Acct. No. | Description | Class. Factor | Total | Residential Service General Use 18-RS Direct | Residential Space Heating 18-RS Direct | General Service Small 18-GSS Direct | General Service Large 18-GSL Direct | General Service Space Heating Rider No 1 Direct | Industrial Service 18-IS Direct | Municipal Power Service 18-M-I Direct | Water Pumping Service 18-WP Direct | Irrigation Service 18-IP-I Direct | Temporary Service 18-CS Direct | Lighting Direct |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | **Power Supply** | | | | | | | | | | | | | |
| 2 | | **Production** | | | | | | | | | | | | | |
| 3 | 500-557 | Fuel | FUEL | | | | | | | | | | | | |
| 4 | 500-557 | Non-Fuel O&M - Demand | PROD1 | | | | | | | | | | | | |
| 5 | 500-557 | Non-Fuel O&M - Energy | PROD1 | | | | | | | | | | | | |
| 6 | | Subtotal - Production | | | | | | | | | | | | | |
| 7 | | **Purchases** | | | | | | | | | | | | | |
| 8 | 555 | Direct Assign. Chgs (Cr.) | | | | | | | | | | | | | |
| 9 | 555 | Substation Charges | SUB | | | | | | | | | | | | |
| 10 | 555 | Demand Charges | PURKW-1 | | | | | | | | | | | | |
| 11 | 555 | Summer - MKEC | PURKW-2 | 3,024,070 | | | | | | | | | | | |
| 12 | 555 | Winter - MKEC | PURKW-3 | 3,624,566 | | | | | | | | | | | |
| 16 | 555 | Energy Charges | PURKWH-1 | 11,132,967 | | | | | | | | | | | |
| 17 | 555 | ECA Charges | PURKWH-2 | | | | | | | | | | | | |
| 18 | 555 | Contract Energy | PURKWH-3 | | | | | | | | | | | | |
| 19 | 555 | Revenue Related Charges | REV | | | | | | | | | | | | |
| 20 | | Subtotal - Purchases | | 17,781,603 | | | | | | | | | | | |
| 21 | 500-557 | Total Power Supply | | 17,781,603 | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | **Transmission** | | | | | | | | | | | | | |
| 24 | 560-573 | Operation & Maintenance | TRAN1 | 548,530 | | | | | | | | | | | |
| 26 | 555 | Transmission - MKEC | TRAN3 | 3,817,140 | | | | | | | | | | | |
| 27 | 555 | Transmission - SEPC | TRAN4 | | | | | | | | | | | | |
| 28 | 555 | Transmission - KEPCo | TRAN5 | | | | | | | | | | | | |
| 29 | | Total Transmission | | 4,365,670 | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | |
| 31 | | **Distribution** | | 45,133 | | | | | | | | | | | |
| 32 | 580 | Oper. Super & Eng. | EX1 | 503,968 | | | | | | | | | | | 9,672 |
| 33 | 581 | Load Dispatch | EX1 | | | | | | | | | | | | |
| 34 | 582 | Oper. Station | SUB | 485,632 | | | | | | | | | | | |
| 35 | 583 | Oper. OH Line | PRI-OH | 1,322,742 | | | | | | | | | | | |
| 36 | 584 | Oper. UG Line | PRI-UG | 248,803 | | | | | | | | | | | |
| 37 | 585 | Oper. St. Lighting | STL | 49,298 | | | | | | | | | | | 49,298 |
| 38 | 586 | Oper. Meters | MTR | 398,015 | | | | | | | | | | | |
| 39 | 587 | Oper. Cons. Install | ICON | 64,125 | | | | | | | | | | | |
| 40 | 588 | Oper. Misc. Oper. | EX1 | 1,122,510 | | | | | | | | | | | 21,544 |
| 41 | 589 | Rents | EX1 | | | | | | | | | | | | |
| 42 | 590 | Main. Super. & Eng. | EX2 | 193,957 | | | | | | | | | | | 6,883 |
| 43 | 591 | Main. Structure | SUB | | | | | | | | | | | | |
| 44 | 592 | Main. Station | SUB | 146,099 | | | | | | | | | | | |
| 45 | 593 | Main. OH Line | PRI-OH | 1,059,327 | | | | | | | | | | | |
| 46 | 594 | Main. UG Line | PRI-UG | 12,917 | | | | | | | | | | | |
| 47 | 595 | Main. Line Transf. | TRF | 4,859 | | | | | | | | | | | |
| 48 | 596 | Main. St. Lighting | STL | 45,133 | | | | | | | | | | | 45,133 |
| 49 | 597 | Main. Meters | MTR | 3,390 | | | | | | | | | | | |
| 50 | 598 | Main. Misc. Dist. | EX2 | 239,993 | | | | | | | | | | | 8,517 |
| 51 | 580-598 | Subtotal | | 5,900,769 | | | | | | | | | | | 141,047 |

**Classification of Revenue Requirements -- BUNDLED**
(Continued)

| Line No. | Acct. No. | Description | Class. Factor | Total | Power Supply Energy | Power Supply Capacity | Transmission Energy | Transmission Capacity | Dist. Substation Capacity | Dist. Substation Cons. | Primary Line Capacity | Primary Line Cons. | Line Transf. Capacity | Line Transf. Cons. | Second. & Serv. Cons. | Meter Cons. | Acct. & Serv. Cons. | Revenue |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 52 | | **Consumer Acct., Service & Sales** | | | | | | | | | | | | | | | | |
| 53 | | **Consumer Accounting** | | | | | | | | | | | | | | | | |
| 54 | 901 | Supervision | CACC | | | | | | | | | | | | | | | |
| 55 | 902 | Meter Reading Expense | CACC | 39,525 | | | | | | | | | | | | | 39,525 | |
| 56 | 903 | Records & Collections | CACC | 1,063,764 | | | | | | | | | | | | | 1,063,764 | |
| 57 | 904 | Uncollectible Accounts | CACC | 65,837 | | | | | | | | | | | | | 65,837 | |
| 58 | 905 | Misc. Customer Account | CACC | 41,977 | | | | | | | | | | | | | 41,977 | |
| 59 | | Subtotal | | 1,211,103 | | | | | | | | | | | | | 1,211,103 | |
| 60 | | | | | | | | | | | | | | | | | | |
| 61 | | **Consumer Service & Info.** | | | | | | | | | | | | | | | | |
| 62 | 907 | Supervision | CS | 11,546 | | | | | | | | | | | | | 11,546 | |
| 63 | 908 | Customer Assistance | CS | 179,478 | | | | | | | | | | | | | 179,478 | |
| 64 | 909 | Info. & Instruction | CS | | | | | | | | | | | | | | | |
| 65 | 910 | Misc. Cust Serv. & Info | CS | 21,233 | | | | | | | | | | | | | 21,233 | |
| 66 | | Subtotal | | 212,257 | | | | | | | | | | | | | 212,257 | |
| 67 | | | | | | | | | | | | | | | | | | |
| 68 | | **Sales** | | | | | | | | | | | | | | | | |
| 69 | 911 | Supervision | SALES | | | | | | | | | | | | | | | |
| 70 | 912 | Demonstrating & Selling | SALES | 6,649 | | | | | | | | | | | | | 6,649 | |
| 71 | 913 | Advertising | SALES | | | | | | | | | | | | | | | |
| 72 | 916 | Misc. Sales | SALES | | | | | | | | | | | | | | | |
| 73 | | Subtotal | | 6,649 | | | | | | | | | | | | | 6,649 | |
| 74 | | | | | | | | | | | | | | | | | | |
| 75 | | **Prorated Operating Expenses** | | | | | | | | | | | | | | | | |
| 76 | 920- | **Administrative & General** | | | | | | | | | | | | | | | | |
| 77 | 932 | Power Supply | EX6-PS | 184,003 | 115,203 | 68,800 | | | | | | | | | | | | |
| 78 | | Transmission | EX6-TR | 91,288 | | | | 91,288 | | | | | | | | | | |
| 79 | | Distribution | EX6-D | 1,564,740 | | | | | 211,120 | | 877,169 | | 1,391 | | | 139,721 | 305,232 | |
| 80 | | Subtotal - A&G | | 1,840,031 | 115,203 | 68,800 | | 91,288 | 211,120 | | 877,169 | | 1,391 | | | 139,721 | 305,232 | |
| 81 | | | | | | | | | | | | | | | | | | |
| 82 | 408 | **Other Taxes** | | | | | | | | | | | | | | | | |
| 83 | | Power Supply | EX6-PS | | | | | | | | | | | | | | | |
| 84 | | Transmission | EX6-TR | | | | | | | | | | | | | | | |
| 85 | | Distribution | REV | (46,333) | | | | | | | | | | | | | | (46,333) |
| 86 | | Subtotal - Other Taxes | | (46,333) | | | | | | | | | | | | | | (46,333) |
| 87 | | | | | | | | | | | | | | | | | | |
| 88 | 421- | **Miscellaneous Expense** | | | | | | | | | | | | | | | | |
| 89 | 426,431 | Power Supply | EX6-PS | 85,926 | 53,798 | 32,128 | | | | | | | | | | | | |
| 90 | | Transmission | EX6-TR | 42,630 | | | | 42,630 | | | | | | | | | | |
| 91 | | Distribution | EX6-D | 730,703 | | | | | 98,589 | | 409,621 | | 650 | | | 65,247 | 142,538 | |
| 92 | | Subtotal - Misc. Expense | | 859,258 | 53,798 | 32,128 | | 42,630 | 98,589 | | 409,621 | | 650 | | | 65,247 | 142,538 | |

**Classification of Revenue Requirements -- BUNDLED**
(Continued)

| Line No. | Acct. No. | Description | Class. Factor | Total | Residential Service General Use 18-RS Direct | Residential Space Heating 18-RS Direct | General Service Small 18-GSS Direct | General Service Large 18-GSL Direct | General Service Space Heating Rider No 1 Direct | Industrial Service 18-IS Direct | Municipal Power Service 18-M-I Direct | Water Pumping Service 18-WP Direct | Irrigation Service 18-IP-I Direct | Temporary Service 18-CS Direct | Lighting Direct |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 52 | | **Consumer Acct., Service & Sales** | | | | | | | | | | | | | |
| 53 | | **Consumer Accounting** | | | | | | | | | | | | | |
| 54 | 901 | Supervision | CACC | | | | | | | | | | | | |
| 55 | 902 | Meter Reading Expense | CACC | 39,525 | | | | | | | | | | | |
| 56 | 903 | Records & Collections | CACC | 1,063,764 | | | | | | | | | | | |
| 57 | 904 | Uncollectible Accounts | CACC | 65,837 | | | | | | | | | | | |
| 58 | 905 | Misc. Customer Account | CACC | 41,977 | | | | | | | | | | | |
| 59 | | Subtotal | | 1,211,103 | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | |
| 61 | | **Consumer Service & Info.** | | | | | | | | | | | | | |
| 62 | 907 | Supervision | CS | 11,546 | | | | | | | | | | | |
| 63 | 908 | Customer Assistance | CS | 179,478 | | | | | | | | | | | |
| 64 | 909 | Info. & Instruction | CS | | | | | | | | | | | | |
| 65 | 910 | Misc. Cust Serv. & Info | CS | 21,233 | | | | | | | | | | | |
| 66 | | Subtotal | | 212,257 | | | | | | | | | | | |
| 67 | | | | | | | | | | | | | | | |
| 68 | | **Sales** | | | | | | | | | | | | | |
| 69 | 911 | Supervision | SALES | | | | | | | | | | | | |
| 70 | 912 | Demonstrating & Selling | SALES | 6,649 | | | | | | | | | | | |
| 71 | 913 | Advertising | SALES | | | | | | | | | | | | |
| 72 | 916 | Misc. Sales | SALES | | | | | | | | | | | | |
| 73 | | Subtotal | | 6,649 | | | | | | | | | | | |
| 74 | | | | | | | | | | | | | | | |
| 75 | | **Prorated Operating Expenses** | | | | | | | | | | | | | |
| 76 | 920- | **Administrative & General** | | | | | | | | | | | | | |
| 77 | 932 | Power Supply | EX6-PS | 184,003 | | | | | | | | | | | |
| 78 | | Transmission | EX6-TR | 91,288 | | | | | | | | | | | |
| 79 | | Distribution | EX6-D | 1,564,740 | | | | | | | | | | | 30,106 |
| 80 | | Subtotal - A&G | | 1,840,031 | | | | | | | | | | | 30,106 |
| 81 | | | | | | | | | | | | | | | |
| 82 | 408 | **Other Taxes** | | | | | | | | | | | | | |
| 83 | | Power Supply | EX6-PS | | | | | | | | | | | | |
| 84 | | Transmission | EX6-TR | | | | | | | | | | | | |
| 85 | | Distribution | REV | (46,333) | | | | | | | | | | | |
| 86 | | Subtotal - Other Taxes | | (46,333) | | | | | | | | | | | |
| 87 | | | | | | | | | | | | | | | |
| 88 | 421- | **Miscellaneous Expense** | | | | | | | | | | | | | |
| 89 | 426,431 | Power Supply | EX6-PS | 85,926 | | | | | | | | | | | |
| 90 | | Transmission | EX6-TR | 42,630 | | | | | | | | | | | |
| 91 | | Distribution | EX6-D | 730,703 | | | | | | | | | | | 14,059 |
| 92 | | Subtotal - Misc. Expense | | 859,258 | | | | | | | | | | | 14,059 |

**Classification of Revenue Requirements -- BUNDLED**
(Continued)

| Line No. | Acct. No. | Description | Class. Factor | Total | Power Supply Energy | Power Supply Capacity | Transmission Energy | Transmission Capacity | Dist. Substation Capacity | Dist. Substation Cons. | Primary Line Capacity | Primary Line Cons. | Line Transf. Capacity | Line Transf. Cons. | Second. & Serv. Cons. | Meter Cons. | Acct. & Serv. Cons. | Revenue |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93 | | **Fixed Charges** | | | | | | | | | | | | | | | | |
| 94 | 403- | **Depreciation** | | | | | | | | | | | | | | | | |
| 95 | 407 | Power Supply | PROPLNT | | | | | | | | | | | | | | | |
| 96 | | Transmission | TRNPLNT | 801,970 | | | | 801,970 | | | | | | | | | | |
| 97 | | Distribution | DSTPLNT | 1,769,329 | | | | | 331,659 | | 938,133 | | 229,501 | | 48,889 | 176,925 | | |
| 98 | | Subtotal - Depreciation | | 2,571,298 | | | | 801,970 | 331,659 | | 938,133 | | 229,501 | | 48,889 | 176,925 | | |
| 99 | | | | | | | | | | | | | | | | | | |
| 100 | 408 | **Property Taxes** | | | | | | | | | | | | | | | | |
| 101 | | Power Supply | REV | | | | | | | | | | | | | | | |
| 102 | | Transmission | REV | | | | | | | | | | | | | | | |
| 103 | | Distribution | REV | | | | | | | | | | | | | | | |
| 104 | | Subtotal - Property Taxes | | | | | | | | | | | | | | | | |
| 105 | | | | | | | | | | | | | | | | | | |
| 106 | 427 | **Interest-LT** | | | | | | | | | | | | | | | | |
| 107 | | Power Supply | PROPLNT | | | | | | | | | | | | | | | |
| 108 | | Transmission | TRNPLNT | 1,307,821 | | | | 1,307,821 | | | | | | | | | | |
| 109 | | Distribution | DSTPLNT | 3,469,208 | | | | | 650,299 | | 1,839,442 | | 449,994 | | 95,858 | 346,905 | | |
| 110 | | Subtotal - Interest-LT | | 4,777,030 | | | | 1,307,821 | 650,299 | | 1,839,442 | | 449,994 | | 95,858 | 346,905 | | |
| 111 | | | | | | | | | | | | | | | | | | |
| 112 | | **Required Margin** | | | | | | | | | | | | | | | | |
| 113 | | Power Supply | PROPLNT | | | | | | | | | | | | | | | |
| 114 | | Transmission | TRNPLNT | 914,424 | | | | 914,424 | | | | | | | | | | |
| 115 | | Distribution | DSTPLNT | 2,425,658 | | | | | 454,687 | | 1,286,131 | | 314,634 | | 67,024 | 242,555 | | |
| 116 | | Subtotal - Required Margin | | 3,340,082 | | | | 914,424 | 454,687 | | 1,286,131 | | 314,634 | | 67,024 | 242,555 | | |
| 117 | | | | | | | | | | | | | | | | | | |
| 118 | | **Summary of Revenue Requirements** | | | | | | | | | | | | | | | | |
| 119 | | Power Supply | | 18,051,532 | 11,301,968 | 6,749,564 | | | | | | | | | | | | |
| 120 | | Transmission | | 7,523,803 | | | | 7,523,803 | | | | | | | | | | |
| 121 | | Distribution | | 17,244,082 | | | | | 2,735,446 | | 9,460,017 | | 1,002,687 | | 211,770 | 1,625,943 | 1,877,778 | (46,333) |
| 122 | | **Total Revenue Required** | | 42,819,417 | 11,301,968 | 6,749,564 | | 7,523,803 | 2,735,446 | | 9,460,017 | | 1,002,687 | | 211,770 | 1,625,943 | 1,877,778 | (46,333) |

**Classification of Revenue Requirements -- BUNDLED**
(Continued)

| Line No. | Acct. No. | Description | Class. Factor | Total | Residential Service General Use 18-RS Direct | Residential Space Heating 18-RS Direct | General Service Small 18-GSS Direct | General Service Large 18-GSL Direct | General Service Space Heating Rider No 1 Direct | Industrial Service 18-IS Direct | Municipal Power Service 18-M-I Direct | Water Pumping Service 18-WP Direct | Irrigation Service 18-IP-I Direct | Temporary Service 18-CS Direct | Lighting Direct |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93 | | **Fixed Charges** | | | | | | | | | | | | | |
| 94 | 403- | **Depreciation** | | | | | | | | | | | | | |
| 95 | 407 | Power Supply | PROPLNT | | | | | | | | | | | | |
| 96 | | Transmission | TRNPLNT | 801,970 | | | | | | | | | | | |
| 97 | | Distribution | DSTPLNT | 1,769,329 | | | | | | | | | | | 44,223 |
| 98 | | Subtotal - Depreciation | | 2,571,298 | | | | | | | | | | | 44,223 |
| 99 | | | | | | | | | | | | | | | |
| 100 | 408 | **Property Taxes** | | | | | | | | | | | | | |
| 101 | | Power Supply | REV | | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. |
| 102 | | Transmission | REV | | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. |
| 103 | | Distribution | REV | | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. |
| 104 | | Subtotal - Property Taxes | | | | | | | | | | | | | |
| 105 | | | | | | | | | | | | | | | |
| 106 | 427 | **Interest-LT** | | | | | | | | | | | | | |
| 107 | | Power Supply | PROPLNT | | | | | | | | | | | | |
| 108 | | Transmission | TRNPLNT | 1,307,821 | | | | | | | | | | | |
| 109 | | Distribution | DSTPLNT | 3,469,208 | | | | | | | | | | | 86,710 |
| 110 | | Subtotal - Interest-LT | | 4,777,030 | | | | | | | | | | | 86,710 |
| 111 | | | | | | | | | | | | | | | |
| 112 | | **Required Margin** | | | | | | | | | | | | | |
| 113 | | Power Supply | PROPLNT | | | | | | | | | | | | |
| 114 | | Transmission | TRNPLNT | 914,424 | | | | | | | | | | | |
| 115 | | Distribution | DSTPLNT | 2,425,658 | | | | | | | | | | | 60,627 |
| 116 | | Subtotal - Required Margin | | 3,340,082 | | | | | | | | | | | 60,627 |
| 117 | | | | | | | | | | | | | | | |
| 118 | | **Summary of Revenue Requirements** | | | | | | | | | | | | | |
| 119 | | Power Supply | | 18,051,532 | | | | | | | | | | | |
| 120 | | Transmission | | 7,523,803 | | | | | | | | | | | |
| 121 | | Distribution | | 17,244,082 | | | | | | | | | | | 376,772 |
| 122 | | **Total Revenue Required** | | 42,819,417 | | | | | | | | | | | 376,772 |

## Adjusted Statement of Operations and Revenue Requirements

| (a) Line No. | (b) Description | (c) Total System [1] | (d) Adjustment [2] | (e) SpRateElim Adjustment [3] | (f) LAC Revenue Credits [4] | (g) Adjusted System |
|---|---|---|---|---|---|---|
| | **Operating Revenue** | ($) | | ($) | | ($) |
| 1 | Retail Electricity Sales | 68,808,760 | 302,529 | (26,291,817) | | 42,819,472 |
| 2 | Wholesale Electricty Sales | 2,142,184 | | | (2,142,184) | |
| 3 | Other Operating Revenue | 305,461 | (302,529) | | | 2,932 |
| 4 | Total Operating Revenue | 71,256,405 | | (26,291,817) | (2,142,184) | 42,822,404 |
| 5 | **Operating Expenses** | | | | | |
| 6 | Cost of Purchased Power | | | | | |
| 7 | Transmission - all Capacity | 7,288,658 | | (3,471,518) | - | 3,817,140 |
| 8 | Demand | | | | | |
| 9 | Summer | 5,314,551 | | (2,290,482) | | 3,024,070 |
| 10 | Winter | 7,643,209 | | (4,018,643) | | 3,624,566 |
| 11 | Energy | 9,898,085 | | (5,830,002) | - | 4,068,083 |
| 12 | ECA | 16,791,346 | | (9,726,461) | - | 7,064,884 |
| 13 | Transmission - O & M | 1,293,444 | | (202,656) | (542,258) | 548,530 |
| 14 | Distribution - Operation | 4,195,093 | | - | - | 4,195,093 |
| 15 | Distribution - Maintenance | 1,705,676 | | - | - | 1,705,676 |
| 16 | Consumer Accounts | 1,211,103 | | - | - | 1,211,103 |
| 17 | Consumer Service & Information | 212,257 | | - | - | 212,257 |
| 18 | Sales | 6,649 | | - | - | 6,649 |
| 19 | Administrative & General | 2,086,076 | | (202,656) | (43,389) | 1,840,031 |
| 20 | Depreciation & Amortization | 3,064,894 | | (202,656) | (290,940) | 2,571,298 |
| 21 | Taxes - Property | - | | - | - | - |
| 22 | Taxes - Other | (51,878) | | - | 5,545 | (46,333) |
| 23 | Other Interest Expense | 108,337 | | - | (11,274) | 97,063 |
| 24 | Other Deductions | 861,019 | | - | (98,824) | 762,195 |
| 25 | **Total Operating Expenses** (Before | | | | | |
| 26 | Long Term | 61,628,518 | | (25,945,074) | (981,139) | 34,702,305 |
| 27 | Long Term Interest | 5,625,339 | | (202,656) | (645,653) | 4,777,030 |
| 28 | Required Margin [4] | 3,999,561 | | (144,087) | (515,393) | 3,340,082 |
| 29 | **Revenue Requirements** | 71,253,418 | | (26,291,817) | (2,142,184) | 42,819,417 |

[1] See Exhibit 2, page 1.

[2] Move Unbilled Revenue ($444,182) and ACA Under-recovery $141,653 into Other Operating Revenue - net sum of ($302,529).

[3] See next page for calculation of adjustments for rates not included in the class cost of service analysis.

[4] Credits related to revenue generated by the Local Access Rate.

[5] Required Net Operating Income less Interest. See calculation below:

9,733,237 - $5,733,676 = $3,999,561

**Adjustment to Eliminate Revenue and Expenses Associated with Non-Adjustable Rates**

| | | | Proposed ($) | |
|---|---|---|---|---|
| **1. Revenue** [1] | | | | |
| a. | Real -Time Pricing (13-RTP) | = | 33,528 | |
| b. | Transmission Level Service (18-STR) | = | 26,258,290 | |
| c. | Total -- Revenue | = | 26,291,817 | |
| **2. Expenses** | | | | |
| a. | Purchased Power Expenses [2] | | | |
| | Transmission | | | |
| | Transmission Level Service (18-STR) | = | 3,471,518 | |
| | Subtotal -- Transmission Expenses | | 3,471,518 | |
| | Demand | | | |
| | Transmission Level Service (18-STR) | = | 6,309,124 | |
| | Subtotal -- Demand Expenses | | 6,309,124 | |
| | Energy | | | |
| | Transmission Level Service (18-STR) | = | 5,808,023 | |
| | Real -Time Pricing (13-RTP) | = | 21,979 | |
| | Subtotal -- Energy Expenses | | 5,830,002 | |
| | ECA | | | |
| | Transmission Level Service (18-STR) | = | 9,726,461 | |
| | Subtotal -- ECA | | 9,726,461 | |
| | Total -- Purchased Power Expenses | | 25,337,105 | |
| b. | Transmission O&M | = | 202,656 | [3] |
| d. | Administrative and General | = | 202,656 | [3] |
| e. | Depreciation | = | 202,656 | [3] |
| f. | Interest | = | 202,656 | [3] |
| g. | Margin Requirements | = | 144,087 | [3] |
| h. | Subtotal | | 954,712 | |
| i. | Total -- Expenses | | $ 26,291,817 | |

[1] From Exhibit PSE-2, Schedule A.

[2] From Exhibit PSE-2 - see Schedule A, Page 5 for STR wholesale power detail, Schedule B Page 9 for RTP rider.

[3] Margin requirement based on Target ratio. Split remainder of revenue equally between Transmission Operation and Maintenance, A&G, Depreciation, and Interest.

**Summary of Classification Factors -- BUNDLED**

| Line No. | Name | Description | Source | Total | Power Supply Energy | Power Supply Cap. | Transmission Energy | Transmission Capacity | Dist. Substation Cap. | Dist. Substation Cons. | Primary Line Cap. | Primary Line Cons. | Line Transf. Cap. | Line Transf. Cons. | Second. & Serv. Cons. | Meter Cons. | Acct. & Serv. Cons. | Revenue |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **Classification Factor Data** | | | | | | | | | | | | | | | | |
| 1 | PROPLNT | Production Plant | Plant | | | | | | | | | | | | | | | |
| 2 | TRNPLNT | Transmission Plant | Plant | 29,310,492 | | | | 29,310,492 | | | | | | | | | | |
| 3 | DSTPLNT | Distribution Plant | Plant | 59,108,566 | | | | | 11,079,835 | | 31,340,514 | | 7,667,021 | | 1,633,235 | 5,910,592 | | |
| 4 | PLNT | Prod, Trans, Dist. Subtotal | Plant | 88,419,058 | | | | 29,310,492 | 11,079,835 | | 31,340,514 | | 7,667,021 | | 1,633,235 | 5,910,592 | | |
| 5 | EX1 | Assigned Dist. Oper. Exp. | Rev Req | 2,568,614 | | | | | 485,632 | | 1,635,670 | | | | | 398,015 | | |
| 6 | EX2 | Assigned Dist. Main. Exp. | Rev Req | 1,271,726 | | | | | 146,099 | | 1,072,244 | | 4,859 | | | 3,390 | | |
| 7 | EX3 | Dist. Oper. & Main. | Rev Req | 5,900,769 | | | | | 989,092 | | 4,109,522 | | 6,518 | | | 654,590 | | |
| 8 | EX4 | Assigned O & M Exp. | Rev Req | 29,478,050 | 11,132,967 | 6,648,636 | | 4,365,670 | 989,092 | | 4,109,522 | | 6,518 | | | 654,590 | 1,430,008 | |
| 9 | EX4-PS | Power Supply | Rev Req | 17,781,603 | 11,132,967 | 6,648,636 | | | | | | | | | | | | |
| 10 | EX4-TR | Transmission | Rev Req | 4,365,670 | | | | 4,365,670 | | | | | | | | | | |
| 11 | EX4-D | Distribution | Rev Req | 7,330,777 | | | | | 989,092 | | 4,109,522 | | 6,518 | | | 654,590 | 1,430,008 | |
| 12 | EX5 | Rev. Req. Less Margin | Rev Req | 37,094,140 | 11,301,968 | 6,749,564 | | 6,475,461 | 1,971,050 | | 6,887,097 | | 686,013 | | 144,747 | 1,178,420 | 1,430,008 | (46,333) |
| 13 | EX5-PS | Power Supply | Rev Req | 18,005,199 | 11,301,968 | 6,749,564 | | | | | | | | | | | | (46,333) |
| 14 | EX5-TR | Transmission | Rev Req | 6,475,461 | | | | 6,475,461 | | | | | | | | | | |
| 15 | EX5-D | Distribution | Rev Req | 12,613,480 | | | | | 1,971,050 | | 6,887,097 | | 686,013 | | 144,747 | 1,178,420 | 1,430,008 | |

**Summary of Classification Factors -- BUNDLED**

| Line No. | Name | Description | Source | Total | Residential Service General Use 18-RS Direct | Residential Space Heating 18-RS Direct | General Service Small 18-GSS Direct | General Service Large 18-GSL Direct | General Service Space Heating Rider No 1 Direct | Industrial Service 18-IS Direct | Municipal Power Service 18-M-I Direct | Water Pumping Service 18-WP Direct | Irrigation Service 18-IP-I Direct | Temporary Service 18-CS Direct | Lighting Direct |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **Classification Factor Data** | | | | | | | | | | | | | |
| 1 | PROPLNT | Production Plant | Plant | | | | | | | | | | | | |
| 2 | TRNPLNT | Transmission Plant | Plant | 29,310,492 | | | | | | | | | | | |
| 3 | DSTPLNT | Distribution Plant | Plant | 59,108,566 | | | | | | | | | | | 1,477,369 |
| 4 | PLNT | Prod, Trans, Dist. Subtotal | Plant | 88,419,058 | | | | | | | | | | | 1,477,369 |
| 5 | EX1 | Assigned Dist. Oper. Exp. | Rev Req | 2,568,614 | | | | | | | | | | | 49,298 |
| 6 | EX2 | Assigned Dist. Main. Exp. | Rev Req | 1,271,726 | | | | | | | | | | | 45,133 |
| 7 | EX3 | Dist. Oper. & Main. | Rev Req | 5,900,769 | | | | | | | | | | | 141,047 |
| 8 | EX4 | Assigned O & M Exp. | Rev Req | 29,478,050 | | | | | | | | | | | 141,047 |
| 9 | EX4-PS | Power Supply | Rev Req | 17,781,603 | | | | | | | | | | | |
| 10 | EX4-TR | Transmission | Rev Req | 4,365,670 | | | | | | | | | | | |
| 11 | EX4-D | Distribution | Rev Req | 7,330,777 | | | | | | | | | | | 141,047 |
| 12 | EX5 | Rev. Req. Less Margin | Rev Req | 37,094,140 | | | | | | | | | | | 316,145 |
| 13 | EX5-PS | Power Supply | Rev Req | 18,005,199 | | | | | | | | | | | |
| 14 | EX5-TR | Transmission | Rev Req | 6,475,461 | | | | | | | | | | | |
| 15 | EX5-D | Distribution | Rev Req | 12,613,480 | | | | | | | | | | | 316,145 |

**Summary of Classification Factors -- BUNDLED**

| Line No. | Name | Description | Source | Total | Power Supply Energy | Power Supply Cap. | Transmission Energy | Transmission Capacity | Dist. Substation Cap. | Dist. Substation Cons. | Primary Line Cap. | Primary Line Cons. | Line Transf. Cap. | Line Transf. Cons. | Second. & Serv. Cons. | Meter Cons. | Acct. & Serv. Cons. | Revenue |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | **Classification Factors** | | | | | | | | | | | | | | | | | |
| 17 | CACC | Consumer Accounting | Input | 1.000000 | | | | | | | | | | | | | 1.000000 | |
| 18 | CS | Customer Service | Input | 1.000000 | | | | | | | | | | | | | 1.000000 | |
| 19 | CS-PS | Cust. Service - Pwr. Supply | Input | | | | | | | | | | | | | | | |
| 20 | CS-TR | Cust. Service - Transmission | Input | | | | | | | | | | | | | | | |
| 21 | CS-D | Cust. Service - Distribution | Input | 1.000000 | | | | | | | | | | | | | 1.000000 | |
| 22 | SALES | Sales | Input | 1.000000 | | | | | | | | | | | | | 1.000000 | |
| 23 | SALES-PS | Sales - Power Supply | Input | | | | | | | | | | | | | | | |
| 24 | SALES-TR | Sales - Transmission | Input | | | | | | | | | | | | | | | |
| 25 | SALES-D | Sales - Distribution | Input | 1.000000 | | | | | | | | | | | | | 1.000000 | |
| 26 | PROPLNT | Production Plant | Plant | | | | | | | | | | | | | | | |
| 27 | TRNPLNT | Transmission Plant | Plant | 1.000000 | | | | 1.000000 | | | | | | | | | | |
| 28 | DSTPLNT | Distribution Plant | Plant | 1.000000 | | | | | 0.187449 | | 0.530219 | | 0.129711 | | 0.027631 | 0.099996 | | |
| 29 | PLNT | Prod, Trans, Dist. Subtotal | Plant | 1.000000 | | | | 0.331495 | 0.125310 | | 0.354454 | | 0.086712 | | 0.018472 | 0.066847 | | |
| 30 | EX1 | Assigned Dist. Oper. Exp. | Rev Req | 1.000000 | | | | | 0.189064 | | 0.636791 | | | | | 0.154953 | | |
| 31 | EX2 | Assigned Dist. Main. Exp. | Rev Req | 1.000000 | | | | | 0.114883 | | 0.843141 | | 0.003821 | | | 0.002666 | | |
| 32 | EX3 | Dist. Oper. & Main. | Rev Req | 1.000000 | | | | | 0.167621 | | 0.696438 | | 0.001105 | | | 0.110933 | | |
| 33 | EX4 | Assigned O & M Exp. | Rev Req | 1.000000 | 0.377670 | 0.225545 | | 0.148099 | 0.033554 | | 0.139410 | | 0.000221 | | | 0.022206 | 0.048511 | |
| 34 | EX4-PS | Power Supply | Rev Req | 0.603215 | 0.377670 | 0.225545 | | | | | | | | | | | | |
| 35 | EX4-TR | Transmission | Rev Req | 0.148099 | | | | 0.148099 | | | | | | | | | | |
| 36 | EX4-D | Distribution | Rev Req | 0.248686 | | | | | 0.033554 | | 0.139410 | | 0.000221 | | | 0.022206 | 0.048511 | |
| 37 | EX5 | Rev. Req. Less Margin | Rev Req | 1.000000 | 0.304683 | 0.181958 | | 0.174568 | 0.053136 | | 0.185665 | | 0.018494 | | 0.003902 | 0.031768 | 0.038551 | (0.001249) |
| 38 | EX5-PS | Power Supply | Rev Req | 0.485392 | 0.304683 | 0.181958 | | | | | | | | | | | | (0.001249) |
| 39 | EX5-TR | Transmission | Rev Req | 0.174568 | | | | 0.174568 | | | | | | | | | | |
| 40 | EX5-D | Distribution | Rev Req | 0.340040 | | | | | 0.053136 | | 0.185665 | | 0.018494 | | 0.003902 | 0.031768 | 0.038551 | |
| 41 | EX6 | A&G Classification | Input | 1.000000 | 0.062609 | 0.037391 | | 0.049612 | 0.114737 | | 0.476714 | | 0.000756 | | | 0.075934 | 0.165884 | |
| 42 | EX6-PS | Power Supply | Input | 0.100000 | 0.062609 | 0.037391 | | | | | | | | | | | | |
| 43 | EX6-TR | Transmission | Input | 0.049612 | | | | 0.049612 | | | | | | | | | | |
| 44 | EX6-D | Distribution | Input | 0.850388 | | | | | 0.114737 | | 0.476714 | | 0.000756 | | | 0.075934 | 0.165884 | |
| 45 | FUEL | Fuel | Input | | | | | | | | | | | | | | | |
| 46 | ICON | Install Cons. Prem. | Input | 1.000000 | | | | | | | 1.000000 | | | | | | | |
| 47 | LAND | Land & Land Rights | Input | 1.000000 | | | | | 1.00000 | | | | | | | | | |
| 48 | LICON | Leased Property | Input | 1.000000 | | | | | | | 1.000000 | | | | | | | |
| 49 | MTR | Meters | Input | 1.000000 | | | | | | | | | | | | 1.000000 | | |
| 50 | PRI-OH | Primary Line - Overhead | Input | 1.000000 | | | | | | | 1.000000 | | | | | | | |
| 51 | PRI-UG | Primary Line - Underground | Input | 1.000000 | | | | | | | 1.000000 | | | | | | | |
| 52 | PROD1 | Production Plant | Input | | | | | | | | | | | | | | | |
| 53 | PROD2 | Production O & M | Input | | | | | | | | | | | | | | | |
| 54 | PURTR-1 | Trans. Capacity | Input | 1.000000 | | | | 1.000000 | | | | | | | | | | |
| 55 | PURTR-2 | Trans. Energy | Input | 1.000000 | 1.000000 | | | | | | | | | | | | | |
| 56 | PURKW-1 | Purchased Power Capacity | Input | 1.000000 | | 1.000000 | | | | | | | | | | | | |
| 57 | PURKW-2 | MKEC - Summer | Input | 1.000000 | | 1.000000 | | | | | | | | | | | | |
| 58 | PURKW-3 | MKEC - Winter | Input | 1.000000 | | 1.000000 | | | | | | | | | | | | |
| 58 | PURKWH-1 | Purchased Power Energy | Input | 1.000000 | 1.000000 | | | | | | | | | | | | | |
| 59 | PURKWH-2 | On-Peak | Input | 1.000000 | 1.000000 | | | | | | | | | | | | | |
| 60 | PURKWH-3 | Off-Peak | Input | 1.000000 | 1.000000 | | | | | | | | | | | | | |
| 61 | SERV | Services | Input | 1.000000 | | | | | | | | | | | 1.000000 | | | |
| 62 | STL | Street Lighting | Input | | | | | | | | | | | | | | | |
| 63 | SUB | Substation | Input | 1.000000 | | | | | 1.000000 | | | | | | | | | |
| 64 | TRAN1 | Transmission O&M - MKEC | Input | 1.000000 | | | | 1.000000 | | | | | | | | | | |
| 65 | TRAN3 | Transmission Purchases - MKEC | Input | 1.000000 | | | | 1.000000 | | | | | | | | | | |
| 66 | TRF | Line Transf. | Input | 1.000000 | | | | | | | | | 1.000000 | | | | | |
| 67 | REV | Revenue Related | Input | 1.000000 | | | | | | | | | | | | | | 1.000000 |

**Summary of Classification Factors -- BUNDLED**

| Line No. | Name | Description | Source | Total | Residential Service General Use 18-RS Direct | Residential Space Heating 18-RS Direct | General Service Small 18-GSS Direct | General Service Large 18-GSL Direct | General Service Space Heating Rider No 1 Direct | Industrial Service 18-IS Direct | Municipal Power Service 18-M-I Direct | Water Pumping Service 18-WP Direct | Irrigation Service 18-IP-I Direct | Temporary Service 18-CS Direct | Lighting Direct |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | **Classification Factors** | | | | | | | | | | | | | | |
| 17 | CACC | Consumer Accounting | Input | 1.000000 | | | | | | | | | | | |
| 18 | CS | Customer Service | Input | 1.000000 | | | | | | | | | | | |
| 19 | CS-PS | Cust. Service - Pwr. Supply | Input | | | | | | | | | | | | |
| 20 | CS-TR | Cust. Service - Transmission | Input | | | | | | | | | | | | |
| 21 | CS-D | Cust. Service - Distribution | Input | 1.000000 | | | | | | | | | | | |
| 22 | SALES | Sales | Input | 1.000000 | | | | | | | | | | | |
| 23 | SALES-PS | Sales - Power Supply | Input | | | | | | | | | | | | |
| 24 | SALES-TR | Sales - Transmission | Input | | | | | | | | | | | | |
| 25 | SALES-D | Sales - Distribution | Input | 1.000000 | | | | | | | | | | | |
| 26 | PROPLNT | Production Plant | Plant | | | | | | | | | | | | |
| 27 | TRNPLNT | Transmission Plant | Plant | 1.000000 | | | | | | | | | | | |
| 28 | DSTPLNT | Distribution Plant | Plant | 1.000000 | | | | | | | | | | | 0.024994 |
| 29 | PLNT | Prod, Trans, Dist. Subtotal | Plant | 1.000000 | | | | | | | | | | | 0.016709 |
| 30 | EX1 | Assigned Dist. Oper. Exp. | Rev Req | 1.000000 | | | | | | | | | | | 0.019192 |
| 31 | EX2 | Assigned Dist. Main. Exp. | Rev Req | 1.000000 | | | | | | | | | | | 0.035489 |
| 32 | EX3 | Dist. Oper. & Main. | Rev Req | 1.000000 | | | | | | | | | | | 0.023903 |
| 33 | EX4 | Assigned O & M Exp. | Rev Req | 1.000000 | | | | | | | | | | | 0.004785 |
| 34 | EX4-PS | Power Supply | Rev Req | 0.603215 | | | | | | | | | | | |
| 35 | EX4-TR | Transmission | Rev Req | 0.148099 | | | | | | | | | | | |
| 36 | EX4-D | Distribution | Rev Req | 0.248686 | | | | | | | | | | | 0.004785 |
| 37 | EX5 | Rev. Req. Less Margin | Rev Req | 1.000000 | | | | | | | | | | | 0.008523 |
| 38 | EX5-PS | Power Supply | Rev Req | 0.485392 | | | | | | | | | | | |
| 39 | EX5-TR | Transmission | Rev Req | 0.174568 | | | | | | | | | | | |
| 40 | EX5-D | Distribution | Rev Req | 0.340040 | | | | | | | | | | | 0.008523 |
| 41 | EX6 | A&G Classification | Input | 1.000000 | | | | | | | | | | | 0.016362 |
| 42 | EX6-PS | Power Supply | Input | 0.100000 | | | | | | | | | | | |
| 43 | EX6-TR | Transmission | Input | 0.049612 | | | | | | | | | | | |
| 44 | EX6-D | Distribution | Input | 0.850388 | | | | | | | | | | | 0.016362 |
| 45 | FUEL | Fuel | Input | | | | | | | | | | | | |
| 46 | ICON | Install Cons. Prem. | Input | 1.000000 | | | | | | | | | | | |
| 47 | LAND | Land & Land Rights | Input | 1.000000 | | | | | | | | | | | |
| 48 | LICON | Leased Property | Input | 1.000000 | | | | | | | | | | | |
| 49 | MTR | Meters | Input | 1.000000 | | | | | | | | | | | |
| 50 | PRI-OH | Primary Line - Overhead | Input | 1.000000 | | | | | | | | | | | |
| 51 | PRI-UG | Primary Line - Underground | Input | 1.000000 | | | | | | | | | | | |
| 52 | PROD1 | Production Plant | Input | | | | | | | | | | | | |
| 53 | PROD2 | Production O & M | Input | | | | | | | | | | | | |
| 54 | PURTR-1 | Trans. Capacity | Input | 1.000000 | | | | | | | | | | | |
| 55 | PURTR-2 | Trans. Energy | Input | 1.000000 | | | | | | | | | | | |
| 56 | PURKW-1 | Purchased Power Capacity | Input | 1.000000 | | | | | | | | | | | |
| 57 | PURKW-2 | MKEC - Summer | Input | 1.000000 | | | | | | | | | | | |
| 58 | PURKW-3 | MKEC - Winter | Input | 1.000000 | | | | | | | | | | | |
| 58 | PURKWH-1 | Purchased Power Energy | Input | 1.000000 | | | | | | | | | | | |
| 59 | PURKWH-2 | On-Peak | Input | 1.000000 | | | | | | | | | | | |
| 60 | PURKWH-3 | Off-Peak | Input | 1.000000 | | | | | | | | | | | |
| 61 | SERV | Services | Input | 1.000000 | | | | | | | | | | | |
| 62 | STL | Street Lighting | Input | | | | | | | | | | | | |
| 63 | SUB | Substation | Input | 1.000000 | | | | | | | | | | | |
| 64 | TRAN1 | Transmission O&M - MKEC | Input | 1.000000 | | | | | | | | | | | |
| 65 | TRAN3 | Transmission Purchases - MKEC | Input | 1.000000 | | | | | | | | | | | |
| 66 | TRF | Line Transf. | Input | 1.000000 | | | | | | | | | | | |
| 67 | REV | Revenue Related | Input | 1.000000 | | | | | | | | | | | |

**Summary of Allocation of Revenue Requirements to Rate Classes -- BUNDLED**

| Line No. | Cost Classification | | Alloc. Factor | Total | Residential Service General Use 18-RS | Residential Space Heating 18-RS | General Service Small 18-GSS | General Service Large 18-GSL | General Service Space Heating Rider No 1 | Industrial Service 18-IS | Municipal Power Service 18-M-I | Water Pumping Service 18-WP | Irrigation Service 18-IP-I | Temporary Service 18-CS | Lighting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Power Supply** | | | | | | | | | | | | | | |
| 2 | **Wholesale Power** | | | | | | | | | | | | | | |
| 3 | Direct Assigned Charges (Credits) | | Direct | | | | | | | | | | | | |
| 4 | Demand Related | | | | | | | | | | | | | | |
| 5 | Demand Related - MKEC Summer | | D5 | 3,024,070 | 1,472,771 | 39,785 | 97,416 | 1,052,921 | 39,541 | 212,874 | 15,359 | 37,231 | 50,465 | 397 | 5,311 |
| 6 | Demand Related - MKEC Winter | | D6 | 3,624,566 | 1,226,389 | 83,428 | 135,681 | 1,672,210 | 68,709 | 336,192 | 14,778 | 43,667 | 6,240 | 884 | 36,389 |
| 6 | Subtotal - Demand | | | 6,648,636 | 2,699,160 | 123,213 | 233,097 | 2,725,131 | 108,250 | 549,066 | 30,137 | 80,898 | 56,704 | 1,281 | 41,700 |
| 7 | Energy Related | | E1 | 11,132,967 | 3,927,770 | 212,778 | 417,185 | 4,792,686 | 184,254 | 1,120,135 | 51,873 | 192,725 | 86,639 | 1,845 | 145,076 |
| 8 | ECA Charges | | E2 | | | | | | | | | | | | |
| 9 | Contract Energy | | E3 | | | | | | | | | | | | |
| 10 | Subtotal - Energy | | | 11,132,967 | 3,927,770 | 212,778 | 417,185 | 4,792,686 | 184,254 | 1,120,135 | 51,873 | 192,725 | 86,639 | 1,845 | 145,076 |
| 11 | Revenue Related | | R2 | | | | | | | | | | | | |
| 12 | Subtotal - Wholesale | | | 17,781,603 | 6,626,930 | 335,991 | 650,282 | 7,517,817 | 292,504 | 1,669,201 | 82,010 | 273,623 | 143,343 | 3,126 | 186,777 |
| 13 | **Allocated Overhead & Margin** | | | | | | | | | | | | | | |
| 14 | Direct Related | | Direct | | | | | | | | | | | | |
| 15 | Revenue Related | | R2 | | | | | | | | | | | | |
| 16 | Demand Related | | D7 | 100,928 | 40,974 | 1,870 | 3,538 | 41,368 | 1,643 | 8,335 | 457 | 1,228 | 861 | 19 | 633 |
| 17 | Energy Related | | E1 | 169,001 | 59,624 | 3,230 | 6,333 | 72,754 | 2,797 | 17,004 | 787 | 2,926 | 1,315 | 28 | 2,202 |
| 18 | Subtotal - Allocated | | | 269,929 | 100,598 | 5,100 | 9,871 | 114,122 | 4,440 | 25,339 | 1,245 | 4,154 | 2,176 | 47 | 2,835 |
| 19 | Subtotal - Power Supply | | | 18,051,532 | 6,727,528 | 341,092 | 660,153 | 7,631,939 | 296,944 | 1,694,539 | 83,255 | 277,777 | 145,519 | 3,174 | 189,612 |
| 20 | | | | | | | | | | | | | | | |
| 21 | **Transmission** | | | | | | | | | | | | | | |
| 22 | Direct Assigned | | Direct | | | | | | | | | | | | |
| 23 | Demand Related - SPEC O&M | | D4 | 548,530 | 212,135 | 10,857 | 19,548 | 232,134 | 9,327 | 46,740 | 2,410 | 6,634 | 3,674 | 115 | 4,955 |
| 24 | Demand Related - MKEC Purch | | D4 | 3,817,140 | 1,476,221 | 75,555 | 136,032 | 1,615,385 | 64,904 | 325,257 | 16,770 | 46,168 | 25,567 | 798 | 34,482 |
| 25 | | | | | | | | | | | | | | | |
| 26 | Subtotal--Transmission | | | 4,365,670 | 1,688,356 | 86,413 | 155,580 | 1,847,519 | 74,231 | 371,997 | 19,180 | 52,803 | 29,241 | 912 | 39,437 |
| 27 | **Allocated Overhead & Margin** | | | | | | | | | | | | | | |
| 28 | Direct Related | | Direct | | | | | | | | | | | | |
| 29 | Revenue Related | | R2 | | | | | | | | | | | | |
| 30 | Demand Related | | D8 | 3,158,133 | 1,221,360 | 62,511 | 112,547 | 1,336,499 | 53,699 | 269,103 | 13,875 | 38,198 | 21,153 | 660 | 28,529 |
| 31 | Subtotal - Allocated | | | 3,158,133 | 1,221,360 | 62,511 | 112,547 | 1,336,499 | 53,699 | 269,103 | 13,875 | 38,198 | 21,153 | 660 | 28,529 |
| 32 | Subtotal - Transmission | | | 7,523,803 | 2,909,716 | 148,924 | 268,127 | 3,184,018 | 127,930 | 641,100 | 33,055 | 91,000 | 50,394 | 1,573 | 67,966 |
| 33 | | | | | | | | | | | | | | | |
| 34 | **Distribution** | | | | | | | | | | | | | | |
| 35 | Power Supply | -Energy | E1 | | | | | | | | | | | | |
| 36 | Dist. Sub. | -Capacity | D2 | 2,735,446 | 1,104,879 | 60,249 | 86,039 | 1,044,254 | 46,907 | 255,260 | 16,447 | 49,310 | 29,049 | 807 | 42,245 |
| 38 | Primary Line | -Capacity | D2 | 9,460,017 | 3,821,012 | 208,361 | 297,549 | 3,611,354 | 162,220 | 882,768 | 56,878 | 170,529 | 100,460 | 2,791 | 146,095 |
| 40 | Line Transf. | -Capacity | D1 | 1,002,687 | 482,426 | 33,162 | 48,849 | 323,824 | 15,059 | 56,117 | 12,773 | 14,321 | 10,799 | 288 | 5,068 |
| 42 | Sec. & Serv. | -Consumer | C4 | 211,770 | 143,004 | 6,787 | 33,374 | 22,244 | 963 | 309 | 1,851 | 1,269 | 748 | 69 | 1,152 |
| 43 | Meter | -Consumer | C5 | 1,625,943 | 1,095,383 | 51,990 | 248,929 | 163,926 | 7,100 | 6,555 | 16,570 | 16,534 | 9,604 | 527 | 8,827 |
| 44 | Acct. & Serv. | -Consumer | C6 | 1,877,778 | 1,265,042 | 60,042 | 287,484 | 189,316 | 8,199 | 7,570 | 19,136 | 19,095 | 11,092 | 608 | 10,194 |
| 45 | Revenue Related | -Revenue | R1 | (46,333) | (17,315) | (863) | (2,022) | (19,059) | (607) | (3,930) | (217) | (706) | (391) | (13) | (1,208) |
| 46 | Direct Assigned | | Direct | 376,772 | | | | | | | | | | | 376,772 |
| 47 | Subtotal - Distribution | | | 17,244,082 | 7,894,430 | 419,729 | 1,000,202 | 5,335,858 | 239,842 | 1,204,648 | 123,438 | 270,353 | 161,361 | 5,075 | 589,146 |
| 48 | **Total** | | | 42,819,417 | 17,531,674 | 909,744 | 1,928,483 | 16,151,815 | 664,716 | 3,540,287 | 239,747 | 639,130 | 357,274 | 9,822 | 846,724 |

**Allocation of Plant in Service To Rate Classes -- BUNDLED**

| Line No. | Acct. No. | Description | Class. Factor | Total | Residential Service General Use 18-RS | Residential Space Heating 18-RS | General Service Small 18-GSS | General Service Large 18-GSL | General Service Space Heating Rider No 1 | Industrial Service 18-IS | Municipal Power Service 18-M-I | Water Pumping Service 18-WP | Irrigation Service 18-IP-I | Temporary Service 18-CS | Lighting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | **Intangible Plant** | | | | | | | | | | | | | |
| 2 | 301 | Organization | PLNT | | | | | | | | | | | | |
| 3 | 302 | Franchises and consents | PLNT | | | | | | | | | | | | |
| 4 | 303 | Miscellaneous intangible plant | PLNT | | | | | | | | | | | | |
| 5 | 301-303 | Subtotal | PLNT | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | **Production Plant** | | | | | | | | | | | | | |
| 8 | 310-346 | Production Plant | PROD1 | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | **Transmission Plant** | | | | | | | | | | | | | |
| 11 | 350-359 | Transmission Plant | TRAN1 | 29,310,492 | 11,335,385 | 580,163 | 1,044,544 | 12,403,984 | 498,378 | 2,497,533 | 128,771 | 354,510 | 196,320 | 6,126 | 264,777 |
| 12 | | | | | | | | | | | | | | | |
| 13 | | **Distribution Plant** | | | | | | | | | | | | | |
| 14 | 360 | Land | LAND | 16,306 | 6,586 | 359 | 513 | 6,225 | 280 | 1,522 | 98 | 294 | 173 | 5 | 252 |
| 15 | 361 | Structures | SUB | 59,605 | 24,075 | 1,313 | 1,875 | 22,754 | 1,022 | 5,562 | 358 | 1,074 | 633 | 18 | 920 |
| 16 | 362 | Station | SUB | 11,003,925 | 4,444,615 | 242,366 | 346,111 | 4,200,739 | 188,694 | 1,026,839 | 66,161 | 198,360 | 116,855 | 3,246 | 169,938 |
| 17 | 363 | Battery | SUB | | | | | | | | | | | | |
| 18 | 364 | Poles, towers | PRI-OH | 15,057,486 | 6,081,896 | 331,648 | 473,609 | 5,748,183 | 258,205 | 1,405,100 | 90,533 | 271,431 | 159,902 | 4,442 | 232,539 |
| 19 | 365 | OH Cond | PRI-OH | 12,961,782 | 5,235,416 | 285,489 | 407,692 | 4,948,150 | 222,268 | 1,209,538 | 77,933 | 233,653 | 137,646 | 3,823 | 200,174 |
| 20 | 366 | UG Conduit | PRI-URD | | | | | | | | | | | | |
| 21 | 367 | UG Cond | PRI-URD | 2,975,788 | 1,201,956 | 65,543 | 93,599 | 1,136,005 | 51,029 | 277,688 | 17,892 | 53,643 | 31,601 | 878 | 45,956 |
| 22 | 368 | Transf | TRF | 7,667,021 | 3,688,857 | 253,571 | 373,522 | 2,476,114 | 115,150 | 429,096 | 97,671 | 109,508 | 82,576 | 2,200 | 38,756 |
| 23 | 369 | Services | SERV | 1,633,235 | 1,102,892 | 52,346 | 257,391 | 171,549 | 7,430 | 2,380 | 14,272 | 9,789 | 5,769 | 530 | 8,887 |
| 24 | 370 | Meters | MTR | 5,910,592 | 3,981,910 | 188,993 | 904,900 | 595,900 | 25,809 | 23,828 | 60,233 | 60,104 | 34,913 | 1,914 | 32,088 |
| 25 | 371 | Cons Premise | ICON | 345,457 | 139,534 | 7,609 | 10,866 | 131,878 | 5,924 | 32,237 | 2,077 | 6,227 | 3,669 | 102 | 5,335 |
| 26 | 372 | Leased Prop | LICON | | | | | | | | | | | | |
| 27 | 373 | St. Light | STL | 1,477,369 | | | | | | | | | | | 1,477,369 |
| 28 | 360-373 | Subtotal | | 59,108,566 | 25,907,737 | 1,429,236 | 2,870,076 | 19,437,495 | 875,810 | 4,413,789 | 427,229 | 944,084 | 573,736 | 17,158 | 2,212,215 |
| 29 | | | | | | | | | | | | | | | |
| 30 | | **General Plant** | | | | | | | | | | | | | |
| 31 | 389 | Land & Land Rights | PLNT | 272,812 | 114,912 | 6,200 | 12,078 | 98,245 | 4,240 | 21,325 | 1,716 | 4,007 | 2,376 | 72 | 7,643 |
| 32 | 390 | Structures and Improve. | PLNT | 6,807,460 | 2,867,380 | 154,705 | 301,390 | 2,451,503 | 105,800 | 532,109 | 42,807 | 99,980 | 59,287 | 1,793 | 190,706 |
| 33 | 391 | Office Furniture & Equip. | PLNT | 722,811 | 304,456 | 16,426 | 32,001 | 260,299 | 11,234 | 56,499 | 4,545 | 10,616 | 6,295 | 190 | 20,249 |
| 34 | 392 | Transportation & Equipment | PLNT | 3,998,692 | 1,684,295 | 90,874 | 177,036 | 1,440,009 | 62,147 | 312,560 | 25,145 | 58,728 | 34,825 | 1,053 | 112,020 |
| 35 | 393 | Stores Equipment | PLNT | 368,215 | 155,096 | 8,368 | 16,302 | 132,602 | 5,723 | 28,782 | 2,315 | 5,408 | 3,207 | 97 | 10,315 |
| 36 | 394 | Tool, Shop & Garage Equip. | PLNT | 64,829 | 27,307 | 1,473 | 2,870 | 23,346 | 1,008 | 5,067 | 408 | 952 | 565 | 17 | 1,816 |
| 37 | 395 | Laboratory Equipment | PLNT | 291,250 | 122,678 | 6,619 | 12,895 | 104,885 | 4,527 | 22,766 | 1,831 | 4,278 | 2,537 | 77 | 8,159 |
| 38 | 396 | Power Operated Equipment | PLNT | 122,810 | 51,729 | 2,791 | 5,437 | 44,226 | 1,909 | 9,600 | 772 | 1,804 | 1,070 | 32 | 3,440 |
| 39 | 397 | Communication Equipment | PLNT | 344,385 | 145,059 | 7,826 | 15,247 | 124,020 | 5,352 | 26,919 | 2,166 | 5,058 | 2,999 | 91 | 9,648 |
| 40 | 398 | Miscellaneous Equipment | PLNT | 146,092 | 61,536 | 3,320 | 6,468 | 52,611 | 2,271 | 11,419 | 919 | 2,146 | 1,272 | 38 | 4,093 |
| 41 | 399 | Other tangible property | PLNT | | | | | | | | | | | | |
| 42 | 389-399 | Subtotal | | 13,139,357 | 5,534,448 | 298,603 | 581,725 | 4,731,746 | 204,209 | 1,027,045 | 82,623 | 192,975 | 114,433 | 3,460 | 368,089 |
| 43 | | | | | | | | | | | | | | | |
| 44 | | **Total Plant** | | 101,558,415 | 42,777,570 | 2,308,003 | 4,496,345 | 36,573,225 | 1,578,397 | 7,938,367 | 638,624 | 1,491,570 | 884,489 | 26,744 | 2,845,081 |

**Allocation of Revenue Requirements to Rate Classes -- BUNDLED**

| Line No. | Acct. No. | Description | Class. Factor | Total | Residential Service General Use 18-RS | Residential Space Heating 18-RS | General Service Small 18-GSS | General Service Large 18-GSL | General Service Space Heating Rider No 1 | Industrial Service 18-IS | Municipal Power Service 18-M-I | Water Pumping Service 18-WP | Irrigation Service 18-IP-I | Temporary Service 18-CS | Lighting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Power Supply** | | | | | | | | | | | | | | |
| 2 | | **Production** | | | | | | | | | | | | | |
| 3 | 500-557 | Fuel | FUEL | | | | | | | | | | | | |
| 4 | 500-557 | Non-Fuel O&M - Demand | PROD1 | | | | | | | | | | | | |
| 5 | 500-557 | Non-Fuel O&M - Energy | PROD1 | | | | | | | | | | | | |
| 6 | | Subtotal - Production | | | | | | | | | | | | | |
| 7 | | **Purchases** | | | | | | | | | | | | | |
| 8 | 555 | Direct Assign. Chgs (Cr.) | | | | | | | | | | | | | |
| 9 | 555 | Substation Charges | PURSUB | | | | | | | | | | | | |
| 10 | 555 | Demand Charges | PURKW-1 | | | | | | | | | | | | |
| 11 | 555 | MKEC - Summer | PURKW-2 | 3,024,070 | 1,472,771 | 39,785 | 97,416 | 1,052,921 | 39,541 | 212,874 | 15,359 | 37,231 | 50,465 | 397 | 5,311 |
| 12 | 555 | MKEC - Winter | PURKW-3 | 3,624,566 | 1,226,389 | 83,428 | 135,681 | 1,672,210 | 68,709 | 336,192 | 14,778 | 43,667 | 6,240 | 884 | 36,389 |
| 12 | 555 | Total Demand | | 6,648,636 | 2,699,160 | 123,213 | 233,097 | 2,725,131 | 108,250 | 549,066 | 30,137 | 80,898 | 56,704 | 1,281 | 41,700 |
| 13 | 555 | Energy Charges | PURKWH-1 | 11,132,967 | 3,927,770 | 212,778 | 417,185 | 4,792,686 | 184,254 | 1,120,135 | 51,873 | 192,725 | 86,639 | 1,845 | 145,076 |
| 14 | 555 | ECA Charges | PURKWH-2 | | | | | | | | | | | | |
| 15 | 555 | Contract Energy | PURKWH-3 | | | | | | | | | | | | |
| 16 | | Total Energy | | 11,132,967 | 3,927,770 | 212,778 | 417,185 | 4,792,686 | 184,254 | 1,120,135 | 51,873 | 192,725 | 86,639 | 1,845 | 145,076 |
| 17 | 555 | Revenue Related Charges | REVENUE | | | | | | | | | | | | |
| 18 | | Subtotal - Purchases | | 17,781,603 | 6,626,930 | 335,991 | 650,282 | 7,517,817 | 292,504 | 1,669,201 | 82,010 | 273,623 | 143,343 | 3,126 | 186,777 |
| 19 | 500-557 | Total Power Supply | | 17,781,603 | 6,626,930 | 335,991 | 650,282 | 7,517,817 | 292,504 | 1,669,201 | 82,010 | 273,623 | 143,343 | 3,126 | 186,777 |
| 20 | **Transmission** | | | | | | | | | | | | | | |
| 21 | 560-573 | Operation & Maintenance | TRAN1 | 548,530 | 212,135 | 10,857 | 19,548 | 232,134 | 9,327 | 46,740 | 2,410 | 6,634 | 3,674 | 115 | 4,955 |
| 23 | 555 | Transmission - MKEC | TRAN3 | 3,817,140 | 1,476,221 | 75,555 | 136,032 | 1,615,385 | 64,904 | 325,257 | 16,770 | 46,168 | 25,567 | 798 | 34,482 |
| 26 | | Total Transmission | | 4,365,670 | 1,688,356 | 86,413 | 155,580 | 1,847,519 | 74,231 | 371,997 | 19,180 | 52,803 | 29,241 | 912 | 39,437 |
| 27 | **Distribution** | | | | | | | | | | | | | | |
| 28 | 580 | Oper. Super & Eng. | EX1 | 503,968 | 220,719 | 11,664 | 25,047 | 166,759 | 7,478 | 39,153 | 3,298 | 8,297 | 4,881 | 148 | 16,524 |
| 29 | 581 | Load Dispatch | EX1 | | | | | | | | | | | | |
| 30 | 582 | Oper. Station | SUB | 485,632 | 196,152 | 10,696 | 15,275 | 185,389 | 8,328 | 45,317 | 2,920 | 8,754 | 5,157 | 143 | 7,500 |
| 31 | 583 | Oper. OH Line | PRI-OH | 1,322,742 | 534,271 | 29,134 | 41,605 | 504,956 | 22,682 | 123,433 | 7,953 | 23,844 | 14,047 | 390 | 20,428 |
| 32 | 584 | Oper. UG Line | PRI-UG | 248,803 | 100,494 | 5,480 | 7,826 | 94,980 | 4,266 | 23,217 | 1,496 | 4,485 | 2,642 | 73 | 3,842 |
| 33 | 585 | Oper. St. Lighting | STL | 49,298 | | | | | | | | | | | 49,298 |
| 34 | 586 | Oper. Meters | MTR | 398,015 | 268,139 | 12,727 | 60,935 | 40,127 | 1,738 | 1,605 | 4,056 | 4,047 | 2,351 | 129 | 2,161 |
| 35 | 587 | Oper. Cons. Install | ICON | 64,125 | 25,901 | 1,412 | 2,017 | 24,480 | 1,100 | 5,984 | 386 | 1,156 | 681 | 19 | 990 |
| 36 | 588 | Oper. Misc. Oper. | EX1 | 1,122,510 | 491,618 | 25,980 | 55,788 | 371,429 | 16,656 | 87,208 | 7,346 | 18,480 | 10,872 | 330 | 36,804 |
| 37 | 589 | Rents | EX1 | | | | | | | | | | | | |
| 38 | 590 | Main. Super. & Eng. | EX2 | 193,957 | 75,758 | 4,134 | 5,960 | 71,226 | 3,200 | 17,383 | 1,132 | 3,365 | 1,984 | 55 | 9,760 |
| 39 | 591 | Main. Structure | SUB | | | | | | | | | | | | |
| 40 | 592 | Main. Station | SUB | 146,099 | 59,011 | 3,218 | 4,595 | 55,773 | 2,505 | 13,633 | 878 | 2,634 | 1,551 | 43 | 2,256 |
| 41 | 593 | Main. OH Line | PRI-OH | 1,059,327 | 427,875 | 23,332 | 33,319 | 404,397 | 18,165 | 98,852 | 6,369 | 19,096 | 11,249 | 312 | 16,360 |
| 42 | 594 | Main. UG Line | PRI-UG | 12,917 | 5,217 | 285 | 406 | 4,931 | 222 | 1,205 | 78 | 233 | 137 | 4 | 199 |
| 43 | 595 | Main. Line Transf. | TRF | 4,859 | 2,338 | 161 | 237 | 1,569 | 73 | 272 | 62 | 69 | 52 | 1 | 25 |
| 44 | 596 | Main. St. Lighting | STL | 45,133 | | | | | | | | | | | 45,133 |
| 45 | 597 | Main. Meters | MTR | 3,390 | 2,284 | 108 | 519 | 342 | 15 | 14 | 35 | 34 | 20 | 1 | 18 |
| 46 | 598 | Main. Misc. Dist. | EX2 | 239,993 | 93,739 | 5,115 | 7,374 | 88,132 | 3,959 | 21,509 | 1,401 | 4,164 | 2,455 | 68 | 12,076 |
| 47 | 580-598 | Subtotal | | 5,900,769 | 2,503,517 | 133,445 | 260,903 | 2,014,492 | 90,387 | 478,784 | 37,409 | 98,659 | 58,081 | 1,718 | 223,374 |

**Allocation of Revenue Requirements to Rate Classes -- BUNDLED**
(Continued)

| Line No. | Acct. No. | Description | Class. Factor | Total | Residential Service General Use 18-RS | Residential Space Heating 18-RS | General Service Small 18-GSS | General Service Large 18-GSL | General Service Space Heating Rider No 1 | Industrial Service 18-IS | Municipal Power Service 18-M-I | Water Pumping Service 18-WP | Irrigation Service 18-IP-I | Temporary Service 18-CS | Lighting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 48 | **Consumer Acct., Service & Sales** | | | | | | | | | | | | | | |
| 49 | | **Consumer Accounting** | | | | | | | | | | | | | |
| 50 | 901 | Supervision | CACC | | | | | | | | | | | | |
| 51 | 902 | Meter Reading Expense | CACC | 39,525 | 26,628 | 1,264 | 6,051 | 3,985 | 173 | 159 | 403 | 402 | 233 | 13 | 215 |
| 52 | 903 | Records & Collections | CACC | 1,063,764 | 716,648 | 34,014 | 162,860 | 107,248 | 4,645 | 4,288 | 10,841 | 10,817 | 6,283 | 345 | 5,775 |
| 53 | 904 | Uncollectible Accounts | CACC | 65,837 | 44,354 | 2,105 | 10,080 | 6,638 | 287 | 265 | 671 | 669 | 389 | 21 | 357 |
| 54 | 905 | Misc. Customer Account | CACC | 41,977 | 28,279 | 1,342 | 6,427 | 4,232 | 183 | 169 | 428 | 427 | 248 | 14 | 228 |
| 55 | | Subtotal | | 1,211,103 | 815,909 | 38,725 | 185,418 | 122,102 | 5,288 | 4,882 | 12,342 | 12,315 | 7,154 | 392 | 6,575 |
| 56 | | **Consumer Service & Info.** | | | | | | | | | | | | | |
| 57 | 907 | Supervision | CS | 11,546 | 7,778 | 369 | 1,768 | 1,164 | 50 | 47 | 118 | 117 | 68 | 4 | 63 |
| 58 | 908 | Customer Assistance | CS | 179,478 | 120,913 | 5,739 | 27,478 | 18,095 | 784 | 724 | 1,829 | 1,825 | 1,060 | 58 | 974 |
| 59 | 909 | Info. & Instruction | CS | | | | | | | | | | | | |
| 60 | 910 | Misc. Cust Serv. & Info | CS | 21,233 | 14,304 | 679 | 3,251 | 2,141 | 93 | 86 | 216 | 216 | 125 | 7 | 115 |
| 61 | | Subtotal | | 212,257 | 142,995 | 6,787 | 32,496 | 21,400 | 927 | 856 | 2,163 | 2,158 | 1,254 | 69 | 1,152 |
| 62 | | **Sales** | | | | | | | | | | | | | |
| 63 | 911 | Supervision | SALES | | | | | | | | | | | | |
| 64 | 912 | Demonstrating & Selling | SALES | 6,649 | 4,479 | 213 | 1,018 | 670 | 29 | 27 | 68 | 68 | 39 | 2 | 36 |
| 65 | 913 | Advertising | SALES | | | | | | | | | | | | |
| 66 | 916 | Misc. Sales | SALES | | | | | | | | | | | | |
| 67 | | Subtotal | | 6,649 | 4,479 | 213 | 1,018 | 670 | 29 | 27 | 68 | 68 | 39 | 2 | 36 |
| 68 | **Prorated Operating Expenses** | | | | | | | | | | | | | | |
| 69 | | **Administrative & General** | | | | | | | | | | | | | |
| 70 | 920 | Administrative & General | | 1,080,780 | | | | | | | | | | | |
| 71 | 921 | Office Supplies & Expenses | | 105,125 | | | | | | | | | | | |
| 72 | 922 | Admin. Expenses Transferred | | | | | | | | | | | | | |
| 73 | 923 | Outside Services Employed | | 293,629 | | | | | | | | | | | |
| 74 | 924 | Property Insurance | | | | | | | | | | | | | |
| 75 | 925 | Injuries & Damages | | | | | | | | | | | | | |
| 76 | 926 | Employee Pensions & Benefits | | | | | | | | | | | | | |
| 77 | 927 | Franchise Requirements | | | | | | | | | | | | | |
| 78 | 928 | Regulatory Commission Exp. | | 70,277 | | | | | | | | | | | |
| 79 | 929 | Duplicate Charges | | (79,931) | | | | | | | | | | | |
| 80 | 930.1 | General Advertising | | 9,700 | | | | | | | | | | | |
| 81 | 930.2-930.31 | Misc. | | 234,187 | | | | | | | | | | | |
| 82 | 931 | Rents | | | | | | | | | | | | | |
| 83 | 932 | Maint. of General Plant | | 126,264 | | | | | | | | | | | |
| 84 | | Accounts 920-935 | | 1,840,031 | | | | | | | | | | | |
| 85 | | Power Supply | EX6-PS | 184,003 | 68,575 | 3,477 | 6,729 | 77,794 | 3,027 | 17,273 | 849 | 2,831 | 1,483 | 32 | 1,933 |
| 86 | | Transmission | EX6-TR | 91,288 | 35,304 | 1,807 | 3,253 | 38,633 | 1,552 | 7,779 | 401 | 1,104 | 611 | 19 | 825 |
| 87 | | Distribution | EX6-D | 1,564,740 | 740,003 | 38,244 | 102,420 | 460,762 | 20,626 | 103,426 | 11,095 | 24,162 | 14,200 | 466 | 49,336 |
| 88 | | Subtotal - A&G | | 1,840,031 | 843,882 | 43,527 | 112,402 | 577,189 | 25,205 | 128,478 | 12,345 | 28,098 | 16,295 | 517 | 52,093 |

**Allocation of Revenue Requirements to Rate Classes -- BUNDLED**
(Continued)

| Line No. | Acct. No. | Description | Class. Factor | Total | Residential Service General Use 18-RS | Residential Space Heating 18-RS | General Service Small 18-GSS | General Service Large 18-GSL | General Service Space Heating Rider No 1 | Industrial Service 18-IS | Municipal Power Service 18-M-I | Water Pumping Service 18-WP | Irrigation Service 18-IP-I | Temporary Service 18-CS | Lighting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 89 | 408 | **Other Taxes** | | | | | | | | | | | | | |
| 90 | | Power Supply | EX6-PS | | | | | | | | | | | | |
| 91 | | Transmission | EX6-TR | | | | | | | | | | | | |
| 92 | | Distribution | REV | (46,333) | (17,315) | (863) | (2,022) | (19,059) | (607) | (3,930) | (217) | (706) | (391) | (13) | (1,208) |
| 93 | | Subtotal - Other Taxes | | (46,333) | (17,315) | (863) | (2,022) | (19,059) | (607) | (3,930) | (217) | (706) | (391) | (13) | (1,208) |
| 94 | 421- | **Miscellaneous Expense** | | | | | | | | | | | | | |
| 95 | 426,431 | Power Supply | EX6-PS | 85,926 | 32,023 | 1,624 | 3,142 | 36,328 | 1,413 | 8,066 | 396 | 1,322 | 693 | 15 | 903 |
| 96 | | Transmission | EX6-TR | 42,630 | 16,486 | 844 | 1,519 | 18,041 | 725 | 3,632 | 187 | 516 | 286 | 9 | 385 |
| 97 | | Distribution | EX6-D | 730,703 | 345,567 | 17,859 | 47,828 | 215,167 | 9,632 | 48,298 | 5,181 | 11,283 | 6,631 | 217 | 23,039 |
| 98 | | Subtotal - Misc. Expense | | 859,258 | 394,076 | 20,326 | 52,490 | 269,536 | 11,770 | 59,996 | 5,765 | 13,121 | 7,609 | 241 | 24,326 |
| 99 | **Fixed Charges** | | | | | | | | | | | | | | |
| 100 | 403- | **Depreciation** | | | | | | | | | | | | | |
| 101 | 407 | Power Supply | PROPLNT | | | | | | | | | | | | |
| 102 | | Transmission | TRNPLNT | 801,970 | 310,149 | 15,874 | 28,580 | 339,388 | 13,636 | 68,335 | 3,523 | 9,700 | 5,372 | 168 | 7,245 |
| 103 | | Distribution | DSTPLNT | 1,769,329 | 775,510 | 42,782 | 85,912 | 581,833 | 26,216 | 132,120 | 12,788 | 28,260 | 17,174 | 514 | 66,219 |
| 104 | | Subtotal - Depreciation | | 2,571,298 | 1,085,660 | 58,656 | 114,491 | 921,221 | 39,852 | 200,456 | 16,312 | 37,960 | 22,546 | 681 | 73,464 |
| 105 | 408 | **Property Taxes** | | | | | | | | | | | | | |
| 106 | | Power Supply | REV | | | | | | | | | | | | |
| 107 | | Transmission | REV | | | | | | | | | | | | |
| 108 | | Distribution | REV | | | | | | | | | | | | |
| 109 | | Subtotal - Property Taxes | | | | | | | | | | | | | |
| 110 | | | | | | | | | | | | | | | |
| 111 | | Total Oper. Expenses | | 30,885,165 | 12,612,269 | 647,666 | 1,427,025 | 11,657,501 | 474,682 | 2,585,489 | 170,607 | 471,930 | 259,604 | 6,848 | 571,544 |
| 112 | | | | | | | | | | | | | | | |
| 113 | 427 | **Interest-LT** | | | | | | | | | | | | | |
| 114 | | Power Supply | PROPLNT | | | | | | | | | | | | |
| 115 | | Transmission | TRNPLNT | 1,307,821 | 505,780 | 25,887 | 46,607 | 553,460 | 22,237 | 111,439 | 5,746 | 15,818 | 8,760 | 273 | 11,814 |
| 116 | | Distribution | DSTPLNT | 3,469,208 | 1,520,581 | 83,885 | 168,451 | 1,140,828 | 51,403 | 259,055 | 25,075 | 55,410 | 33,674 | 1,007 | 129,840 |
| 117 | | Subtotal - Interest-LT | | 4,777,030 | 2,026,361 | 109,772 | 215,058 | 1,694,289 | 73,641 | 370,494 | 30,821 | 71,228 | 42,434 | 1,280 | 141,654 |
| 118 | | **Required Margin** | | | | | | | | | | | | | |
| 119 | | Power Supply | PROPLNT | | | | | | | | | | | | |
| 120 | | Transmission | TRNPLNT | 914,424 | 353,639 | 18,100 | 32,588 | 386,977 | 15,548 | 77,918 | 4,017 | 11,060 | 6,125 | 191 | 8,260 |
| 121 | | Distribution | DSTPLNT | 2,425,658 | 1,063,184 | 58,652 | 117,780 | 797,663 | 35,941 | 181,130 | 17,532 | 38,743 | 23,545 | 704 | 90,783 |
| 122 | | Subtotal - Required Margin | | 3,340,082 | 1,416,824 | 76,752 | 150,368 | 1,184,640 | 51,489 | 259,048 | 21,550 | 49,803 | 29,669 | 895 | 99,044 |
| 123 | **Summary of Revenue Requirements** | | | | | | | | | | | | | | |
| 124 | | Power Supply | | 18,051,532 | 6,727,528 | 341,092 | 660,153 | 7,631,939 | 296,944 | 1,694,539 | 83,255 | 277,777 | 145,519 | 3,174 | 189,612 |
| 125 | | Transmission | | 7,523,803 | 2,909,716 | 148,924 | 268,127 | 3,184,018 | 127,930 | 641,100 | 33,055 | 91,000 | 50,394 | 1,573 | 67,966 |
| 126 | | Distribution | | 17,244,082 | 7,894,430 | 419,729 | 1,000,202 | 5,335,858 | 239,842 | 1,204,648 | 123,438 | 270,353 | 161,361 | 5,075 | 589,146 |
| 127 | | Total Rev. Req. | | 42,819,417 | 17,531,674 | 909,744 | 1,928,483 | 16,151,815 | 664,716 | 3,540,287 | 239,747 | 639,130 | 357,274 | 9,822 | 846,724 |

**Rate Class Weighting Factors**

**I. Three Phase Vs. Single Phase Class Weighting Factors**

A. Investment to Serve 3Ø vs. 1Ø Consumers (use replacement cost) [1]

| | 1Ø | 3Ø |
|---|---|---|
| 1. kWh & kW Meter - Type 2, 7 | $325 | $400 |
| 2. kWh, kW, PF Meter - Type 6 | | $550 |
| 3. kWh, kW, PF, CP/PT Meter - Type 5 | | $1,600 |
| 4. Service [1] | $300 | $459 |
| 5. Transformer [2] | $2,764 | $4,358 |
| 6. Primary Line [3] | $855 | $1,350 |

B. Weighting Factors for Relative 3Ø Class Investment Costs

| | | | | |
|---|---|---|---|---|
| 1. General Service Small | 450 | ÷ | $325 | = 1.38 |
| 2. General Service Large | 469 | ÷ | $325 | = 1.44 |
| 3. Industrial Service | 1,375 | ÷ | $325 | = 4.23 |
| 4. Irrigation Service | 831 | ÷ | $325 | = 2.56 |
| 5. Municipal Service | 795 | ÷ | $325 | = 2.45 |
| 6. Water Pumping Service | 713 | ÷ | $325 | = 2.19 |
| 7. Service | $459 | ÷ | $300 | = 1.53 |
| 8. Transformer | $4,358 | ÷ | $2,764 | = 1.58 |
| 9. Primary Line | $1,350 | ÷ | $855 | = 1.58 |

[1] Single phase meter costs represent weighted cost by meter type (Type 1, Type 2,and Type 3).

[2] Assume a typical installation of 80 feet of 1/0 triplex (or quadriplex), pole and miscellaneous materials to estimate the difference between a 1Ø and 3Ø installation.

[3] Use the cost difference between 1-75 kVA transformer and 3-25 kVA transformers as representative of the difference between a 1Ø versus a 3Ø transformer installation.

[4] Assume a typical installation of 150 feet of 1/0 ACSR to estimate the difference in primary line between a 1Ø and 3Ø installation.

**Estimate of Class Demands Summary**

| Description | Total System | Residential Service General Use 18-RS | Residential Space Heating 18-RS | General Service Small 18-GSS | General Service Large 18-GSL | General Service Space Heating Rider No 1 | Industrial Service 18-IS | Municipal Municipal Service 18-M-I | Water Pumping Water Service 18-WP | Irrigation Service 18-IP-I | Temporary Service 18-CS | Lighting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Class Billing Determinants** | | | | | | | | | | | | |
| Number of Consumers | 21,611 | 11,960 | 568 | 2,521 | 1,408 | 61 | 17 | 140 | 71 | 41 | 6 | 4,819 |
| Energy (MWh) | 302,954 | 106,884 | 5,790 | 11,353 | 130,420 | 5,014 | 30,481 | 1,412 | 5,245 | 2,358 | 50 | 3,948 |
| Billing Demand (kW) | 1,352,574 | 698,988 | 42,861 | 54,520 | 390,065 | 19,765 | 98,985 | 11,158 | 25,057 | 10,918 | 258 | n/a |
| **Estimated Demand Responsibility** | | | | | | | | | | | | |
| Non-Coincident Consumer Demand | 184,339 | 88,691 | 6,097 | 8,981 | 59,533 | 2,769 | 10,317 | 2,348 | 2,633 | 1,985 | 53 | 932 |
| Non-Coincident Class Demand | 63,817 | 25,777 | 1,406 | 2,007 | 24,362 | 1,094 | 5,955 | 384 | 1,150 | 678 | 19 | 986 |
| Allocated Coincident Class Demand - MKEC Avg Monthly | 54,883 | 21,225 | 1,086 | 1,956 | 23,226 | 933 | 4,677 | 241 | 664 | 368 | 11 | 496 |
| Allocated Coincident Class Demand - MKEC Summer | 74,011 | 36,044 | 974 | 2,384 | 25,769 | 968 | 5,210 | 376 | 911 | 1,235 | 10 | 130 |
| Allocated Coincident Demand - MKEC Winter | 48,507 | 16,412 | 1,116 | 1,816 | 22,379 | 920 | 4,499 | 198 | 584 | 84 | 12 | 487 |

| Month | Peak Time | Data Type | Rate Class | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 18-RS General Service | 18-RS Space Heat | 18-GSS | 18-GSL | GSL Rider 1 | 18-IS | 18-MI-I | 18-WP | 18-IP-I | 18-CS |
| January | N/A | Total kWh (Individually normalized for missing readings) | 8,462,965 | 850,247 | 1,073,782 | 10,692,559 | 427,055 | 2,680,617 | 103,257 | 377,043 | 2,129.38 | 12,045.56 |
| | | Customers (Daily Avg) | 12,200 | 645 | 2,421 | 1,413 | 57 | 17 | 139 | 69 | 29 | 9 |
| | | kWh per Customer | 694 | 1,318 | 444 | 7,567 | 7,492 | 157,683 | 743 | 5,464 | 73.43 | 1,338.40 |
| | N/A | Sum of Maximum kW | 52,559.8 | 4,759.5 | 4,360.9 | 35,493.3 | 1,590.1 | 6,552.0 | 336.0 | 1,806.9 | 58.51 | 33.28 |
| | | Customers (Daily Avg) | 12,200 | 645 | 2,421 | 1,413 | 57 | 17 | 139 | 69 | 29 | 9 |
| | | kW per Customer | 4.3 | 7.4 | 1.8 | 25.1 | 27.9 | 385.4 | 2.4 | 26.2 | 2.02 | 3.70 |
| | Listed By Class | NCP Time (Calculated as Hour with highest kW/customer) | 1/5/17 20:00 | 1/7/17 9:00 | 1/5/17 17:00 | 1/5/17 11:00 | 1/7/17 7:00 | 1/9/17 20:00 | 1/5/17 9:00 | 1/6/17 19:00 | 1/31/17 13:00 | 1/5/17 8:00 |
| | | Maximum kW (Class NCP) | 18,248.1 | 2,257.8 | 1,950.1 | 21,787.4 | 1,035.5 | 5,508.7 | 187.1 | 881.7 | 33.17 | 27.55 |
| | | Customers (Daily Avg) | 12,171 | 645 | 2,407 | 1,389 | 57 | 17 | 137 | 69 | 29 | 9 |
| | | NCP kW per Customer | 1.5 | 3.5 | 0.8 | 15.7 | 18.2 | 324.0 | 1.4 | 12.8 | 1.14 | 3.06 |
| | 01/16/18 HE 11 | kW at System CP (Hour in Column C) Coincident To MKEC | 13,234.3 | 1,972.7 | 1,930.1 | 21,787.4 | 1,022.7 | 4,156.7 | 169.0 | 465.2 | 1.33 | 26.14 |
| | | Customers (Daily Avg) | 12,171 | 645 | 2,407 | 1,389 | 57 | 17 | 137 | 69 | 28 | 9 |
| | | CP kW per Customer (Coincident to MKEC) | 1.09 | 3.06 | 0.8 | 15.7 | 17.9 | 244.5 | 1.2 | 6.7 | 0.05 | 2.90 |
| February | N/A | Total kWh (Individually normalized for missing readings) | 6,310,269 | 550,752 | 812,843 | 9,323,743 | 270,217 | 2,145,540 | 84,340 | 314,344 | 4,742.17 | 9,115.79 |
| | | Customers (Daily Avg) | 12,177 | 647 | 2,405 | 1,414 | 57 | 17 | 139 | 69 | 29 | 9 |
| | | kWh per Customer | 518 | 851 | 338 | 6,594 | 4,741 | 126,208 | 607 | 4,556 | 163.52 | 1,012.87 |
| | N/A | Sum of Maximum kW | 49,281.6 | 4,387.5 | 3,891.6 | 33,953.3 | 1,186.7 | 6,033.4 | 453.6 | 2,079.4 | 131.16 | 28.81 |
| | | Customers (Daily Avg) | 12,177 | 647 | 2,405 | 1,414 | 57 | 17 | 139 | 69 | 29 | 9 |
| | | kW per Customer | 4.0 | 6.8 | 1.6 | 24.0 | 20.8 | 354.9 | 3.3 | 30.1 | 4.52 | 3.20 |
| | Listed By Class | NCP Time (Calculated as Hour with highest kW/customer) | 2/2/17 21:00 | 2/3/17 8:00 | 2/2/17 11:00 | 2/9/17 10:00 | 2/2/17 19:00 | 2/2/17 11:00 | 2/14/17 12:00 | 2/8/17 15:00 | 2/28/17 18:00 | 2/15/17 7:00 |
| | | Maximum kW (Class NCP) | 15,094.5 | 1,721.3 | 1,647.5 | 20,406.3 | 728.2 | 5,279.6 | 209.1 | 1,002.8 | 94.54 | 27.23 |
| | | Customers (Daily Avg) | 12,154 | 644 | 2,384 | 1,402 | 57 | 17 | 136 | 69 | 29 | 9 |
| | | NCP kW per Customer | 1.2 | 2.7 | 0.7 | 14.6 | 12.8 | 310.6 | 1.5 | 14.5 | 3.26 | 3.03 |
| | 02/06/18 HE 20 | kW at System CP (Hour in Column C) Coincident To MKEC | 10,916.7 | 1,405.1 | 1,647.5 | 19,512.7 | 627.7 | 5,279.6 | 162.7 | 430.1 | 1.92 | 19.77 |
| | | Customers (Daily Avg) | 12,154 | 644 | 2,384 | 1,403 | 57 | 17 | 138 | 69 | 29 | 9 |
| | | CP kW per Customer (Coincident to MKEC) | 0.9 | 2.2 | 0.7 | 13.9 | 11.0 | 310.6 | 1.2 | 6.2 | 0.07 | 2.20 |
| March | N/A | Total kWh (Individually normalized for missing readings) | 6,509,304 | 495,356 | 822,864 | 9,431,931 | 254,419 | 2,758,194 | 88,958 | 404,563 | 62,434.24 | 4,553.45 |
| | | Customers (Daily Avg) | 12,193 | 648 | 2,411 | 1,414 | 58 | 17 | 137 | 69 | 29 | 9 |
| | | kWh per Customer | 534 | 764 | 341 | 6,670 | 4,387 | 162,247 | 649 | 5,863 | 2,152.90 | 505.94 |
| | N/A | Sum of Maximum kW | 51,818.3 | 4,115.5 | 3,940.2 | 34,671.6 | 1,079.0 | 7,380.0 | 573.8 | 2,232.6 | 421.35 | 25.19 |
| | | Customers (Daily Avg) | 12,193 | 648 | 2,411 | 1,414 | 58 | 17 | 137 | 69 | 29 | 9 |
| | | kW per Customer | 4.2 | 6.4 | 1.6 | 24.5 | 18.6 | 434.1 | 4.2 | 32.4 | 14.53 | 2.80 |
| | Listed By Class | NCP Time (Calculated as Hour with highest kW/customer) | 3/19/17 19:00 | 3/2/17 8:00 | 3/13/17 11:00 | 3/20/17 15:00 | 3/10/17 20:00 | 3/23/17 17:00 | 3/23/17 20:00 | 3/16/17 23:00 | 3/16/17 21:00 | 3/7/17 8:00 |
| | | Maximum kW (Class NCP) | 16,843.6 | 1,393.6 | 1,451.2 | 19,900.6 | 591.7 | 6,146.9 | 234.7 | 1,011.2 | 232.34 | 18.80 |
| | | Customers (Daily Avg) | 12,152 | 647 | 2,398 | 1,404 | 57 | 17 | 137 | 68 | 29 | 8 |
| | | NCP kW per Customer | 1.4 | 2.2 | 0.6 | 14.2 | 10.4 | 361.6 | 1.7 | 14.9 | 8.01 | 2.35 |
| | 03/07/18 HE 9 | kW at System CP (Hour in Column C) Coincident To MKEC | 9,331.6 | 1,163.6 | 1,383.2 | 16,558.6 | 461.2 | 4,393.8 | 146.1 | 582.2 | 23.74 | 7.03 |
| | | Customers (Daily Avg) | 12,154 | 648 | 2,399 | 1,404 | 57 | 17 | 137 | 69 | 29 | 8 |
| | | CP kW per Customer (Coincident to MKEC) | 0.8 | 1.8 | 0.6 | 11.8 | 8.1 | 258.5 | 1.1 | 8.4 | 0.82 | 0.88 |
| April | N/A | Total kWh (Individually normalized for missing readings) | 6,308,782 | 422,521 | 750,091 | 8,997,743 | 236,305 | 2,323,109 | 83,832 | 380,548 | 22,598.17 | 2,161.01 |
| | | Customers (Daily Avg) | 12,211 | 649 | 2,409 | 1,414 | 58 | 18 | 137 | 68 | 29 | 8 |
| | | kWh per Customer | 517 | 651 | 311 | 6,363 | 4,074 | 129,062 | 612 | 5,596 | 779.25 | 270.13 |
| | N/A | Sum of Maximum kW | 53,760.6 | 4,015.1 | 3,918.9 | 33,916.6 | 1,145.0 | 7,163.3 | 976.0 | 2,121.3 | 176.42 | 15.55 |
| | | Customers (Daily Avg) | 12,211 | 649 | 2,409 | 1,414 | 58 | 18 | 137 | 68 | 29 | 8 |
| | | kW per Customer | 4.4 | 6.2 | 1.6 | 24.0 | 19.7 | 398.0 | 7.1 | 31.2 | 6.08 | 1.94 |
| | Listed By Class | NCP Time (Calculated as Hour with highest kW/customer) | 4/19/17 19:00 | 4/30/17 14:00 | 4/19/17 16:00 | 4/19/17 15:00 | 4/4/17 19:00 | 4/7/17 22:00 | 4/18/17 21:00 | 4/26/17 23:00 | 4/19/17 14:00 | 4/26/17 8:00 |
| | | Maximum kW (Class NCP) | 19,874.5 | 1,426.1 | 1,490.8 | 21,366.0 | 628.8 | 5,838.6 | 325.3 | 992.8 | 122.60 | 15.53 |
| | | Customers (Daily Avg) | 12,155 | 635 | 2,392 | 1,404 | 58 | 17 | 137 | 68 | 29 | 7 |
| | | NCP kW per Customer | 1.6 | 2.2 | 0.6 | 15.2 | 10.8 | 343.4 | 2.4 | 14.6 | 4.23 | 2.22 |
| | 04/12/18 HE 16 | kW at System CP (Hour in Column C) Coincident To MKEC | 14,732.8 | 550.6 | 1,490.8 | 21,115.7 | 457.7 | 3,952.9 | 183.3 | 506.1 | 121.07 | 6.14 |
| | | Customers (Daily Avg) | 12,155 | 641 | 2,392 | 1,404 | 58 | 18 | 137 | 68 | 29 | 8 |
| | | CP kW per Customer (Coincident to MKEC) | 1.2 | 0.9 | 0.6 | 15.0 | 7.9 | 219.6 | 1.3 | 7.4 | 4.17 | 0.77 |
| May | N/A | Total kWh (Individually normalized for missing readings) | 7,316,828 | 366,249 | 783,245 | 9,607,936 | 243,824 | 2,432,309 | 96,464 | 388,864 | 39,853.25 | 1,886.96 |
| | | Customers (Daily Avg) | 12,280 | 637 | 2,412 | 1,407 | 58 | 17 | 137 | 68 | 29 | 7 |
| | | kWh per Customer | 596 | 575 | 325 | 6,829 | 4,204 | 143,077 | 704 | 5,719 | 1,374.25 | 269.57 |
| | N/A | Sum of Maximum kW | 58,256.8 | 3,474.5 | 4,237.0 | 35,845.7 | 1,055.9 | 6,056.7 | 1,268.3 | 2,190.9 | 841.62 | 28.46 |
| | | Customers (Daily Avg) | 12,280 | 637 | 2,412 | 1,407 | 58 | 17 | 137 | 68 | 29 | 7 |
| | | kW per Customer | 4.7 | 5.5 | 1.8 | 25.5 | 18.2 | 356.3 | 9.3 | 32.2 | 29.02 | 4.07 |
| | Listed By Class | NCP Time (Calculated as Hour with highest kW/customer) | 5/15/17 18:00 | 5/1/17 8:00 | 5/31/17 15:00 | 5/15/17 15:00 | 5/15/17 19:00 | 5/26/17 10:00 | 5/30/17 22:00 | 5/25/17 6:00 | 5/29/17 19:00 | 5/1/17 8:00 |
| | | Maximum kW (Class NCP) | 23,385.8 | 1,103.6 | 1,668.4 | 22,115.8 | 597.8 | 5,416.5 | 425.6 | 903.7 | 354.29 | 17.24 |
| | | Customers (Daily Avg) | 12,155 | 636 | 2,396 | 1,401 | 58 | 17 | 137 | 68 | 29 | 7 |
| | | NCP kW per Customer | 1.9 | 1.7 | 0.7 | 15.8 | 10.3 | 318.6 | 3.1 | 13.3 | 12.22 | 2.46 |
| | 05/31/18 HE 16 | kW at System CP (Hour in Column C) Coincident To MKEC | 18,884.9 | 667.1 | 1,587.0 | 21,592.2 | 502.8 | 3,995.2 | 210.4 | 548.5 | 47.07 | 8.12 |
| | | Customers (Daily Avg) | 12,155 | 621 | 2,396 | 1,401 | 58 | 17 | 137 | 68 | 29 | 6 |
| | | CP kW per Customer (Coincident to MKEC) | 1.6 | 1.1 | 0.7 | 15.4 | 8.7 | 235.0 | 1.5 | 8.1 | 1.62 | 1.35 |
| June | N/A | Total kWh (Individually normalized for missing readings) | 12,474,218 | 386,532 | 964,829 | 11,426,500 | 305,465 | 2,697,375 | 183,668 | 577,314 | 314,905.87 | 1,390.85 |
| | | Customers (Daily Avg) | 12,296 | 553 | 2,407 | 1,409 | 58 | 17 | 138 | 68 | 29 | 6 |
| | | kWh per Customer | 1,014 | 699 | 401 | 8,110 | 5,267 | 158,669 | 1,331 | 8,490 | 10,858.82 | 231.81 |
| | N/A | Sum of Maximum kW | 69,462.1 | 2,767.3 | 4,767.8 | 41,553.0 | 1,097.3 | 8,405.6 | 1,516.9 | 2,256.7 | 1,364.40 | 6.29 |
| | | Customers (Daily Avg) | 12,296 | 553 | 2,407 | 1,409 | 58 | 17 | 138 | 68 | 29 | 6 |
| | | kW per Customer | 5.6 | 5.0 | 2.0 | 29.5 | 18.9 | 494.4 | 11.0 | 33.2 | 47.05 | 1.05 |
| | Listed By Class | NCP Time (Calculated as Hour with highest kW/customer) | 6/17/17 18:00 | 6/17/17 18:00 | 6/21/17 16:00 | 6/21/17 16:00 | 6/21/17 13:00 | 6/21/17 13:00 | 6/15/17 22:00 | 6/28/17 23:00 | 6/29/17 1:00 | 6/28/17 17:00 |
| | | Maximum kW (Class NCP) | 38,267.8 | 1,015.5 | 2,242.5 | 26,194.3 | 781.1 | 6,240.6 | 615.9 | 1,423.1 | 1,085.71 | 6.29 |
| | | Customers (Daily Avg) | 12,228 | 537 | 2,392 | 1,397 | 58 | 17 | 137 | 68 | 29 | 5 |
| | | NCP kW per Customer | 3.1 | 1.9 | 0.9 | 18.8 | 13.5 | 367.1 | 4.5 | 20.9 | 37.44 | 1.26 |
| | 06/28/18 HE 16 | kW at System CP (Hour in Column C) Coincident To MKEC | 33,293.9 | 873.4 | 2,242.5 | 26,194.3 | 683.2 | 5,811.1 | 382.4 | 945.4 | 443.80 | 6.17 |
| | | Customers (Daily Avg) | 12,237 | 535 | 2,392 | 1,397 | 58 | 17 | 137 | 68 | 29 | 5 |
| | | CP kW per Customer (Coincident to MKEC) | 2.7 | 1.6 | 0.9 | 18.8 | 11.8 | 341.8 | 2.8 | 13.9 | 15.30 | 1.23 |

| Month | Peak Time | Data Type | Rate Class | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 18-RS General Service | 18-RS Space Heat | 18-GSS | 18-GSL | GSL Rider 1 | 18-IS | 18-MI-I | 18-WP | 18-IP-I | 18-CS |
| July | N/A | Total kWh (Individually normalized for missing readings) | 15,852,765 | 461,121 | 1,111,275 | 12,959,562 | 313,943 | 2,255,218 | 196,122 | 632,619 | 718,236.93 | 2,696.26 |
| | | Customers (Daily Avg) | 12,289 | 538 | 2,410 | 1,419 | 57 | 17 | 139 | 68 | 29 | 5 |
| | | kWh per Customer | 1,290 | 857 | 461 | 9,133 | 5,508 | 132,660 | 1,411 | 9,303 | 24,766.79 | 539.25 |
| | N/A | Sum of Maximum kW | 72,248.3 | 2,830.6 | 5,063.8 | 42,056.6 | 1,103.3 | 7,128.2 | 1,231.7 | 2,201.2 | 1,423.00 | 19.03 |
| | | Customers (Daily Avg) | 12,289 | 538 | 2,410 | 1,419 | 57 | 17 | 139 | 68 | 29 | 5 |
| | | kW per Customer | 5.9 | 5.3 | 2.1 | 29.6 | 19.4 | 419.3 | 8.9 | 32.4 | 49.07 | 3.81 |
| | Listed By Class | NCP Time (Calculated as Hour with highest kW/customer) | 7/22/17 18:00 | 7/22/17 18:00 | 7/25/17 16:00 | 7/19/17 16:00 | 7/26/17 20:00 | 7/6/17 14:00 | 7/6/17 22:00 | 7/12/17 8:00 | 7/22/17 10:00 | 7/18/17 11:00 |
| | | Maximum kW (Class NCP) | 39,141.7 | 1,091.5 | 2,317.7 | 25,901.9 | 791.4 | 5,572.1 | 606.7 | 1,377.6 | 1,315.38 | 16.29 |
| | | Customers (Daily Avg) | 12,221 | 533 | 2,383 | 1,402 | 58 | 17 | 138 | 68 | 29 | 4 |
| | | NCP kW per Customer | 3.2 | 2.0 | 1.0 | 18.5 | 13.6 | 327.8 | 4.4 | 20.3 | 45.36 | 4.07 |
| | 07/12/18 HE 15 | kW at System CP (Hour in Column C) Coincident To MKEC | 35,689.1 | 972.5 | 2,296.9 | 25,474.7 | 545.5 | 3,728.3 | 390.4 | 839.7 | 1,208.84 | 13.18 |
| | | Customers (Daily Avg) | 12,236 | 533 | 2,383 | 1,402 | 58 | 17 | 138 | 68 | 29 | 4 |
| | | CP kW per Customer (Coincident to MKEC) | 2.9 | 1.8 | 1.0 | 18.2 | 9.4 | 219.3 | 2.8 | 12.3 | 41.68 | 3.30 |
| August | N/A | Total kWh (Individually normalized for missing readings) | 11,980,830 | 380,188 | 960,393 | 11,623,418 | 313,620 | 2,407,474 | 167,823 | 495,769 | 378,658.32 | 3,182.78 |
| | | Customers (Daily Avg) | 12,266 | 532 | 2,413 | 1,413 | 58 | 17 | 139 | 69 | 29 | 5 |
| | | kWh per Customer | 977 | 715 | 398 | 8,226 | 5,407 | 141,616 | 1,207 | 7,185 | 13,057.18 | 636.56 |
| | N/A | Sum of Maximum kW | 66,782.0 | 2,669.3 | 4,659.9 | 40,066.7 | 1,008.1 | 6,771.9 | 1,245.8 | 2,044.2 | 1,458.09 | 16.46 |
| | | Customers (Daily Avg) | 12,266 | 532 | 2,413 | 1,413 | 58 | 17 | 139 | 69 | 29 | 5 |
| | | kW per Customer | 5.4 | 5.0 | 1.9 | 28.4 | 17.4 | 398.3 | 9.0 | 29.6 | 50.28 | 3.29 |
| | Listed By Class | NCP Time (Calculated as Hour with highest kW/customer) | 8/19/17 18:00 | 8/19/17 17:00 | 8/2/17 16:00 | 8/15/17 15:00 | 8/20/17 19:00 | 8/30/17 14:00 | 8/23/17 21:00 | 8/3/17 6:00 | 8/4/17 23:00 | 8/2/17 8:00 |
| | | Maximum kW (Class NCP) | 34,745.5 | 963.7 | 1,903.0 | 24,008.7 | 659.7 | 5,298.0 | 366.4 | 1,234.3 | 1,226.25 | 13.16 |
| | | Customers (Daily Avg) | 12,209 | 532 | 2,381 | 1,397 | 58 | 17 | 138 | 68 | 29 | 4 |
| | | NCP kW per Customer | 2.8 | 1.8 | 0.8 | 17.2 | 11.4 | 311.6 | 2.7 | 18.2 | 42.28 | 3.29 |
| | 08/09/18 HE 15 | kW at System CP (Hour in Column C) Coincident To MKEC | 33,544.5 | 927.7 | 1,653.5 | 19,400.5 | 571.5 | 3,491.7 | 325.0 | 721.2 | 1,063.71 | 7.25 |
| | | Customers (Daily Avg) | 12,209 | 532 | 2,389 | 1,391 | 58 | 17 | 138 | 68 | 29 | 5 |
| | | CP kW per Customer (Coincident to MKEC) | 2.7 | 1.7 | 0.7 | 13.9 | 9.9 | 205.4 | 2.4 | 10.6 | 36.68 | 1.45 |
| September | N/A | Total kWh (Individually normalized for missing readings) | 9,554,520 | 322,980 | 845,008 | 11,455,507 | 266,698 | 2,313,440 | 126,526 | 497,843 | 168,922.01 | 1,319.22 |
| | | Customers (Daily Avg) | 12,240 | 532 | 2,430 | 1,402 | 58 | 18 | 138 | 69 | 30 | 5 |
| | | kWh per Customer | 781 | 607 | 348 | 8,171 | 4,598 | 128,524 | 917 | 7,215 | 5,630.73 | 263.84 |
| | N/A | Sum of Maximum kW | 63,794.0 | 2,540.6 | 4,425.9 | 42,012.8 | 980.8 | 6,240.5 | 1,468.7 | 2,059.7 | 1,275.34 | 18.67 |
| | | Customers (Daily Avg) | 12,240 | 532 | 2,430 | 1,402 | 58 | 18 | 138 | 69 | 30 | 5 |
| | | kW per Customer | 5.2 | 4.8 | 1.8 | 30.0 | 16.9 | 346.7 | 10.6 | 29.9 | 42.51 | 3.73 |
| | Listed By Class | NCP Time (Calculated as Hour with highest kW/customer) | 9/3/17 18:00 | 9/4/17 19:00 | 9/14/17 16:00 | 9/22/17 15:00 | 9/13/17 19:00 | 9/21/17 17:00 | 9/15/17 21:00 | 9/22/17 6:00 | 9/1/17 16:00 | 9/19/17 8:00 |
| | | Maximum kW (Class NCP) | 31,215.4 | 867.2 | 1,942.0 | 27,820.0 | 696.7 | 5,566.3 | 480.3 | 1,281.2 | 836.69 | 12.89 |
| | | Customers (Daily Avg) | 12,202 | 532 | 2,402 | 1,377 | 58 | 16 | 138 | 69 | 29 | 5 |
| | | NCP kW per Customer | 2.6 | 1.6 | 0.8 | 20.2 | 12.0 | 347.9 | 3.5 | 18.6 | 28.85 | 2.58 |
| | 09/19/18 HE 16 | kW at System CP (Hour in Column C) Coincident To MKEC | 23,391.8 | 691.4 | 1,831.0 | 27,160.0 | 577.8 | 3,503.0 | 234.2 | 695.8 | 228.83 | 7.71 |
| | | Customers (Daily Avg) | 12,201 | 532 | 2,406 | 1,377 | 58 | 16 | 138 | 69 | 30 | 5 |
| | | CP kW per Customer (Coincident to MKEC) | 1.9 | 1.3 | 0.8 | 19.7 | 10.0 | 218.9 | 1.7 | 10.1 | 7.63 | 1.54 |
| October | N/A | Total kWh (Individually normalized for missing readings) | 6,629,568 | 314,357 | 746,532 | 12,346,701 | 230,848 | 2,509,965 | 94,002 | 388,986 | 24,013.74 | 1,046.03 |
| | | Customers (Daily Avg) | 12,239 | 533 | 2,424 | 1,390 | 57 | 15 | 138 | 69 | 30 | 5 |
| | | kWh per Customer | 542 | 590 | 308 | 8,883 | 4,050 | 167,331 | 681 | 5,637 | 800.46 | 209.21 |
| | N/A | Sum of Maximum kW | 54,869.6 | 2,992.5 | 3,996.6 | 42,132.2 | 934.5 | 5,909.2 | 1,236.1 | 1,930.1 | 456.81 | 13.31 |
| | | Customers (Daily Avg) | 12,239 | 533 | 2,424 | 1,390 | 57 | 15 | 138 | 69 | 30 | 5 |
| | | kW per Customer | 4.5 | 5.6 | 1.6 | 30.3 | 16.4 | 393.9 | 9.0 | 28.0 | 15.23 | 2.66 |
| | Listed By Class | NCP Time (Calculated as Hour with highest kW/customer) | 10/6/17 18:00 | 10/28/17 9:00 | 10/6/17 16:00 | 10/6/17 15:00 | 10/6/17 14:00 | 10/26/17 17:00 | 10/12/17 20:00 | 10/26/17 10:00 | 10/22/17 20:00 | 10/28/17 8:00 |
| | | Maximum kW (Class NCP) | 22,061.0 | 878.0 | 1,550.6 | 25,097.5 | 479.6 | 3,390.1 | 473.2 | 910.8 | 166.86 | 10.94 |
| | | Customers (Daily Avg) | 12,188 | 532 | 2,403 | 1,377 | 58 | 5 | 138 | 69 | 29 | 5 |
| | | NCP kW per Customer | 1.8 | 1.7 | 0.6 | 18.2 | 8.3 | 678.0 | 3.4 | 13.2 | 5.75 | 2.19 |
| | 10/03/18 HE 16 | kW at System CP (Hour in Column C) Coincident To MKEC | 18,371.3 | 575.8 | 1,550.6 | 24,781.7 | 477.6 | 3,558.2 | 204.1 | 489.2 | 1.61 | 1.73 |
| | | Customers (Daily Avg) | 12,188 | 532 | 2,403 | 1,377 | 58 | 15 | 138 | 69 | 30 | 5 |
| | | CP kW per Customer (Coincident to MKEC) | 1.5 | 1.1 | 0.6 | 18.0 | 8.2 | 237.2 | 1.5 | 7.1 | 0.05 | 0.35 |
| November | N/A | Total kWh (Individually normalized for missing readings) | 6,593,846 | 407,762 | 800,956 | 10,847,026 | 261,690 | 2,056,990 | 85,097 | 343,756 | 36,193.01 | 2,021.17 |
| | | Customers (Daily Avg) | 12,170 | 533 | 2,412 | 1,386 | 58 | 15 | 139 | 69 | 29 | 5 |
| | | kWh per Customer | 542 | 765 | 332 | 7,826 | 4,512 | 137,133 | 612 | 4,982 | 1,248.03 | 404.23 |
| | N/A | Sum of Maximum kW | 50,003.4 | 3,167.6 | 3,785.2 | 36,049.3 | 1,097.4 | 5,959.6 | 499.1 | 1,855.9 | 526.86 | 13.17 |
| | | Customers (Daily Avg) | 12,170 | 533 | 2,412 | 1,386 | 58 | 15 | 139 | 69 | 29 | 5 |
| | | kW per Customer | 4.1 | 5.9 | 1.6 | 26.0 | 18.9 | 397.3 | 3.6 | 26.9 | 18.17 | 2.63 |
| | Listed By Class | NCP Time (Calculated as Hour with highest kW/customer) | 11/7/17 20:00 | 11/19/17 9:00 | 11/7/17 12:00 | 11/21/17 11:00 | 11/10/17 21:00 | 11/29/17 13:00 | 11/3/17 21:00 | 11/17/17 22:00 | 11/1/17 20:00 | 11/30/17 9:00 |
| | | Maximum kW (Class NCP) | 13,519.7 | 960.3 | 1,369.0 | 20,213.4 | 595.3 | 4,697.6 | 241.0 | 825.9 | 225.42 | 13.16 |
| | | Customers (Daily Avg) | 12,131 | 528 | 2,394 | 1,373 | 59 | 15 | 138 | 69 | 29 | 5 |
| | | NCP kW per Customer | 1.1 | 1.8 | 0.6 | 14.7 | 10.1 | 313.2 | 1.7 | 12.0 | 7.77 | 2.63 |
| | 11/13/18 HE 10 | kW at System CP (Hour in Column C) Coincident To MKEC | 9,008.6 | 657.6 | 1,366.6 | 19,886.1 | 441.4 | 3,680.3 | 141.3 | 542.9 | 1.79 | 1.12 |
| | | Customers (Daily Avg) | 12,133 | 528 | 2,393 | 1,369 | 59 | 15 | 138 | 69 | 29 | 5 |
| | | CP kW per Customer (Coincident to MKEC) | 0.7 | 1.2 | 0.6 | 14.5 | 7.5 | 245.4 | 1.0 | 7.9 | 0.06 | 0.22 |
| December | N/A | Total kWh (Individually normalized for missing readings) | 8,615,072 | 665,921 | 997,065 | 11,149,599 | 396,518 | 2,391,687 | 100,332 | 353,121 | 16,299.74 | 3,264.78 |
| | | Customers (Daily Avg) | 12,162 | 528 | 2,411 | 1,381 | 59 | 15 | 140 | 69 | 29 | 4 |
| | | kWh per Customer | 708 | 1,261 | 414 | 8,074 | 6,721 | 159,446 | 717 | 5,118 | 562.06 | 816.19 |
| | N/A | Sum of Maximum kW | 54,354.2 | 3,910.6 | 4,188.7 | 36,368.7 | 1,600.0 | 6,794.7 | 342.5 | 1,849.6 | 150.94 | 11.00 |
| | | Customers (Daily Avg) | 12,162 | 528 | 2,411 | 1,381 | 59 | 15 | 140 | 69 | 29 | 4 |
| | | kW per Customer | 4.5 | 7.4 | 1.7 | 26.3 | 27.1 | 453.0 | 2.4 | 26.8 | 5.20 | 2.75 |
| | Listed By Class | NCP Time (Calculated as Hour with highest kW/customer) | 12/26/17 19:00 | 12/26/17 9:00 | 12/27/17 15:00 | 12/7/17 11:00 | 12/26/17 20:00 | 12/18/17 17:00 | 12/27/17 9:00 | 12/29/17 15:00 | 12/2/17 10:00 | 12/26/17 9:00 |
| | | Maximum kW (Class NCP) | 19,301.6 | 1,811.0 | 1,869.5 | 20,410.1 | 1,132.3 | 5,263.9 | 184.3 | 983.3 | 141.12 | 11.00 |
| | | Customers (Daily Avg) | 12,114 | 528 | 2,397 | 1,373 | 59 | 15 | 138 | 69 | 29 | 4 |
| | | NCP kW per Customer | 1.6 | 3.4 | 0.8 | 14.9 | 19.2 | 350.9 | 1.3 | 14.3 | 4.87 | 2.75 |
| | 12/07/18 HE 12 | kW at System CP (Hour in Column C) Coincident To MKEC | 18,336.6 | 1,441.3 | 1,748.0 | 17,331.0 | 1,019.9 | 4,573.9 | 167.9 | 591.2 | 1.79 | 10.77 |
| | | Customers (Daily Avg) | 12,116 | 528 | 2,397 | 1,373 | 59 | 15 | 138 | 69 | 29 | 4 |
| | | CP kW per Customer (Coincident to MKEC) | 1.5 | 2.7 | 0.7 | 12.6 | 17.3 | 304.9 | 1.2 | 8.6 | 0.06 | 2.69 |
| Individual Annual Peak Summary | | Total kWh | 106,608,968 | 5,623,987 | 10,668,884 | 129,862,225 | 3,520,601 | 28,971,918 | 1,410,419 | 5,154,770 | 1,788,987 | 44,684 |
| | | Customers (Sum of any customer with at least a single interval reading) | 12,657 | 661 | 2,627 | 1,522 | 59 | 18 | 145 | 71 | 30 | 10 |
| | | Annual kWh per Customer | 8,423 | 8,508 | 4,061 | 85,323 | 59,671 | 1,609,551 | 9,727 | 72,602 | 59,633 | 4,468 |
| | | Sum of Maximum kW | 88,463.4 | 5,921.6 | 8,439.8 | 59,278.7 | 1,944.0 | 9,805.9 | 2,346.4 | 2,587.9 | 1,506.5 | 47.1 |
| | | Customers (Sum of any customer with at least a single interval reading) | 12,663 | 661 | 2,627 | 1,522 | 59 | 18 | 145 | 71 | 30 | 10 |
| | | kW per Customer | 7.0 | 9.0 | 3.2 | 38.9 | 32.9 | 544.8 | 16.2 | 36.4 | 50.2 | 4.7 |

# Demand Calculation

| Non-Coincident Consumer Demand | Total Demand | 18-RS General Service | 18-RS Space Heat | 18-GSS | 18-GSL | GSL Rider 1 | 18-IS | 18-MI-I | 18-WP | 18-IP-I | 18-CS | Lighting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consumer Average Monthly kWh - AMI Data | | 8,884,081 | 468,666 | 889,074 | 10,821,852 | 293,383 | 2,414,326 | 117,535 | 429,564 | 149,082 | 3,724 | |
| Sum of Max Consumer kW - AMI Data | | 88,463 | 5,922 | 8,440 | 59,279 | 1,944 | 9,806 | 2,346 | 2,588 | 1,506 | 47 | |
| Load Factor | | 13.7571% | 11% | 14% | 25% | 21% | 34% | 7% | 23% | 14% | 11% | |
| Test Year Energy (annual kWh) | | 106,883,802 | 5,790,181 | 11,352,578 | 130,420,192 | 5,013,974 | 30,481,488 | 1,411,591 | 5,244,505 | 2,357,658 | 50,207 | |
| Class Average Monthly kWh - Test Year | | 8,906,984 | 482,515 | 946,048 | 10,868,349 | 417,831 | 2,540,124 | 117,633 | 437,042 | 196,472 | 4,184 | |
| No Line Loss | | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| **Non-Coincident Consumer Demand -Ave Monthly (adjusted to Test Year w/losses)** | **184,339** | **88,691** | **6,097** | **8,981** | **59,533** | **2,769** | **10,317** | **2,348** | **2,633** | **1,985** | **53** | **932** |
| **Non-Coincident Class Demand** | | | | | | | | | | | | |
| Class Average Monthly kWh - AMI Data | | 8,884,081 | 468,666 | 889,074 | 10,821,852 | 293,383 | 2,414,326 | 117,535 | 429,564 | 149,082 | 3,724 | |
| Non-Coincident Class Demand - AMI Data, Ave Monthly | | 24,308 | 1,291 | 1,784 | 22,935 | 726 | 5,352 | 362 | 1,069 | 486 | 16 | |
| Load Factor | | 50.1% | 49.7% | 68.3% | 64.6% | 55.3% | 61.8% | 44.4% | 55.0% | 42.0% | 32.2% | |
| Test Year Energy (annual kWh) | | 106,883,802 | 5,790,181 | 11,352,578 | 130,420,192 | 5,013,974 | 30,481,488 | 1,411,591 | 5,244,505 | 2,357,658 | 50,207 | |
| Class Average Monthly kWh - Test Year | | 8,906,984 | 482,515 | 946,048 | 10,868,349 | 417,831 | 2,540,124 | 117,633 | 437,042 | 196,472 | 4,184 | |
| Line Loss | | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | |
| **Non-Coincident Class Demand -Ave Monthly (adjusted to Test Year w/losses)** | **63,817** | **25,777** | **1,406** | **2,007** | **24,362** | **1,094** | **5,955** | **384** | **1,150** | **678** | **19** | **986** |
| **Allocated Coincident Demand - MKEC (Ave Monthly)** | | | | | | | | | | | | |
| Class Average Monthly kWh - AMI Data | | 8,884,081 | 468,666 | 889,074 | 10,821,852 | 293,383 | 2,414,326 | 117,535 | 429,564 | 149,082 | 3,724 | |
| Coincident Class Demand - MKEC - AMI Data, Ave Monthly | | 19,895 | 992 | 1,727 | 21,733 | 616 | 4,177 | 226 | 613 | 262 | 10 | |
| Load Factor | | 61% | 65% | 71% | 68% | 65% | 79% | 71% | 96% | 78% | 53% | |
| Test Year Energy (annual kWh) | | 106,883,802 | 5,790,181 | 11,352,578 | 130,420,192 | 5,013,974 | 30,481,488 | 1,411,591 | 5,244,505 | 2,357,658 | 50,207 | |
| Class Average Monthly kWh - Test Year | | 8,906,984 | 482,515 | 946,048 | 10,868,349 | 417,831 | 2,540,124 | 117,633 | 437,042 | 196,472 | 4,184 | |
| Line Loss | | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | |
| Coincident Class Demand - MKEC - Ave Monthly (adjusted to Test Year w/ losses) | 54,550 | 21,096 | 1,080 | 1,944 | 23,085 | 928 | 4,648 | 240 | 660 | 365 | 11 | 493 |
| Ratio | 100.00% | 38.67% | 1.98% | 3.56% | 42.32% | 1.70% | 8.52% | 0.44% | 1.21% | 0.67% | 0.02% | 0.90% |
| Total System Coincident Demand - MKEC (Ave Monthly) | 109,269 | | | | | | | | | | | |
| Excluded Coincident Demand - MKEC (Ave Monthly) | 54,386 | | | | | | | | | | | |
| **Allocated Coincident Demand - MKEC (Ave Monthly)** | **54,883** | **21,225** | **1,086** | **1,956** | **23,226** | **933** | **4,677** | **241** | **664** | **368** | **11** | **496** |
| **Allocated Coincident Demand - MKEC Summer** | | | | | | | | | | | | |
| Summer - Class Average Monthly kWh - AMI Data | | 40,307,812 | 1,227,842 | 3,036,496 | 36,009,480 | 933,028 | 7,360,067 | 547,612 | 1,705,701 | 1,411,801 | 7,270 | |
| Summer Coincident Class Demand - MKEC - AMI Data, Ave Monthly | | 102,527 | 2,774 | 6,193 | 71,070 | 1,800 | 13,031 | 1,098 | 2,506 | 2,716 | 27 | |
| Load Factor | | 54% | 61% | 67% | 69% | 71% | 77% | 68% | 93% | 71% | 37% | |
| Test Year Energy (total summer kWh) | | 38,096,232 | 1,158,849 | 3,142,737 | 35,101,585 | 1,348,371 | 7,910,838 | 504,063 | 1,667,190 | 1,725,718 | 7,138 | |
| Class Average Monthly Summer kWh - Test Year | | 12,698,744 | 386,283 | 1,047,579 | 11,700,528 | 449,457 | 2,636,946 | 168,021 | 555,730 | 575,239 | 2,379 | |
| Line Loss | | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | |
| Coincident Class Demand - MKEC - Ave Monthly (adjusted to Test Year w/ losses) | 70,149 | 34,164 | 923 | 2,260 | 24,424 | 917 | 4,938 | 356 | 864 | 1,171 | 9 | 123 |
| Ratio | 100% | 48.70% | 1.32% | 3.22% | 34.82% | 1.31% | 7.04% | 0.51% | 1.23% | 1.67% | 0.01% | 0.18% |
| Total System Coincident Demand - MKEC Summer (Ave Monthly) | 130,067 | | | | | | | | | | | |
| Excluded Coincident Demand - MKEC Summer(Ave Monthly) | 56,057 | | | | | | | | | | | |
| **Allocated Coincident Demand - MKEC Summer (Ave Monthly)** | **74,011** | **36,044** | **974** | **2,384** | **25,769** | **968** | **5,210** | **376** | **911** | **1,235** | **10** | **130** |
| **Allocated Coincident Demand - MKEC Winter** | | | | | | | | | | | | |
| Winter Class Average Monthly kWh - AMI Data | | 7,366,795 | 488,461 | 848,043 | 10,428,083 | 287,508 | 2,401,317 | 95,867 | 383,230 | 41,910 | 4,157 | |
| Winter Coincident Class Demand - MKEC - AMI Data, Ave Monthly | | 15,134 | 1,014 | 1,615 | 21,081 | 621 | 4,122 | 180 | 539 | 48 | 10 | |
| Load Factor | | 67% | 66% | 72% | 68% | 63% | 80% | 73% | 97% | 120% | 58% | |
| Test Year Energy (total winter kWh) | | 68,787,570 | 4,631,332 | 8,209,841 | 95,318,607 | 3,665,603 | 22,570,650 | 907,528 | 3,577,315 | 631,940 | 43,069 | |
| Class Average Monthly Winter kWh - Test Year | | 5,732,298 | 385,944 | 684,153 | 7,943,217 | 305,467 | 1,880,888 | 75,627 | 298,110 | 52,662 | 3,589 | |
| Line Loss | | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | |
| Coincident Class Demand - MKEC - Ave Monthly (adjusted to Test Year w/ losses) | 36,812 | 12,456 | 847 | 1,378 | 16,984 | 698 | 3,414 | 150 | 443 | 63 | 9 | 370 |
| Ratio | 100% | 33.84% | 2.30% | 3.74% | 46.14% | 1.90% | 9.28% | 0.41% | 1.20% | 0.17% | 0.02% | 1.00% |
| Total System Coincident Demand - MKEC Winter (Ave Monthly) | 102,336 | | | | | | | | | | | |
| Excluded Coincident Demand - MKEC Winter(Ave Monthly) | 53,829 | | | | | | | | | | | |
| **Allocated Coincident Demand - MKEC Winter (Ave Monthly)** | **48,507** | **16,412** | **1,116** | **1,816** | **22,379** | **920** | **4,499** | **198** | **584** | **84** | **12** | **487** |

**Development of Allocation Factors -- BUNDLED**

| Line No. | Description | Units | Total | Residential Service General Use 18-RS | Residential Space Heating 18-RS | General Service Small 18-GSS | General Service Large 18-GSL | General Service Space Heating Rider No 1 | Industrial Service 18-IS | Municipal Power Service 18-M-I | Water Pumping Service 18-WP | Irrigation Service 18-IP-I | Temporary Service 18-CS | Lighting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Allocation Factor Input Data** | | | | | | | | | | | | | |
| 2 | **Energy** | | | | | | | | | | | | | |
| 3 | Energy Sales -- All | MWh | 302,954 | 106,884 | 5,790 | 11,353 | 130,420 | 5,014 | 30,481 | 1,412 | 5,245 | 2,358 | 50 | 3,948 |
| 4 | Energy Sales -- On-Peak | MWh | | | | | | | | | | | | |
| 5 | Energy Sales -- Off-Peak | MWh | | | | | | | | | | | | |
| 6 | Dist. Losses | MWh | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% | 5.77% |
| 7 | Energy -- All @ Sub. | MWh | 320,427 | 113,049 | 6,124 | 12,007 | 137,942 | 5,303 | 32,240 | 1,493 | 5,547 | 2,494 | 53 | 4,176 |
| 8 | Energy -- On-Peak @ Sub. | MWh | | | | | | | | | | | | |
| 9 | Energy -- Off-Peak @ Sub. | MWh | | | | | | | | | | | | |
| 10 | Trans. Losses | MWh | | | | | | | | | | | | |
| 11 | Energy -- All @ Source | MWh | 320,427 | 113,049 | 6,124 | 12,007 | 137,942 | 5,303 | 32,240 | 1,493 | 5,547 | 2,494 | 53 | 4,176 |
| 12 | Energy -- On-Peak @ Source | MWh | | | | | | | | | | | | |
| 13 | Energy -- Off-Peak @ Source | MWh | | | | | | | | | | | | |
| 14 | **Demand** | | | | | | | | | | | | | |
| 15 | Non-Coinc. Demand @ Cons. | kW | 184,339 | 88,691 | 6,097 | 8,981 | 59,533 | 2,769 | 10,317 | 2,348 | 2,633 | 1,985 | 53 | 932 |
| 16 | Class Non-Coinc. Demand @ Sub. | kW | 63,817 | 25,777 | 1,406 | 2,007 | 24,362 | 1,094 | 5,955 | 384 | 1,150 | 678 | 19 | 986 |
| 18 | MKEC Coinc. Demand - Avg Monthly | kW | 54,883 | 21,225 | 1,086 | 1,956 | 23,226 | 933 | 4,677 | 241 | 664 | 368 | 11 | 496 |
| 19 | MKEC Coinc. Demand - Summerer | kW | 74,011 | 36,044 | 974 | 2,384 | 25,769 | 968 | 5,210 | 376 | 911 | 1,235 | 10 | 130 |
| 20 | MKEC Coinc. Demand - Winter | kW | 48,507 | 16,412 | 1,116 | 1,816 | 22,379 | 920 | 4,499 | 198 | 584 | 84 | 12 | 487 |
| 19 | Demand Charges @ Class | $ | 6,648,636 | 2,699,160 | 123,213 | 233,097 | 2,725,131 | 108,250 | 549,066 | 30,137 | 80,898 | 56,704 | 1,281 | 41,700 |
| 20 | Transmission Capacity Charges @ Class | $ | 4,365,670 | 1,688,356 | 86,413 | 155,580 | 1,847,519 | 74,231 | 371,997 | 19,180 | 52,803 | 29,241 | 912 | 39,437 |
| 21 | Class Coinc. Demand @ Sub. | kW | 54,883 | 21,225 | 1,086 | 1,956 | 23,226 | 933 | 4,677 | 241 | 664 | 368 | 11 | 496 |
| 22 | | | | | | | | | | | | | | |
| 23 | **Average and Excess Demand** | | | | | | | | | | | | | |
| 24 | Average Demand | kW | 36,578 | 12,905 | 699 | 1,371 | 15,747 | 605 | 3,680 | 170 | 633 | 285 | 6 | 477 |
| 25 | Class Excess Demand | kW | 27,239 | 12,871 | 707 | 637 | 8,615 | 489 | 2,275 | 213 | 517 | 393 | 13 | 509 |
| 26 | Allocated Excess Demand | kW | 6,612,058 | 3,124,471 | 171,499 | 154,523 | 2,091,324 | 118,690 | 552,204 | 51,769 | 125,541 | 95,408 | 3,098 | 123,531 |
| 27 | Avg. & Excess Demand | kW | 6,648,636 | 3,137,376 | 172,198 | 155,893 | 2,107,071 | 119,295 | 555,884 | 51,940 | 126,174 | 95,693 | 3,104 | 124,007 |
| 28 | **Margin** | | | | | | | | | | | | | |
| 29 | Present Rate Revenue | $ | 42,819,472 | 16,002,466 | 797,613 | 1,868,767 | 17,613,799 | 561,145 | 3,632,202 | 200,545 | 652,651 | 361,292 | 12,350 | 1,116,641 |
| 30 | Proposed Rate Revenue | $ | 42,819,472 | 16,174,693 | 805,788 | 1,889,656 | 17,410,495 | 561,145 | 3,632,202 | 202,559 | 652,651 | 361,292 | 12,350 | 1,116,641 |
| 31 | **Consumer** | | | | | | | | | | | | | |
| 32 | No. Consumers | | 21,611 | 11,960 | 568 | 2,521 | 1,408 | 61 | 17 | 140 | 71 | 41 | 6 | 4,819 |
| 33 | Pri. Line Weight. Factor | | | 1.00 | 1.00 | 1.12 | 1.35 | 1.35 | 1.58 | 1.12 | 1.55 | 1.58 | 1.00 | 0.02 |
| 34 | Weight. No. of Cons. | | 17,792.8 | 11,960.3 | 567.7 | 2,818.0 | 1,905.0 | 82.5 | 26.7 | 156.2 | 109.7 | 64.7 | 5.8 | 96.4 |
| 35 | Transf. Weight. Factor | | | 1.00 | 1.00 | 1.12 | 1.35 | 1.35 | 1.58 | 1.12 | 1.55 | 1.58 | 1.00 | 0.02 |
| 36 | Weight. No. of Cons. | | 17,791.2 | 11,960.3 | 567.7 | 2,817.4 | 1,904.1 | 82.5 | 26.7 | 156.2 | 109.6 | 64.6 | 5.8 | 96.4 |
| 37 | Service Weight. Factor | | | 1.00 | 1.00 | 1.11 | 1.32 | 1.32 | 1.53 | 1.11 | 1.50 | 1.53 | 1.00 | 0.02 |
| 38 | Weight. No. of Cons. | | 17,711.5 | 11,960.3 | 567.7 | 2,791.3 | 1,860.3 | 80.6 | 25.8 | 154.8 | 106.2 | 62.6 | 5.8 | 96.4 |
| 39 | Meter Weight. Factor | | | 1.00 | 1.00 | 1.08 | 1.27 | 1.27 | 4.23 | 1.29 | 2.56 | 2.56 | 1.00 | 0.02 |
| 40 | Weight. No. of Cons. | | 17,753.3 | 11,960.3 | 567.7 | 2,718.0 | 1,789.9 | 77.5 | 71.6 | 180.9 | 180.5 | 104.9 | 5.8 | 96.4 |
| 41 | Cons. Acct. Weight Factor | | | 1.00 | 1.00 | 1.08 | 1.27 | 1.27 | 4.23 | 1.29 | 2.56 | 2.56 | 1.00 | 0.02 |
| 42 | Weight. No. of Cons. | | 17,753.3 | 11,960.3 | 567.7 | 2,718.0 | 1,789.9 | 77.5 | 71.6 | 180.9 | 180.5 | 104.9 | 5.8 | 96.4 |

**Development of Allocation Factors -- BUNDLED**
(Continued)

| Line No. | Description | Data Line No. | Name | Total | Residential Service General Use 18-RS | Residential Space Heating 18-RS | General Service Small 18-GSS | General Service Large 18-GSL | General Service Space Heating Rider No 1 | Industrial Service 18-IS | Municipal Power Service 18-M-I | Water Pumping Service 18-WP | Irrigation Service 18-IP-I | Temporary Service 18-CS | Lighting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 43 | **Allocation Factors** | | | | | | | | | | | | | | |
| 44 | **Energy Related** | | | | | | | | | | | | | | |
| 45 | Energy -- All @ Sub. | 7 | E1 | 1.000000 | 0.352805 | 0.019112 | 0.037473 | 0.430495 | 0.016550 | 0.100614 | 0.004659 | 0.017311 | 0.007782 | 0.000166 | 0.013031 |
| 46 | Energy -- On-Peak @ Sub. | 8 | E2 | | | | | | | | | | | | |
| 47 | Energy -- Off-Peak @ Sub. | 9 | E3 | | | | | | | | | | | | |
| 48 | Energy -- All @ Source | 11 | E4 | 1.000000 | 0.352805 | 0.019112 | 0.037473 | 0.430495 | 0.016550 | 0.100614 | 0.004659 | 0.017311 | 0.007782 | 0.000166 | 0.013031 |
| 49 | Energy -- On-Peak @ Source | 12 | E5 | | | | | | | | | | | | |
| 50 | Energy -- Off-Peak @ Source | 13 | E6 | | | | | | | | | | | | |
| 51 | | | | | | | | | | | | | | | |
| 52 | **Demand Related** | | | | | | | | | | | | | | |
| 53 | Non-coinc. Demand @ Cons. | 15 | D1 | 1.000000 | 0.481133 | 0.033073 | 0.048718 | 0.322956 | 0.015019 | 0.055966 | 0.012739 | 0.014283 | 0.010770 | 0.000287 | 0.005055 |
| 54 | Non-coinc. Demand @ Class | 16 | D2 | 1.000000 | 0.403912 | 0.022025 | 0.031453 | 0.381749 | 0.017148 | 0.093316 | 0.006013 | 0.018026 | 0.010619 | 0.000295 | 0.015443 |
| 56 | MKEC Coinc. Demand - Avg Monthly | 18 | D4 | 1.000000 | 0.386735 | 0.019794 | 0.035637 | 0.423193 | 0.017003 | 0.085210 | 0.004393 | 0.012095 | 0.006698 | 0.000209 | 0.009034 |
| 57 | MKEC Coinc. Demand - Summer | 19 | D5 | 1.000000 | 0.487016 | 0.013156 | 0.032213 | 0.348180 | 0.013075 | 0.070393 | 0.005079 | 0.012312 | 0.016688 | 0.000131 | 0.001756 |
| 58 | MKEC Coinc Demand - Winter | 20 | D6 | 1.000000 | 0.338355 | 0.023017 | 0.037434 | 0.461354 | 0.018957 | 0.092754 | 0.004077 | 0.012047 | 0.001721 | 0.000244 | 0.010040 |
| 61 | Demand Charges @ Class | 19 | D7 | 1.000000 | 0.405972 | 0.018532 | 0.035059 | 0.409878 | 0.016282 | 0.082583 | 0.004533 | 0.012168 | 0.008529 | 0.000193 | 0.006272 |
| 62 | Transmission Capacity Charges @ Class | 20 | D8 | 1.000000 | 0.386735 | 0.019794 | 0.035637 | 0.423193 | 0.017003 | 0.085210 | 0.004393 | 0.012095 | 0.006698 | 0.000209 | 0.009034 |
| 63 | Coinc. Demand @ Class | 21 | D9 | 1.000000 | 0.386735 | 0.019794 | 0.035637 | 0.423193 | 0.017003 | 0.085210 | 0.004393 | 0.012095 | 0.006698 | 0.000209 | 0.009034 |
| 64 | | | | | | | | | | | | | | | |
| 65 | | | | | | | | | | | | | | | |
| 66 | **Revenue Related** | | | | | | | | | | | | | | |
| 67 | Present Rate Revenue | 29 | R1 | 1.000000 | 0.373719 | 0.018627 | 0.043643 | 0.411350 | 0.013105 | 0.084826 | 0.004684 | 0.015242 | 0.008438 | 0.000288 | 0.026078 |
| 68 | Proposed Rate Revenue | 30 | R2 | 1.000000 | 0.377742 | 0.018818 | 0.044131 | 0.406602 | 0.013105 | 0.084826 | 0.004731 | 0.015242 | 0.008438 | 0.000288 | 0.026078 |
| 69 | | | | | | | | | | | | | | | |
| 70 | **Consumer Related** | | | | | | | | | | | | | | |
| 71 | No. of Cons. | 32 | C1 | 1.000000 | 0.553429 | 0.026267 | 0.116641 | 0.065171 | 0.002823 | 0.000783 | 0.006470 | 0.003266 | 0.001897 | 0.000266 | 0.222987 |
| 72 | Pri. Line Weight. Cons. | 34 | C2 | 1.000000 | 0.672195 | 0.031904 | 0.158378 | 0.107066 | 0.004637 | 0.001500 | 0.008781 | 0.006164 | 0.003636 | 0.000323 | 0.005417 |
| 73 | Transf. Weight. Cons. | 36 | C3 | 1.000000 | 0.672258 | 0.031907 | 0.158362 | 0.107024 | 0.004635 | 0.001499 | 0.008781 | 0.006160 | 0.003634 | 0.000323 | 0.005417 |
| 74 | Services Weight. Cons. | 38 | C4 | 1.000000 | 0.675281 | 0.032051 | 0.157596 | 0.105036 | 0.004549 | 0.001457 | 0.008738 | 0.005994 | 0.003532 | 0.000325 | 0.005442 |
| 75 | Meter Weight. Cons. | 40 | C5 | 1.000000 | 0.673691 | 0.031975 | 0.153098 | 0.100819 | 0.004367 | 0.004031 | 0.010191 | 0.010169 | 0.005907 | 0.000324 | 0.005429 |
| 76 | Cons. Acct. Weight. Cons. | 42 | C6 | 1.000000 | 0.673691 | 0.031975 | 0.153098 | 0.100819 | 0.004367 | 0.004031 | 0.010191 | 0.010169 | 0.005907 | 0.000324 | 0.005429 |

**Southern Pioneer Electric Company**
**Monthly Rate Comparison**
**HPS vs. LED**

**Current HPS Lights - SPECo Owned**

| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) |
|---|---|---|---|---|---|---|---|---|
| High Pressure Sodium | kWh Usage | kWh Usage with Line Loss | Direct Power Cost [1] | Direct O&M [2] | Allocated Costs & Margin [3] | Direct Capital Costs [4] | Calculated rate [5] | Rate Book Comparison [6] |
| 100 W HPS - Existing Pole | 40 | 42 | $ 2.33 | $ 2.19 | $ 4.41 | $ 2.94 | $ 11.88 | $ 12.09 |
| 200 W HPS Cobra - Existing Pole | 80 | 85 | $ 4.66 | $ 2.19 | $ 6.36 | $ 2.94 | $ 16.16 | $ 19.92 |
| 400 W HPS Cobra - Existing Pole | 160 | 169 | $ 9.33 | $ 2.19 | $ 10.25 | $ 2.94 | $ 24.71 | $ 28.27 |

**LED Lights - SPECo Owned**

| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) |
|---|---|---|---|---|---|---|---|---|
| LED | kWh Usage | kWh Usage with Line Loss | Direct Power Cost [1] | Direct O&M [2] | Allocated Costs & Margin [3] | Direct Capital Costs [4] | Calculated rate [5] | Rate Book Comparison [6] |
| 48 W LED - Existing Pole | 19 | 20 | $ 1.12 | $ 2.19 | $ 3.40 | $ 6.03 | $ 12.74 | $ 12.09 |
| 108 W LED - Existing Pole | 43 | 46 | $ 2.52 | $ 2.19 | $ 4.57 | $ 9.41 | $ 18.69 | $ 19.92 |
| 215 W LED - Existing Pole | 86 | 91 | $ 5.01 | $ 2.19 | $ 6.65 | $ 17.03 | $ 30.88 | $ 28.27 |

[1] Based on 2017 MKEC power costs per kWh sold.
[2] Per 2017 Cost of Service Study: Average O&M costs directly related to lighting.
[3] Per 2017 Cost of Service Study: Allocated customer, O&M, and capital costs per light and distribution capacity costs per kWh.
[4] Direct capital costs based on aggregated cost of HPS lights (COS) or cost of new LED light.
[5] Column D plus Column E plus Column F plus Column G
[6] Per 18-PAL-SL-I

**Southern Pioneer Electric Company**
**Monthly Rate Comparison**
**HPS vs. LED**

**Current Flood Lights**

| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) |
|---|---|---|---|---|---|---|---|---|
| High Pressure Sodium | kWh Usage | kWh Usage with Line Loss | Direct Power Cost [1] | Direct O&M [2] | Allocated Costs & Margin [3] | Direct Capital Costs [4] | Calculated rate [5] | Rate Book Comparison [6] |
| 150 W HPS - Existing Pole | 60 | 63 | $ 3.50 | $ 2.19 | $ 5.39 | $ 2.94 | $ 14.02 | $ 22.28 |
| 400 W HPS - Existing Pole | 160 | 169 | $ 9.33 | $ 2.19 | $ 10.25 | $ 2.94 | $ 24.71 | $ 42.42 |
| 1000 W MH - Existing Pole | 402 | 425 | $ 23.43 | $ 2.19 | $ 22.04 | $ 2.94 | $ 50.60 | $ 67.56 |

**LED Lights**

| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) |
|---|---|---|---|---|---|---|---|---|
| LED | kWh Usage | kWh Usage with Line Loss | Direct Power Cost [1] | Direct O&M [2] | Allocated Costs & Margin [3] | Direct Capital Costs [4] | Calculated rate [5] | Rate Book Comparison [6] |
| 43 W LED - Existing Pole | 16 | 17 | $ 0.93 | $ 2.19 | $ 3.24 | $ 8.98 | $ 15.34 | $ 22.28 |
| 140 W LED - Existing Pole | 56 | 59 | $ 3.26 | $ 2.19 | $ 5.19 | $ 11.83 | $ 22.48 | $ 42.42 |
| 459 W LED - Existing Pole | 185 | 195 | $ 10.76 | $ 2.19 | $ 11.45 | $ 20.09 | $ 44.49 | $ 67.56 |

[1] Based on 2017 MKEC power costs.
[2] Per 2017 Cost of Service Study: Average O&M costs directly related to lighting.
[3] Per 2017 Cost of Service Study: Allocated customer, O&M, and capital costs per light and distribution capacity costs per kWh.
[4] Direct capital costs based on aggregated cost of HPS lights (COS) or cost of new LED light.
[5] Column D plus Column E plus Column F plus Column G
[6] Per 18-PAL-SL-I

# Southern Pioneer Electric Company

## Grid Access Charge: Cost of Service and Rate Design

| (a) | (b) | | | (c) | (d) | (e) | (f) | (g) | (h) |
|---|---|---|---|---|---|---|---|---|---|
| Line | Description | | | Residential General Service (18-RS) | General Service Small (18-GSS) | General Service Large (18-GSL) | Industrial Service (18-IS) | Irrigation (18-IP-I) | Notes |
| | **Summary** | | | | | | | | |
| 1 | **Grid Access Charge per kW (DC nameplate rating)** | | | | | | | | |
| 2 | | Year 1 | | **$ 7.36** | **$ 4.97** | **$ 1.89** | **$ 1.36** | **$ 4.79** | per kW (DC) |
| 3 | | Year 2 | | **$ 7.36** | **$ 5.21** | **$ 1.89** | **$ 1.36** | **$ 4.79** | per kW (DC) |
| 4 | | Year 3 | | **$ 7.36** | **$ 5.42** | **$ 1.89** | **$ 1.36** | **$ 4.79** | per kW (DC) |
| 5 | **Not-to-Exceed** * | | | | | | | | |
| 6 | | Year 1 | | **$ 41.00** | **$ 14.00** | **$ 110.00** | **$ 1,540.00** | **$ 173.00** | per Customer per Month |
| 7 | | Year 2 | | **$ 41.00** | **$ 15.00** | **$ 110.00** | **$ 1,540.00** | **$ 173.00** | per Customer per Month |
| 8 | | Year 3 | | **$ 41.00** | **$ 15.00** | **$ 110.00** | **$ 1,540.00** | **$ 173.00** | per Customer per Month |

* Equivalent to 5.6 kW DG installation for RS, 2.8 kW for GSS, 58.1 kW for GSL, 1,129.9 kW for IS, 36.1 kW for IP (DC)

**Cost of Service and Rate Design Analysis**

1. Cost of Service Study: Distribution Fixed Costs Not Recovered by Rate

| | | | | RS | GSS | GSL | IS | IP | |
|---|---|---|---|---|---|---|---|---|---|
| 9 | Annual Revenue Requirements per CCOS | | | $17,531,674 | $ 1,928,483 | ######### | $ 3,540,287 | $ 357,274 | CCOS Summary, Exhibit PSE-4, Pg. 1, L2 |
| 10 | Less: Under-recovery compared to CCOS (Proposed Rates)** | | | | | | | | |
| 11 | | Year 1 | - | $ 1,355,885 | $ 38,699 | $ - | $ - | $ - | Comparison of Present and Proposed Schedules, Exhibit PSE-8, Pg. 1 |
| 12 | | Year 2 | - | $ 1,183,658 | $ 17,810 | $ - | $ - | $ - | Comparison of Present and Proposed Schedules, Exhibit PSE-8, Pg. 1 |
| 13 | | Year 3 | - | $ 1,011,430 | $ - | $ - | $ - | $ - | Comparison of Present and Proposed Schedules, Exhibit PSE-8, Pg. 1 |
| 14 | Less: Annual Purchased Power Expense | | - | $ 8,103,150 | $ 786,314 | $9,133,202 | $ 1,994,457 | $ 168,910 | CCOS Summary, Exhibit PSE-4, Pg. 2, L19 + L23 + L29 less SPECo Transmission O&M |
| 15 | Equal: Annual Distribution Fixed Costs | | | | | | | | |
| 16 | | Year 1 | = | $ 8,072,638 | $ 1,103,470 | $7,018,613 | $ 1,545,830 | $ 188,364 | Line 9 - Line 11 - Line 14 |
| 17 | | Year 2 | = | $ 8,244,866 | $ 1,124,359 | $7,018,613 | $ 1,545,830 | $ 188,364 | Line 9 - Line 12 - Line 14 |
| 18 | | Year 3 | = | $ 8,417,094 | $ 1,142,169 | $7,018,613 | $ 1,545,830 | $ 188,364 | Line 9 - Line 13 - Line 14 |
| 19 | Less: Annual Customer Charge Revenue | | | | | | | | |
| 20 | | Year 1 | - | $ 2,148,539 | $ 678,788 | $ 700,715 | $ 20,736 | $ - | Proposed Customer Charge x customers x 12 months |
| 21 | | Year 2 | - | $ 2,320,767 | $ 678,788 | $ 700,715 | $ 20,736 | $ - | Proposed Customer Charge x customers x 12 months |
| 22 | | Year 3 | - | $ 2,492,995 | $ 678,788 | $ 700,715 | $ 20,736 | $ - | Proposed Customer Charge x customers x 12 months |
| 23 | Less: Annual Demand Charge Revenue (Distribution portion) | | - | | | $4,458,092 | $ 1,212,404 | $ 103,425 | Capacity-related Per Unit Cost (Distribution component) x Billing Demand |
| 24 | Equal: Distribution Fixed Costs Recovered in Energy Rate | | | | | | | | |
| 25 | | Year 1 | = | $ 5,924,099 | $ 424,683 | $1,859,805 | $ 312,690 | $ 84,938 | Line 16 - Line 20 - Line 23 |
| 26 | | Year 2 | = | $ 5,924,099 | $ 445,571 | $1,859,805 | $ 312,690 | $ 84,938 | Line 17 - Line 21 - Line 23 |
| 27 | | Year 3 | = | $ 5,924,099 | $ 463,381 | $1,859,805 | $ 312,690 | $ 84,938 | Line 18 - Line 22 - Line 23 |
| 28 | Divide By: Annual Energy Sales (kWh) | | ÷ | 106,883,802 | 11,352,578 | ######### | 30,481,488 | 2,357,658 | Revenue Requirement, Exhibit PSE-2, Pg.3 |
| 29 | Equal: Distribution Fixed Costs Recovered in Energy Rate | | | | | | | | |
| 30 | | Year 1 | = | $ 0.0554 | $ 0.0374 | $ 0.0143 | $ 0.0103 | $ 0.0360 | Line 25 ÷ Line 28 |
| 31 | | Year 2 | = | $ 0.0554 | $ 0.0392 | $ 0.0143 | $ 0.0103 | $ 0.0360 | Line 26 ÷ Line 28 |
| 32 | | Year 3 | = | $ 0.0554 | $ 0.0408 | $ 0.0143 | $ 0.0103 | $ 0.0360 | Line 27 ÷ Line 28 |
| 33 | | | | | | | | | |
| 34 | 2. Conversion to per kW Rate | | | | | | | | |
| 35 | Times: DG Capacity Factor (per DC rating) | | x | 18% | 18% | 18% | 18% | 18% | Per NREL PVWatts |
| 36 | Times: Average Hours per Month | | x | 730 | 730 | 730 | 730 | 730 | 365 x 24 ÷ 12 |
| 37 | **Equal: Monthly Rate per DC Nameplate Rating kW-mo.** | | | | | | | | |
| 38 | | Year 1 | = | **$ 7.36** | **$ 4.97** | **$ 1.89** | **$ 1.36** | **$ 4.79** | Line 30 x Line 35 x Line 36 |
| 39 | | Year 2 | = | **$ 7.36** | **$ 5.21** | **$ 1.89** | **$ 1.36** | **$ 4.79** | Line 31 x Line 35 x Line 36 |
| 40 | | Year 3 | = | **$ 7.36** | **$ 5.42** | **$ 1.89** | **$ 1.36** | **$ 4.79** | Line 32 x Line 35 x Line 36 |
| 41 | | | | | | | | | |
| 42 | | | | | | | | | |
| 43 | 3. Monthly Charge Cap per DG Customer | | | | | | | | |
| 44 | Monthly Distribution Fixed Costs | | | | | | | | |
| 45 | | Year 1 | | $ 672,720 | $ 91,956 | $ 584,884 | $ 128,819 | $ 15,697 | Line 16 divided by 12 |
| 46 | | Year 2 | | $ 687,072 | $ 93,697 | $ 584,884 | $ 128,819 | $ 15,697 | Line 17 divided by 12 |
| 47 | | Year 3 | | $ 701,424 | $ 95,181 | $ 584,884 | $ 128,819 | $ 15,697 | Line 18 divided by 12 |
| 48 | Divide By: Number of Customers | | ÷ | 11,960 | 2,521 | 1,408 | 17 | 41 | Revenue Requirement, Exhibit PSE-2, Pg.3 |
| 49 | Equal: Distribution Fixed Costs per Customer (or per HP) per Month | | | | | | | | |
| 50 | | Year 1 | = | $ 56.25 | $ 36.48 | $ 415.28 | $ 7,614.93 | $ 382.85 | Line 45 ÷ Line 48 |
| 51 | | Year 2 | = | $ 57.45 | $ 37.17 | $ 415.28 | $ 7,614.93 | $ 382.85 | Line 46 ÷ Line 48 |
| 52 | | Year 3 | = | $ 58.65 | $ 37.76 | $ 415.28 | $ 7,614.93 | $ 382.85 | Line 47 ÷ Line 48 |
| 53 | Less: Current Monthly Customer Charge | | | | | | | | |
| 54 | | Year 1 | - | $ 14.97 | $ 22.44 | $ 41.46 | $ 102.15 | $ - | Proposed Rate Schedules, Exhibit PSE-8, Pg.6-8 |
| 55 | | Year 2 | - | $ 16.17 | $ 22.44 | $ 41.46 | $ 102.15 | $ - | Proposed Rate Schedules, Exhibit PSE-8, Pg.6-8 |
| 56 | | Year 3 | - | $ 17.37 | $ 22.44 | $ 41.46 | $ 102.15 | $ - | Proposed Rate Schedules, Exhibit PSE-8, Pg.6-8 |
| 57 | Less: Monthly Demand Charge - Distribution Component | | - | $ - | $ - | $ 263.78 | $ 5,972.43 | $ 210.21 | Line 23 ÷ Line 48 ÷ 12 |
| 58 | Equal: Monthly Charge Cap | | | | | | | | |
| 59 | | Year 1 | = | $ 41.28 | $ 14.04 | $ 110.04 | $ 1,540.35 | $ 172.64 | Line 50 - Line 54 - Line 57 |
| 60 | | Year 2 | = | $ 41.28 | $ 14.73 | $ 110.04 | $ 1,540.35 | $ 172.64 | Line 51 - Line 55 - Line 57 |
| 61 | | Year 3 | = | $ 41.28 | $ 15.32 | $ 110.04 | $ 1,540.35 | $ 172.64 | Line 52 - Line 56 - Line 57 |
| 62 | **Equal: Monthly Charge Cap - Rounded** | | | | | | | | |
| 63 | | Year 1 | = | $ 41.00 | $ 14.00 | $ 110.00 | $ 1,540.00 | $ 173.00 | Round Line 59 |
| 64 | | Year 2 | = | $ 41.00 | $ 15.00 | $ 110.00 | $ 1,540.00 | $ 173.00 | Round Line 60 |
| 65 | | Year 3 | = | $ 41.00 | $ 15.00 | $ 110.00 | $ 1,540.00 | $ 173.00 | Round Line 61 |

** Applies only in cases where under-recovery exists. For classes/in years where there is already over-recovery present, taking the difference between COS Revenue Requirement and Targeted Rate revenues into account would result in a higher than necessary GAC.

# Statement of Operations
## Proposed Rates
## For the Test Year Ended December 31, 2017

| (a) Line No. | (b) Description | (c) Historical Test Year [1] | (d) Pro Forma Test Year Present Rates | (f) Pro Forma Test Year Proposed Rates |
|---|---|---|---|---|
| 1 | **Operating Revenue** | | | |
| 2 | Retail Electricity Sales | $ 67,508,951 | $ 68,808,760 | $ 68,808,760 [2] |
| 3 | Wholesale Electricity Sales | $ 1,931,977 | $ 2,142,184 | $ 2,142,184 |
| 4 | Other Operating Revenue | $ 305,461 | $ 305,461 | $ 305,461 |
| 5 | **Total Operating Revenue** | $ 69,746,389 | $ 71,256,405 | $ 71,256,405 |
| 6 | | | | |
| 7 | **Operating Expenses** | | | |
| 8 | Cost of Purchased Power | 46,935,849 | 46,935,849 | 46,935,849 |
| 9 | Transmission - O & M | 1,293,444 | 1,293,444 | 1,293,444 |
| 10 | Distribution - Operation | 4,203,913 | 4,195,093 | 4,195,093 |
| 11 | Distribution - Maintenance | 1,705,676 | 1,705,676 | 1,705,676 |
| 12 | Consumer Accounts | 1,211,640 | 1,211,103 | 1,211,103 |
| 13 | Consumer Service & Information | 234,008 | 212,257 | 212,257 |
| 14 | Sales | 23,324 | 6,649 | 6,649 |
| 15 | Administrative & General | 2,121,868 | 2,086,076 | 2,086,076 |
| 16 | Depreciation & Amortization | 3,283,133 | 3,064,894 | 3,064,894 |
| 17 | Taxes - Property | - | - | - |
| 18 | Taxes - Other | (1,281,817) | (51,878) | (51,878) |
| 19 | Interest on Long Term Debt | 5,517,278 | 5,625,339 | 5,625,339 |
| 20 | Other Interest Expense | 113,020 | 108,337 | 108,337 |
| 21 | Other Deductions [2] | 895,163 | 861,019 | 861,019 |
| 22 | **Total Operating Expenses** | $ 66,256,499 | $ 67,253,857 | $ 67,253,857 |
| 23 | **Net Operating Margins** | $ 3,489,890 | $ 4,002,548 | $ 4,002,548 |

[1] Reference page 1 of Exhibit PSE-2.

[2] Reference Schedule A for an estimate of the Pro Forma Test Year revenue under proposed rates.

**Schedule A**
**Summary of Consumers, Energy Sales, and**
**Revenue Under Proposed Rates**

**I. Consumer and Sales Data for Pro Forma Test Year**

| (a) Line No. | (b) Description | (c) Avg. No. Cons. [1] | (d) Energy Sales [1] | (e) Billing Demand [1] | (f) Rate Schedule Revenue [2] Year 1 | (g) Year 2 | (h) Year 3 |
|---|---|---|---|---|---|---|---|
| | | | (kWh) | (kW) | ($) | ($) | ($) |
| 1 | Residential Service (19-RS) | | | | | | |
| 2 | General Use | 11,960 | 106,883,802 | N.A. | 16,174,693 | 16,346,921 | 16,519,148 |
| 3 | Space Heating | 568 | 5,790,181 | N.A. | 805,788 | 813,962 | 822,136 |
| 4 | General Service Small (19-GSS) | 2,521 | 11,352,578 | N.A. | 1,889,656 | 1,910,545 | 1,931,434 |
| 5 | General Service Large (19-GSL) | 1,408 | 130,420,192 | 390,065.4 | 17,410,495 | 17,207,190 | 17,003,886 |
| 6 | General Service Space Heating (Rider No. 1) | 61 | 5,013,974 | 10,000.2 | 561,145 | 561,145 | 561,145 |
| 7 | Industrial Service (19-IS) | 17 | 30,481,488 | 98,984.6 | 3,632,202 | 3,632,202 | 3,632,202 |
| 8 | Industrial Service-Primary Discount | - | - | - | - | - | - |
| 9 | Real -Time Pricing (13-RTP) | 1 | 390,457 | N.A. | 33,528 | 33,528 | 33,528 |
| 10 | Transmission Level Service (18-STR) | 6 | 447,734,214 | 652,632.6 | 26,258,290 | 26,258,290 | 26,258,290 |
| 11 | Municipal Power Service (19-M-I) | 140 | 1,411,591 | N.A. | 202,559 | 204,573 | 206,586 |
| 12 | Water Pumping Service (19-WP) | 71 | 5,244,505 | N.A. | 652,651 | 652,651 | 652,651 |
| 13 | Irrigation Service (19-IP-I) | 41 | 2,357,658 | N.A. | 361,292 | 361,292 | 361,292 |
| 14 | Temporary Service (19-CS) | 6 | 50,207 | N.A. | 12,350 | 12,350 | 12,350 |
| 15 | Lighting | 4,819 | 3,947,867 | N.A. | 1,116,641 | 1,116,641 | 1,116,641 |
| 16 | **Total** [3] | 16,799 | 751,078,714 | 1,151,682.7 | 69,111,289 | 69,111,289 | 69,111,289 |
| 17 | | | | | | | |
| 18 | Unbilled (prior/current mo.) | | | | (444,182) | (444,182) | (444,182) |
| 19 | 2017 ACA under-recovery as accounted for in 2018 DSC-FBR | | | | 141,653 | 141,653 | 141,653 |
| 20 | Total Retail | | | | 68,808,760 | 68,808,760 | 68,808,760 |
| 21 | 3rd Party Wholesale | | | | 2,142,184 | 2,142,184 | 2,142,184 |
| 22 | | | | | 305,461 | 305,461 | 305,461 |
| 23 | Grand Total | | | | 71,256,405 | 71,256,405 | 71,256,405 |

[1] Using historical billing units from 2017.

[2] Reference Schedule A, pages 3 - 7.

[3] Total number of consumers excludes Lighting. Total revenues exclude revenues from wholesale LADS customers.

**Schedule A**
**Summary of Consumers, Energy Sales, and**
**Revenue Under Proposed Rates**
(Continued)

**II. Estimate of Pro Forma Test Year Revenue Under Proposed Rates**

| Rate Class | Billing Determinants | Units | Year 1 Rate | Year 1 Revenue | Year 2 Rate | Year 2 Revenue | Year 3 Rate | Year 3 Revenue |
|---|---|---|---|---|---|---|---|---|
| **Residential Service (19-RS)** | | | | ($) | | ($) | | ($) |
| **General Use** | | | | | | | | |
| Customer Charge | 11,960 | cons | $14.97 | 2,148,539 | $16.17 | 2,320,767 | $17.37 | 2,492,995 |
| Delivery Charge | | | | | | | | |
| Summer (Jul-Oct) | 47,033,092 | kWh | $0.13155 | 6,187,203 | $0.13155 | 6,187,203 | $0.13155 | 6,187,203 |
| Winter (Nov-Jun) | 59,850,710 | kWh | $0.12055 | 7,215,003 | $0.12055 | 7,215,003 | $0.12055 | 7,215,003 |
| Energy Cost Adjustment | 106,883,802 | kWh | $0.00185 | 197,503 | $0.00185 | 197,503 | $0.00185 | 197,503 |
| Property Tax Surcharge | 106,883,802 | kWh | | 426,444 | | 426,444 | | 426,444 |
| | | | | 16,174,693 | | 16,346,921 | | 16,519,148 |
| **Space Heating** | | | | | | | | |
| Customer Charge | 568 | cons | $14.97 | 101,976 | $16.17 | 110,150 | $17.37 | 118,324 |
| Delivery Charge | | | | | | | | |
| Summer - All kWh | 1,491,709 | kWh | $0.13155 | 196,234 | $0.13155 | 196,234 | $0.13155 | 196,234 |
| Winter (Nov-Jun) | | | | | | | | |
| Heating Block (800-5800 kWh) | 1,461,515 | kWh | $0.10232 | 149,539 | $0.10232 | 149,539 | $0.10232 | 149,539 |
| Other | 2,836,957 | kWh | $0.12055 | 341,995 | $0.12055 | 341,995 | $0.12055 | 341,995 |
| Energy Cost Adjustment | 5,790,181 | kWh | ($0.00114) | (6,607) | ($0.00114) | (6,607) | ($0.00114) | (6,607) |
| Property Tax Surcharge | 5,790,181 | kWh | | 22,650 | | 22,650 | | 22,650 |
| | | | | 805,788 | | 813,962 | | 822,136 |
| **General Service Small (19-GSS)** | | | | | | | | |
| Customer Charge | 2,521 | cons | $22.44 | 678,788 | $22.44 | 678,788 | $22.44 | 678,788 |
| Delivery Charge | | | | | | | | |
| Summer (Jul-Oct) | 3,987,908 | kWh | $0.10916 | 435,320 | $0.11100 | 442,658 | $0.11284 | 449,996 |
| Winter (Nov-Jun) | 7,364,670 | kWh | $0.09816 | 722,916 | $0.10000 | 736,467 | $0.10184 | 750,018 |
| Energy Cost Adjustment | 11,352,578 | kWh | $0.00066 | 7,500 | $0.00066 | 7,500 | $0.00066 | 7,500 |
| Property Tax Surcharge | 11,352,578 | kWh | | 45,132 | | 45,132 | | 45,132 |
| | | | | 1,889,656 | | 1,910,545 | | 1,931,434 |
| **General Service Large (19-GSL)** | | | | | | | | |
| Customer Charge | 1,408 | cons | $41.46 | 700,715 | $41.46 | 700,715 | $41.46 | 700,715 |
| Minimum Charge | | | | $698,310 | | $698,310 | | $698,310 |
| Demand Charge per kW>9 | | | | | | | | |
| Summer (Jul-Oct) | 144,146.8 | kW | $12.69 | 1,829,223 | $12.69 | 1,829,223 | $12.69 | 1,829,223 |
| Winter (Nov-Jun) | 245,918.6 | kW | $10.69 | 2,628,869 | $10.69 | 2,628,869 | $10.69 | 2,628,869 |
| Delivery Charge | 130,420,192 | kWh | $0.08369 | 10,915,017 | $0.08213 | 10,711,713 | $0.08057 | 10,508,408 |
| Energy Cost Adjustment | 130,420,192 | kWh | $0.00090 | 117,605 | $0.00090 | 117,605 | $0.00090 | 117,605 |
| Property Tax Surcharge | 130,420,192 | kWh | | 520,755 | | 520,755 | | 520,755 |
| | | | | 17,410,495 | | 17,207,190 | | 17,003,886 |
| **General Service Space Heating (Rider No. 1)** | | | | | | | | |
| Customer Charge | 61 | cons | $41.46 | 18,408 | $41.46 | 18,408 | $41.46 | 18,408 |
| Demand Charge | | | | | | | | |
| Summer (Jul-Oct) | 4,801.3 | kW | $12.69 | 60,928 | $12.69 | 60,928 | $12.69 | 60,928 |
| Winter (Nov-Jun) | 5,198.9 | kW | $10.69 | 55,576 | $10.69 | 55,576 | $10.69 | 55,576 |
| Energy Charge | | | | | | | | |
| GSL | 3,146,260 | kWh | $0.08369 | 263,314 | $0.08369 | 263,314 | $0.08369 | 263,314 |
| Heating | 1,867,714 | kWh | $0.07530 | 140,631 | $0.07530 | 140,631 | $0.07530 | 140,631 |
| Energy Cost Adjustment | 5,013,974 | kWh | $0.00049 | 2,441 | $0.00049 | 2,441 | $0.00049 | 2,441 |
| Property Tax Surcharge | 5,013,974 | kWh | | 19,846 | | 19,846 | | 19,846 |
| | | | | 561,145 | | 561,145 | | 561,145 |

**Schedule A**
**Summary of Consumers, Energy Sales, and**
**Revenue Under Proposed Rates**
(Continued)

**II. Estimate of Pro Forma Test Year Revenue Under Proposed Rates**

| | Billing | | Year 1 | | Year 2 | | Year 3 | |
|---|---|---|---|---|---|---|---|---|
| **Rate Class** | **Determinants** | **Units** | **Rate** | **Revenue** | **Rate** | **Revenue** | **Rate** | **Revenue** |
| **Industrial Service (18-IS)** | | | | ($) | | ($) | | ($) |
| Customer Charge | 17 | cons | $102.15 | 20,736 | $102.15 | 20,736 | $102.15 | 20,736 |
| Demand Charge per kW>10 | | | | | | | | |
| Summer (Jul-Oct) | 35,252.1 | kW | $14.18 | 499,874 | $14.18 | 499,874 | $14.18 | 499,874 |
| Winter (Nov-Jun) | 63,732.5 | kW | $11.18 | 712,529 | $11.18 | 712,529 | $11.18 | 712,529 |
| Delivery Charge | 30,481,488 | kWh | $0.07433 | 2,265,689 | $0.07433 | 2,265,689 | $0.07433 | 2,265,689 |
| Energy Cost Adjustment | 30,481,488 | kWh | $0.00039 | 11,874 | $0.00039 | 11,874 | $0.00039 | 11,874 |
| Property Tax Surcharge | 30,481,488 | kWh | | 121,500 | | 121,500 | | 121,500 |
| Feb-Dec | | /kWh | $0.00407 | 3,632,202 | | 3,632,202 | | 3,632,202 |
| **Real -Time Pricing (13-RTP)** | | | | | | | | |
| Customer Charge | 1 | cons | $251.55 | 3,019 | $251.55 | 3,019 | $251.55 | 3,019 |
| Delivery Charge | 390,457 | kWh | $0.07814 | 30,509 | $0.07814 | 30,509 | $0.07814 | 30,509 |
| | | | | 33,528 | | 33,528 | | 33,528 |
| **Transmission Level Service (18-STR)** | | | | | | | | |
| **Service at 34.5 kV Voltage** | | | | | | | | |
| Customer Charge | 2 | cons | $116.52 | 2,796 | $116.52 | 2,796 | $116.52 | 2,796 |
| Local Access Charge | 3,733 | kW | $5.00 | 18,665 | $5.00 | 18,665 | $5.00 | 18,665 |
| Delivery Energy Charge | 2,374,220 | kWh | $0.001940 | 4,606 | $0.001940 | 4,606 | $0.001940 | 4,606 |
| Property Tax Surcharge | 2,374,220 | kWh | | 155 | | 155 | | 155 |
| Wholesale Power Cost (2017 Historical) | | | | | | | | |
| Demand (WHM kW) | | | | | | | | |
| Summer | 935 | kW | $13.62 | 12,741 | $13.62 | 12,741 | $13.62 | 12,741 |
| Other | | | | | | | | |
| Jan-May, Sep | 1,952 | kW | $8.47 | 16,536 | $8.47 | 16,536 | $8.47 | 16,536 |
| Oct-Dec | 1,178 | kW | $7.96 | 9,376 | $7.96 | 9,376 | $7.96 | 9,376 |
| Energy | - | | | | | | | |
| Jan - Sep | 1,728,303 | kWh | $0.015282 | 26,412 | $0.015282 | 26,412 | $0.015282 | 26,412 |
| Oct-Dec | 645,917 | kWh | $0.014358 | 9,274 | $0.014358 | 9,274 | $0.014358 | 9,274 |
| Energy Cost Adjustment | 2,374,220.0 | kWh | $0.022154 | 52,599 | $0.022154 | 52,599 | $0.022154 | 52,599 |
| Transmission | | | | 10,921 | | 10,921 | | 10,921 |
| HLF Rider | | | | 1,815 | | 1,815 | | 1,815 |
| FCC Rider | | | | 330 | | 330 | | 330 |
| Make Whole Payment (MWP) | | | | 44 | | 44 | | 44 |
| **Service at 115 kV Voltage** | | | | | | | | |
| Customer Charge | 4 | cons | $116.52 | 5,593 | $116.52 | 5,593 | $116.52 | 5,593 |
| Delivery Energy Charge | 445,359,994 | kW | $0.001940 | 863,998 | $0.001940 | 863,998 | $0.001940 | 863,998 |
| Property Tax Surcharge | 445,359,994 | kW | | 28,986 | | 28,986 | | 28,986 |
| PF Charge | | | | 18,364 | | 18,364 | | 18,364 |
| Wholesale Power Cost (2017 Historical) | | | | | | | | |
| Demand | | | | | | | | |
| Summer | 167,235 | kW | $13.62 | 2,277,741 | $13.62 | 2,277,741 | $13.62 | 2,277,741 |
| Other | | | | | | | | |
| Jan-May, Sep | 316,330.3 | kW | $8.47 | 2,679,317 | $8.47 | 2,679,317 | $8.47 | 2,679,317 |
| Oct-Dec | 165,001.8 | kW | $7.96 | 1,313,414 | $7.96 | 1,313,414 | $7.96 | 1,313,414 |
| Energy | | | | | | | | |
| Jan - Sep | 330,616,079 | kWh | $0.015282 | 5,052,475 | $0.015282 | 5,052,475 | $0.015282 | 5,052,475 |
| Oct-Dec | 114,743,915 | kWh | $0.014358 | 1,647,493 | $0.014358 | 1,647,493 | $0.014358 | 1,647,493 |
| Energy Cost Adjustment | 445,359,994 | kWh | $0.021721 | 9,673,862 | $0.021721 | 9,673,862 | $0.021721 | 9,673,862 |
| Transmission | | | | 3,279,082 | | 3,279,082 | | 3,279,082 |
| HLF Rider | | | | (862,046) | | (862,046) | | (862,046) |
| FCC Rider | | | | 22,467 | | 22,467 | | 22,467 |
| Make Whole Payment (MWP) | | | | 158,673 | | 158,673 | | 158,673 |
| ECIR credits | | | | (67,400) | | (67,400) | | (67,400) |
| | | | | | | - | | - |
| Total STR | 447,734,214 | kWh | | 26,258,290 | | 26,258,290 | | 26,258,290 |

**Schedule A**
**Summary of Consumers, Energy Sales, and**
**Revenue Under Proposed Rates**
(Continued)

**II. Estimate of Pro Forma Test Year Revenue Under Proposed Rates**

| Rate Class | Billing Determinants | Units | Year 1 Rate | Year 1 Revenue | Year 2 Rate | Year 2 Revenue | Year 3 Rate | Year 3 Revenue |
|---|---|---|---|---|---|---|---|---|
| **Municipal Power Service (18-M-I)** | | | | ($) | | ($) | | ($) |
| Customer Charge | 140 | cons | $14.97 | 25,120 | $16.17 | 27,133 | $17.37 | 29,147 |
| Delivery Charge | | | | | | | | |
| Summer (Jul-Oct) | 622,653 | kWh | $0.12619 | 78,573 | $0.12619 | 78,573 | $0.12619 | 78,573 |
| Winter (Nov-Jun) | 788,938 | kWh | $0.11519 | 90,878 | $0.11519 | 90,878 | $0.11519 | 90,878 |
| Energy Cost Adjustment | 1,411,591 | kWh | $0.00166 | 2,346 | $0.00166 | 2,346 | $0.00166 | 2,346 |
| Property Tax Surcharge | 1,411,591 | kWh | | 5,642 | | 5,642 | | 5,642 |
| | | | | 202,559 | | 204,573 | | 206,586 |
| **Water Pumping Service (18-WP)** | | | | | | | | |
| Customer Charge | 71 | cons | $20.34 | 17,228 | $20.34 | 17,228 | $20.34 | 17,228 |
| Delivery Charge | | | | | | | | |
| Summer (Jul-Oct) | 2,139,778 | kWh | $0.12238 | 261,866 | $0.12238 | 261,866 | $0.12238 | 261,866 |
| Winter (Nov-Jun) | 3,104,727 | kWh | $0.11138 | 345,804 | $0.11138 | 345,804 | $0.11138 | 345,804 |
| Energy Cost Adjustment | 5,244,505 | kWh | $0.00129 | 6,792 | $0.00129 | 6,792 | $0.00129 | 6,792 |
| Property Tax Surcharge | 5,244,505 | kWh | | 20,961 | | 20,961 | | 20,961 |
| | | | | 652,651 | | 652,651 | | 652,651 |
| **Irrigation Service (18-IP-I)** | | | | | | | | |
| Demand Charge per horsepower contracted per month | 2,721 | /HP | $3.17 | 103,425 | $3.17 | 103,425 | $3.17 | 103,425 |
| Delivery Charge | | | | | | | | |
| Summer (Jul-Oct) | 1,934,258 | kWh | $0.09902 | 191,530 | $0.09902 | 191,530 | $0.09902 | 191,530 |
| Winter (Nov-Jun) | 423,400 | kWh | $0.08802 | 37,268 | $0.08802 | 37,268 | $0.08802 | 37,268 |
| Energy Cost Adjustment | 2,357,658 | kWh | $0.00826 | 19,466 | $0.00826 | 19,466 | $0.00826 | 19,466 |
| Property Tax Surcharge | 2,357,658 | kWh | | 9,603 | | 9,603 | | 9,603 |
| | | /kWh | $0.00407 | 361,292 | | 361,292 | | 361,292 |
| **Temporary Service (18-CS)** | | | | | | | | |
| Delivery Charge plus equipment service chg. | 50,207 | kWh | $0.24473 | 12,287 | $0.24473 | 12,287 | $0.24473 | 12,287 |
| Energy Cost Adjustment | 50,207 | kWh | ($0.00255) | (128) | ($0.00255) | (128) | ($0.00255) | (128) |
| Property Tax Surcharge | 50,207 | kWh | | 191 | | 191 | | 191 |
| | | | | 12,350 | | 12,350 | | 12,350 |
| **Private Area / Street Lighting (18-PAL-SL-I)** | | | | | | | | |
| **Private Area Light (Coop owned)** | | | | | | | | |
| On Existing Pole | | | | | | | | |
| 100 W P.A.L. Cust 0% | 892 | lights | $12.09 | 129,411 | $12.09 | 129,411 | $12.09 | 129,411 |
| 100 W P.A.L. Cust 100% | 9 | lights | $5.35 | 578 | $5.35 | 578 | $5.35 | 578 |
| 150 W P.A.L. Cust 0% | 29 | lights | $19.11 | 6,650 | $19.11 | 6,650 | $19.11 | 6,650 |
| 200 W P.A.L. Cust 0% | 12 | lights | $21.87 | 3,149 | $21.87 | 3,149 | $21.87 | 3,149 |
| 200 W P.A.L. Cust 50% | 1 | lights | $15.64 | 188 | $15.64 | 188 | $15.64 | 188 |
| On New Pole (Wood) | | | | | | | | |
| 100 W P.A.L. Cust 0% | 164 | lights | $19.33 | 38,041 | $19.33 | 38,041 | $19.33 | 38,041 |
| 100 W P.A.L. Cust 100% | 2 | lights | $5.82 | 140 | $5.82 | 140 | $5.82 | 140 |
| 150 W P.A.L. Cust 0% | 27 | lights | $21.97 | 7,118 | $21.97 | 7,118 | $21.97 | 7,118 |
| 200 W P.A.L. Cust 0% | 5 | lights | $24.04 | 1,442 | $24.04 | 1,442 | $24.04 | 1,442 |
| **Flood Lights** | | | | | | | | |
| On Existing Pole | | | | | | | | |
| 150 W Flood Cust 0% | 82 | lights | $22.28 | 21,924 | $22.28 | 21,924 | $22.28 | 21,924 |
| 400 W Flood Cust 0% | 204 | lights | $42.42 | 103,844 | $42.42 | 103,844 | $42.42 | 103,844 |
| 400 W Flood Cust 50% | 5 | lights | $30.14 | 1,808 | $30.14 | 1,808 | $30.14 | 1,808 |
| 400 W Flood Cust 100% | 4 | lights | $18.45 | 886 | $18.45 | 886 | $18.45 | 886 |
| 1000 W Flood M.H. Cust 0% | 39 | lights | $67.56 | 31,618 | $67.56 | 31,618 | $67.56 | 31,618 |
| 1000 W Flood M.H. Cust 100% | 3 | lights | $44.27 | 1,594 | $44.27 | 1,594 | $44.27 | 1,594 |
| On New Pole (Wood) | | | | | | | | |
| 150 W P.A.L. Cust 0% | 32 | lights | $24.92 | 9,569 | $24.92 | 9,569 | $24.92 | 9,569 |
| 400 W P.A.L. Cust 0% | 82 | lights | $44.47 | 43,758 | $44.47 | 43,758 | $44.47 | 43,758 |
| 400 W P.A.L. Cust 100% | 3 | lights | $18.63 | 671 | $18.63 | 671 | $18.63 | 671 |
| 1000 W Flood M.H. Cust 0% | 3 | lights | $87.41 | 3,147 | $87.41 | 3,147 | $87.41 | 3,147 |
| 1000 W Flood M.H. Cust 100% | 1 | lights | $43.12 | 517 | $43.12 | 517 | $43.12 | 517 |

**Schedule A**
**Summary of Consumers, Energy Sales, and**
**Revenue Under Present Rates**
(Continued)

**II. Estimate of Pro Forma Test Year Revenue Under Proposed Rates**

| Rate Class | Billing Determinants | Units | Year 1 Rate | Year 1 Revenue | Year 2 Rate | Year 2 Revenue | Year 3 Rate | Year 3 Revenue |
|---|---|---|---|---|---|---|---|---|
| **Private Area / Street Lighting (18-PAL-SL-I)** | | | | ($) | | ($) | | ($) |
| Continued | | | | | | | | |
| **Street Lights** | | | | | | | | |
| On Existing Pole | | | | | | | | |
| 100 W P.A.L. Cust 0% | 780 | lights | $13.28 | 124,301 | $13.28 | 124,301 | $13.28 | 124,301 |
| 100 W P.A.L. Cust 100% | 1 | lights | $5.44 | 65 | $5.44 | 65 | $5.44 | 65 |
| 150 W P.A.L. Cust 0% | 4 | lights | $16.05 | 770 | $16.05 | 770 | $16.05 | 770 |
| 200 W P.A.L. Cust 0% | 3 | lights | $19.92 | 717 | $19.92 | 717 | $19.92 | 717 |
| On New Pole (Wood) | | | | | | | | |
| 100 W P.A.L. Cust 0% | 257 | lights | $19.33 | 59,614 | $19.33 | 59,614 | $19.33 | 59,614 |
| 100 W P.A.L. Cust 100% | 1 | lights | $5.82 | 70 | $5.82 | 70 | $5.82 | 70 |
| 200 W P.A.L. Cust 0% | 1 | lights | $24.04 | 288 | $24.04 | 288 | $24.04 | 288 |
| On Existing Pole | | | | | | | | |
| 100 W Cobra Head Cust 0% | 64 | lights | $13.28 | 10,199 | $13.28 | 10,199 | $13.28 | 10,199 |
| 150 W Cobra Head Cust 0% | 43 | lights | $16.05 | 8,282 | $16.05 | 8,282 | $16.05 | 8,282 |
| 200 W Cobra Head Cust 0% | 109 | lights | $19.92 | 26,055 | $19.92 | 26,055 | $19.92 | 26,055 |
| 400 W Cobra Head Cust 0% | 28 | lights | $28.27 | 9,499 | $28.27 | 9,499 | $28.27 | 9,499 |
| 400 W Cobra Head Cust 100% | 31 | lights | $17.51 | 6,514 | $17.51 | 6,514 | $17.51 | 6,514 |
| On New Pole (Wood) | | | | | | | | |
| 100 W Cobra Head Cust 0% | 119 | lights | $22.40 | 31,987 | $22.40 | 31,987 | $22.40 | 31,987 |
| 150 W Cobra Head Cust 0% | 3 | lights | $24.63 | 887 | $24.63 | 887 | $24.63 | 887 |
| 200 W Cobra Head Cust 0% | 12 | lights | $26.28 | 3,784 | $26.28 | 3,784 | $26.28 | 3,784 |
| 250 W Cobra Head Cust 0% | 3 | lights | $29.56 | 1,064 | $29.56 | 1,064 | $29.56 | 1,064 |
| 250 W Cobra Head Cust 100% | 2 | lights | $12.46 | 299 | $12.46 | 299 | $12.46 | 299 |
| 400 W Cobra Head Cust 0% | 38 | lights | $35.60 | 16,234 | $35.60 | 16,234 | $35.60 | 16,234 |
| 400 W Cobra Head Cust 100% | 2 | lights | $18.40 | 442 | $18.40 | 442 | $18.40 | 442 |
| On New Pole (Steel) | | | | | | | | |
| 100 W Cobra Head Cust 0% | 1 | lights | $34.26 | 411 | $34.26 | 411 | $34.26 | 411 |
| 150 W Cobra Head Cust 0% | 18 | lights | $36.48 | 7,880 | $36.48 | 7,880 | $36.48 | 7,880 |
| 150 W Cobra Head Cust 100% | 16 | lights | $8.81 | 1,692 | $8.81 | 1,692 | $8.81 | 1,692 |
| 200 W Cobra Head Cust 0% | 77 | lights | $39.02 | 36,054 | $39.02 | 36,054 | $39.02 | 36,054 |
| 250 W Cobra Head Cust 0% | 34 | lights | $43.86 | 17,895 | $43.86 | 17,895 | $43.86 | 17,895 |
| 400 W Cobra Head Cust 100% | 13 | lights | $18.93 | 2,953 | $18.93 | 2,953 | $18.93 | 2,953 |
| **Security (Decorative) Lighting Service (18-DOL-I)** | | | | | | | | |
| **Acorn** | | | | | | | | |
| 100 W HPS Cust 50% | 8 | lights | $22.07 | 2,119 | $22.07 | 2,119 | $22.07 | 2,119 |
| **Shoebox** | | | | | | | | |
| 400 W HPS Cust 0% | 3 | lights | $61.20 | 2,203 | $61.20 | 2,203 | $61.20 | 2,203 |
| **Vapor Street Lighting Ornamental Service (18-OSL-V-I)** | | | | | | | | |
| 175 W MV | 328 | lights | $15.22 | 59,906 | $15.22 | 59,906 | $15.22 | 59,906 |
| 250 W MV | 10 | lights | $19.04 | 2,285 | $19.04 | 2,285 | $19.04 | 2,285 |
| 400 W MV | 64 | lights | $25.97 | 19,945 | $25.97 | 19,945 | $25.97 | 19,945 |
| 100 W HPS | 82 | lights | $13.28 | 13,068 | $13.28 | 13,068 | $13.28 | 13,068 |
| 150 W HPS | - | lights | $16.05 | - | $16.05 | - | $16.05 | - |
| 200 W HPS | 3 | lights | $19.92 | 717 | $19.92 | 717 | $19.92 | 717 |
| **Controlled Private Area Lighting (18-PAL-I) Frozen** | | | | | | | | |
| 175 W MV | 251 | lights | $14.04 | 42,288 | $14.04 | 42,288 | $14.04 | 42,288 |
| 400 W MV | 27 | lights | $27.93 | 9,049 | $27.93 | 9,049 | $27.93 | 9,049 |
| 400 W MV (Flood) | 46 | lights | $30.05 | 16,588 | $30.05 | 16,588 | $30.05 | 16,588 |
| 1000 W MV (Flood) | 9 | lights | $59.00 | 6,372 | $59.00 | 6,372 | $59.00 | 6,372 |
| 100 W HPS | 138 | lights | $12.09 | 20,021 | $12.09 | 20,021 | $12.09 | 20,021 |
| 200 W HPS | 17 | lights | $21.87 | 4,461 | $21.87 | 4,461 | $21.87 | 4,461 |
| 150 W HPS (Flood) | 60 | lights | $22.28 | 16,042 | $22.28 | 16,042 | $22.28 | 16,042 |
| 400 W HPS (Flood) | 59 | lights | $42.42 | 30,033 | $42.42 | 30,033 | $42.42 | 30,033 |

**Schedule A**
**Summary of Consumers, Energy Sales, and**
**Revenue Under Present Rates**
(Continued)

**II. Estimate of Pro Forma Test Year Revenue Under Proposed Rates**

| | Billing | | Year 1 | | Year 2 | | Year 3 | |
|---|---|---|---|---|---|---|---|---|
| **Rate Class** | **Determinants** | **Units** | **Rate** | **Revenue** | **Rate** | **Revenue** | **Rate** | **Revenue** |
| **Street Lighting Service Dusk to Dawn (18-SL-I)** | | | | ($) | | ($) | | ($) |
| MV 7000 lumen lamps | 455 | lights | $14.69 | 80,207 | $14.69 | 80,207 | $14.69 | 80,207 |
| Energy Cost Adjustment | 3,947,867 | kWh | $0.00040 | 1,565 | $0.00040 | 1,565 | $0.00040 | 1,565 |
| Property Tax Surcharge | 3,947,867 | kWh | | 15,761 | | 15,761 | | 15,761 |
| **Total Lighting** | 4,819 | lights | | 1,116,641 | | 1,116,641 | | 1,116,641 |
| **Grand Total (retail)** | 751,078,714 | kWh | | 69,111,289 | | 69,111,289 | | 69,111,289 |
| **Local Access Charge (18-LAC)** | | | | | | | | |
| Demand Charge | 386,556 | kW | $5.00 | 1,932,778 | $5.00 | 1,932,778 | $5.00 | 1,932,778 |
| Property Tax Surcharge | 386,556 | kW | 0.541725 | 209,407 | 0.541725 | 209,407 | 0.541725 | 209,407 |
| | | | | 2,142,184 | | 2,142,184 | | 2,142,184 |

**Comparison of Present and Proposed Rates**
**Annual Rate Schedule Revenue by Rate Class**

| (a) | (b) | (c) | (d) | (e) | (f) |
|---|---|---|---|---|---|
| | | | Rate Schedule Revenue | | |
| Line | | Present | Proposed Rates [2] | | |
| No. | Rate Class | Rates [1] | Year 1 | Year 2 | Year 3 |
| | | ($) | ($) | ($) | ($) |
| 1 | Residential Service (19-RS) | | | | |
| 2 | General Use | 16,002,466 | 16,174,693 | 16,346,921 | 16,519,148 |
| 3 | Space Heating | 797,613 | 805,788 | 813,962 | 822,136 |
| 4 | General Service Small (19-GSS) | 1,868,767 | 1,889,656 | 1,910,545 | 1,931,434 |
| 5 | General Service Large (19-GSL) | 17,613,799 | 17,410,495 | 17,207,190 | 17,003,886 |
| 6 | General Service Space Heating (Rider No. 1) | 561,145 | 561,145 | 561,145 | 561,145 |
| 7 | Industrial Service (19-IS) | 3,632,202 | 3,632,202 | 3,632,202 | 3,632,202 |
| 8 | Industrial Service-Primary Discount | - | - | - | - |
| 9 | Real -Time Pricing (13-RTP) | 33,528 | 33,528 | 33,528 | 33,528 |
| 10 | Transmission Level Service (18-STR) | 26,258,290 | 26,258,290 | 26,258,290 | 26,258,290 |
| 11 | Municipal Power Service (19-M-I) | 200,545 | 202,559 | 204,573 | 206,586 |
| 12 | Water Pumping Service (19-WP) | 652,651 | 652,651 | 652,651 | 652,651 |
| 13 | Irrigation Service (19-IP-I) | 361,292 | 361,292 | 361,292 | 361,292 |
| 14 | Temporary Service (19-CS) | 12,350 | 12,350 | 12,350 | 12,350 |
| 15 | Lighting | 1,116,641 | 1,116,641 | 1,116,641 | 1,116,641 |
| 16 | **Total Retail Rates** | 69,111,289 | 69,111,289 | 69,111,289 | 69,111,289 |
| 17 | | | | | |
| 18 | Local Access Delivery Service | 2,142,184 | 2,142,184 | 2,142,184 | 2,142,184 |
| 19 | | | | | |
| 20 | **Total All Rates** | 71,253,473 | 71,253,473 | 71,253,473 | 71,253,473 |

[1] Reference page 3 of Exhibit PSE-2.

[2] Reference page 2 of Exhibit RJM-7.

**Comparison of Present and Proposed Rates**
**Annual Change in Rate Schedule Revenue**

| (a) Line No. | (b) Rate Class | (c) Change in Rate Schedule Revenue [2] Year 1 | (d) Year 2 | (e) Year 3 |
|---|---|---|---|---|
| | | ($) | ($) | ($) |
| 1 | Residential Service (19-RS) | | | |
| 2 | General Use | 172,228 | 172,228 | 172,228 |
| 3 | Space Heating | 8,174 | 8,174 | 8,174 |
| 4 | General Service Small (19-GSS) | 20,889 | 20,889 | 20,889 |
| 5 | General Service Large (19-GSL) | (203,304) | (203,304) | (203,304) |
| 6 | General Service Space Heating (Rider No. 1) | - | - | - |
| 7 | Industrial Service (19-IS) | - | - | - |
| 8 | Industrial Service-Primary Discount | - | - | - |
| 9 | Real -Time Pricing (13-RTP) | - | - | - |
| 10 | Transmission Level Service (18-STR) | - | - | - |
| 11 | Municipal Power Service (19-M-I) | 2,014 | 2,014 | 2,014 |
| 12 | Water Pumping Service (19-WP) | - | - | - |
| 13 | Irrigation Service (19-IP-I) | - | - | - |
| 14 | Temporary Service (19-CS) | - | - | - |
| 15 | Lighting | - | - | - |
| 16 | **Total Retail Rates** | - | - | - |
| 17 | | | | |
| 18 | Local Access Delivery Service | - | - | - |
| 19 | | | | |
| 20 | **Total All Rates** | - | - | - |

**Comparision of Present and Proposed Rates**
**Annual Percentage Change in Rate Schedule Revenue**

| (a) Line No. | (b) Rate Class | (c) Annual Percent Change (Cumulative) Year 1 | (d) Year 2 | (e) Year 3 |
|---|---|---|---|---|
| | | ($) | ($) | ($) |
| 1 | Residential Service (19-RS) | | | |
| 2 | General Use | 1.1% | 2.2% | 3.2% |
| 3 | Space Heating | 1.0% | 2.0% | 3.1% |
| 4 | General Service Small (19-GSS) | 1.1% | 2.2% | 3.4% |
| 5 | General Service Large (19-GSL) | -1.2% | -2.3% | -3.5% |
| 6 | General Service Space Heating (Rider No. 1) | 0.0% | 0.0% | 0.0% |
| 7 | Industrial Service (19-IS) | 0.0% | 0.0% | 0.0% |
| 8 | Industrial Service-Primary Discount | | | |
| 9 | Real -Time Pricing (13-RTP) | 0.0% | 0.0% | 0.0% |
| 10 | Transmission Level Service (18-STR) | 0.0% | 0.0% | 0.0% |
| 11 | Municipal Power Service (19-M-I) | 1.0% | 2.0% | 3.0% |
| 12 | Water Pumping Service (19-WP) | 0.0% | 0.0% | 0.0% |
| 13 | Irrigation Service (19-IP-I) | 0.0% | 0.0% | 0.0% |
| 14 | Temporary Service (19-CS) | 0.0% | 0.0% | 0.0% |
| 15 | Lighting | 0.0% | 0.0% | 0.0% |
| 16 | **Total Retail Rates** | 0.0% | 0.0% | 0.0% |
| 17 | | | | |
| 18 | Local Access Delivery Service | 0.0% | 0.0% | 0.0% |
| 19 | | | | |
| 20 | **Total All Rates** | 0.0% | 0.0% | 0.0% |

**Comparison of Present and Proposed Rates**
**Average Rate Per kWh**

| (a) Line No. | (b) Rate Class | (c) Energy Sales | (d) | (e) Average Rate | (f) | (g) |
|---|---|---|---|---|---|---|
| | | | Present | Year 1 | Year 2 | Year 3 |
| | | (kWh) | (¢/kWh) | (¢/kWh) | (¢/kWh) | (¢/kWh) |
| 1 | Residential Service (19-RS) | | | | | |
| 2 | General Use | 106,883,802 | 14.97 | 15.13 | 15.29 | 15.46 |
| 3 | Space Heating | 5,790,181 | 13.78 | 13.92 | 14.06 | 14.20 |
| 4 | General Service Small (19-GSS) | 11,352,578 | 16.46 | 16.65 | 16.83 | 17.01 |
| 5 | General Service Large (19-GSL) | 130,420,192 | 13.51 | 13.35 | 13.19 | 13.04 |
| 6 | General Service Space Heating (Rider No. 1) | 5,013,974 | 11.19 | 11.19 | 11.19 | 11.19 |
| 7 | Industrial Service (19-IS) | 30,481,488 | 11.92 | 11.92 | 11.92 | 11.92 |
| 8 | Industrial Service-Primary Discount | - | N.A. | N.A. | N.A. | N.A. |
| 9 | Real -Time Pricing (13-RTP) | 390,457 | 8.59 | 8.59 | 8.59 | 8.59 |
| 10 | Transmission Level Service (18-STR) | 447,734,214 | 5.86 | 5.86 | 5.86 | 5.86 |
| 11 | Municipal Power Service (19-M-I) | 1,411,591 | 14.21 | 14.35 | 14.49 | 14.63 |
| 12 | Water Pumping Service (19-WP) | 5,244,505 | 12.44 | 12.44 | 12.44 | 12.44 |
| 13 | Irrigation Service (19-IP-I) | 2,357,658 | 15.32 | 15.32 | 15.32 | 15.32 |
| 14 | Temporary Service (19-CS) | 50,207 | 24.60 | 24.60 | 24.60 | 24.60 |
| 15 | Lighting | 3,947,867 | 28.28 | 28.28 | 28.28 | 28.28 |

**Comparison of Present and Proposed - Average Monthly Bill**
**Average Monthly Bill Per Consumer**

| (a) Line No. | (b) Rate Class | (c) Average Consumers | (d) | (e) | (f) | (g) |
|---|---|---|---|---|---|---|
| | | | Average Bill Per Consumer | | | |
| | | | Present | Year 1 | Year 2 | Year 3 |
| | | (cons.) | ($/cons./mo.) | ($/cons./mo.) | ($/cons./mo.) | ($/cons./mo.) |
| 1 | Residential Service (19-RS) | | | | | |
| 2 | General Use | 11,960 | 111.50 | 112.70 | 113.90 | 115.10 |
| 3 | Space Heating | 568 | 117.09 | 118.29 | 119.49 | 120.69 |
| 4 | General Service Small (19-GSS) | 2,521 | 61.78 | 62.47 | 63.16 | 63.85 |
| 5 | General Service Large (19-GSL) | 1,408 | 1,042.17 | 1,030.15 | 1,018.12 | 1,006.09 |
| 6 | General Service Space Heating (Rider No. 1) | 61 | 766.59 | 766.59 | 766.59 | 766.59 |
| 7 | Industrial Service (19-IS) | 17 | 17,892.62 | 17,892.62 | 17,892.62 | 17,892.62 |
| 8 | Industrial Service-Primary Discount | - | N.A. | N.A. | N.A. | N.A. |
| 9 | Real -Time Pricing (13-RTP) | 1 | 2,793.96 | 2,793.96 | 2,793.96 | 2,793.96 |
| 10 | Transmission Level Service (18-STR) | 6 | 364,698.47 | 364,698.47 | 364,698.47 | 364,698.47 |
| 11 | Municipal Power Service (19-M-I) | 140 | 119.51 | 120.71 | 121.91 | 123.11 |
| 12 | Water Pumping Service (19-WP) | 71 | 770.54 | 770.54 | 770.54 | 770.54 |
| 13 | Irrigation Service (19-IP-I) | 41 | 734.33 | 734.33 | 734.33 | 734.33 |
| 14 | Temporary Service (19-CS) | 6 | 178.99 | 178.99 | 178.99 | 178.99 |
| 15 | Lighting | 4,819 | 19.31 | 19.31 | 19.31 | 19.31 |

**Present and Proposed Rate Schedules**

| Present Rates [1] | | | | Proposed Rates [1] | | Year 1 | Year2 | Year 3 | |
|---|---|---|---|---|---|---|---|---|---|
| **Residential Service (18-RS)** | | | | **Residential Service (19-RS)** | | | | | |
| **General Use** | | | | **General Use** | | | | | |
| Customer Charge | @ | $13.77 | /mo. | Customer Charge | @ | $14.97 | $16.17 | $17.37 | /mo. |
| Delivery Charge | | | | Delivery Charge | | | | | |
| Summer (Jul-Oct) | @ | $0.13155 | /kWh | Summer (Jul-Oct) | @ | $0.13155 | $0.13155 | $0.13155 | /kWh |
| Winter (Nov-Jun) | @ | $0.12055 | /kWh | Winter (Nov-Jun) | @ | $0.12055 | $0.12055 | $0.12055 | /kWh |
| Energy Cost Adjustment | @ | $0.00185 | /kWh | Energy Cost Adjustment | @ | $0.00185 | $0.00185 | $0.00185 | /kWh |
| Property Tax Surcharge | | | | Property Tax Surcharge | @ | | | | /kWh |
| Jan | @ | $0.003105 | /kWh | | | | | | |
| Feb-Dec | @ | $0.004074 | /kWh | | | | | | |
| **Space Heating** | | | | **Space Heating** | | | | | |
| Customer Charge | @ | $13.77 | /mo. | Customer Charge | @ | $14.97 | $16.17 | $17.37 | /mo. |
| Delivery Charge | | | | Delivery Charge | | | | | |
| Summer (Jul-Oct) | @ | $0.13155 | /kWh | Summer (Jul-Oct) | @ | $0.13155 | $0.13155 | $0.13155 | /kWh |
| Winter (Nov-Jun) | | | | Winter (Nov-Jun) | | | | | |
| Heat Block (801-5800 kWh) | @ | $0.10232 | /kWh | Heat Block (801-5800 kWh) | @ | $0.10232 | $0.10232 | $0.10232 | /kWh |
| Other | @ | $0.12055 | /kWh | Other | @ | $0.12055 | $0.12055 | $0.12055 | /kWh |
| Energy Cost Adjustment | @ | ($0.00114) | /kWh | Energy Cost Adjustment | @ | ($0.00114) | ($0.00114) | ($0.00114) | /kWh |
| Property Tax Surcharge | | | | Property Tax Surcharge | @ | | | | /kWh |
| Jan | @ | $0.003105 | /kWh | | | | | | |
| Feb-Dec | @ | $0.004074 | /kWh | | | | | | |
| **General Service Small (18-GSS)** | | | | **General Service Small (19-GSS)** | | | | | |
| Customer Charge | @ | $22.44 | /mo. | Customer Charge | @ | $22.44 | $22.44 | $22.44 | /mo. |
| Delivery Charge | | | | Delivery Charge | | | | | |
| Summer (Jul-Oct) | @ | $0.10732 | /kWh | Summer (Jul-Oct) | @ | $0.10916 | $0.11100 | $0.11284 | /kWh |
| Winter (Nov-Jun) | @ | $0.09632 | /kWh | Winter (Nov-Jun) | @ | $0.09816 | $0.10000 | $0.10184 | /kWh |
| Energy Cost Adjustment | @ | $0.00066 | /kWh | Energy Cost Adjustment | @ | $0.00066 | $0.00066 | $0.00066 | /kWh |
| Property Tax Surcharge | | | | Property Tax Surcharge | @ | | | | /kWh |
| Jan | @ | $0.003105 | /kWh | | | | | | |
| Feb-Dec | @ | $0.004074 | /kWh | | | | | | |
| **General Service Large (18-GSL)** | | | | **General Service Large (19-GSL)** | | | | | |
| Customer Charge | @ | $41.46 | /mo. | Customer Charge | @ | $41.46 | $41.46 | $41.46 | /mo. |
| Demand Charge per kW>9 | | | | Demand Charge per kW>9 | | | | | |
| Summer (Jul-Oct) | @ | $12.69 | /kW | Summer (Jul-Oct) | @ | $12.69 | $12.69 | $12.69 | /kW |
| Winter (Nov-Jun) | @ | $10.69 | /kW | Winter (Nov-Jun) | @ | $10.69 | $10.69 | $10.69 | /kW |
| Delivery Charge | @ | $0.08525 | /kWh | Delivery Charge | @ | $0.08369 | $0.08213 | $0.08057 | /kWh |
| Energy Cost Adjustment | @ | $0.00090 | /kWh | Energy Cost Adjustment | @ | $0.00090 | $0.00090 | $0.00090 | /kWh |
| Property Tax Surcharge | | | | Property Tax Surcharge | @ | | | | /kWh |
| Jan | @ | $0.003105 | /kWh | | | | | | |
| Feb-Dec | @ | $0.004074 | /kWh | | | $0.00 | | | |
| **General Service Space Heating (Rider No. 1)** | | | | **General Service Space Heating (Rider N** | | | | | |
| Demand Charge | | | | Demand Charge | | | | | |
| Summer (Jul-Oct) | @ | $12.69 | /kW | Summer (Jul-Oct) | @ | $12.69 | $12.69 | $12.69 | /kW |
| Winter (Nov-Jun) | @ | $10.69 | /kW | Winter (Nov-Jun) | @ | $10.69 | $10.69 | $10.69 | /kW |
| Energy Charge | | | | Energy Charge | | | | | |
| GSL | @ | $0.08525 | /kWh | GSL | @ | $0.08369 | $0.08369 | $0.08369 | /kWh |
| Heating | @ | $0.07267 | /kWh | Heating | @ | $0.07530 | $0.07530 | $0.07530 | /kWh |
| Energy Cost Adjustment | @ | $0.00049 | /kWh | Energy Cost Adjustment | @ | $0.00049 | $0.00049 | $0.00049 | /kWh |
| Property Tax Surcharge | | | | Property Tax Surcharge | @ | | | | /kWh |
| Jan | @ | 0.003105 | /kWh | | @ | | | | /kWh |
| Feb-Dec | @ | 0.004074 | /kWh | | @ | 0.004074 | | | /kWh |
| **Industrial Service (18-IS)** | | | | **Industrial Service (19-IS)** | | | | | |
| Customer Charge | @ | $102.15 | /mo. | Customer Charge | @ | $102.15 | $102.15 | $102.15 | /mo. |
| Demand Charge per kW>10 | | | | Demand Charge per kW>10 | | | | | |
| Summer (Jul-Oct) | @ | $14.18 | /kW | Summer (Jul-Oct) | @ | $14.18 | $14.18 | $14.18 | /kW |
| Winter (Nov-Jun) | @ | $11.18 | /kW | Winter (Nov-Jun) | @ | $11.18 | $11.18 | $11.18 | /kW |
| Delivery Charge | | | | Delivery Charge | | | | | |
| Summer (Jul to Oct) | @ | $0.07433 | /kWh | Summer - (July to Oct) | @ | $0.07433 | $0.07433 | $0.07433 | /kWh |
| Winter (Nov-Jun) | @ | $0.07433 | /kWh | Winter (Nov-Jun) | @ | $0.07433 | $0.07433 | $0.07433 | /kWh |
| Energy Cost Adjustment | @ | $0.00039 | /kWh | Energy Cost Adjustment | @ | $0.00039 | $0.00039 | $0.00039 | /kWh |
| Property Tax Surcharge | | | | Property Tax Surcharge | @ | | | | /kWh |
| Jan | @ | $0.003105 | /kWh | | | | | | |
| Feb-Dec | @ | $0.004074 | /kWh | | | | | | |

[1] ECA and PTS are kept at historical levels to "sync" with last approved FBR Revenue Requirements. For retail PTS in 2017TY, January was still billed Dkt No. 16-SPEE-306-TAR rate. The Order in Dkt No. 17-SPEE-263-TAR was issued 1/12/17 for rates effective 2/1/17.

**Present and Proposed Rate Schedules**

| Present Rates [1] | | | | Proposed Rates [1] | | Year 1 | Year2 | Year 3 | |
|---|---|---|---|---|---|---|---|---|---|
| **Industrial Service-Primary Discount** | | | | **Industrial Service-Primary Discount** | | | | | |
| Customer Charge | @ | $100.11 | /mo. | Customer Charge | @ | $100.11 | $100.11 | $100.11 | /mo. |
| Demand Charge per kW>10 | | | | Demand Charge per kW>10 | | | | | |
| Summer (Jul-Oct) | @ | $13.90 | /kW | Summer (Jul-Oct) | @ | $13.90 | $13.90 | $13.90 | /kW |
| Winter (Nov-Jun) | @ | $10.96 | /kW | Winter (Nov-Jun) | @ | $10.96 | $10.96 | $10.96 | /kW |
| Delivery Charge | | | | Delivery Charge | | | | | |
| Summer (Jul-Oct) | @ | $0.07284 | /kWh | Summer (Jul-Oct) | @ | $0.07284 | $0.07284 | $0.07284 | /kWh |
| Winter (Nov-Jun) | @ | $0.07284 | /kWh | Winter (Nov-Jun) | @ | $0.07284 | $0.07284 | $0.07284 | /kWh |
| Energy Cost Adjustment | @ | - | /kWh | Energy Cost Adjustment | @ | | | | /kWh |
| Property Tax Surcharge | @ | - | /kWh | Property Tax Surcharge | @ | | | | /kWh |
| **Interruptible Industrial Service (18-INT)** | | | | **Interruptible Industrial Service (19-INT** | | | | | |
| Customer Charge | @ | $100.62 | /mo. | Customer Charge | @ | $100.62 | $100.62 | $100.62 | /mo. |
| Demand Charge per kW>10 | | | | Demand Charge per kW>10 | | | | | |
| Non-Interruptible | | | | Non-Interruptible | | | | | |
| Summer (Jul-Oct) | @ | $14.18 | /kW | Summer (Jul-Oct) | @ | $14.18 | $14.18 | $14.18 | /kW |
| Winter (Nov-Jun) | @ | $11.18 | /kW | Winter (Nov-Jun) | @ | $11.18 | $11.18 | $11.18 | /kW |
| Interruptible | | | | Interruptible | | | | | |
| Summer (Jul-Oct) | @ | $7.00 | /kW | Summer (Jul-Oct) | @ | $7.00 | $7.00 | $7.00 | /kW |
| Winter (Nov-Jun) | @ | $7.00 | /kW | Winter (Nov-Jun) | @ | $7.00 | $7.00 | $7.00 | /kW |
| Penalty | | | | Penalty | | | | | |
| Summer (Jul-Oct) | @ | $31.24 | /kW | Summer (Jul-Oct) | @ | $31.24 | $31.24 | $31.24 | /kW |
| Winter (Nov-Jun) | @ | $31.24 | /kW | Winter (Nov-Jun) | @ | $31.24 | $31.24 | $31.24 | /kW |
| Delivery Charge | | | | Delivery Charge | | | | | |
| Summer (Jul-Oct) | @ | $0.07433 | /kWh | Summer (Jul-Oct) | @ | $0.07433 | $0.07433 | $0.07433 | /kWh |
| Winter (Nov-Jun) | @ | $0.07433 | /kWh | Winter (Nov-Jun) | @ | $0.07433 | $0.07433 | $0.07433 | /kWh |
| Energy Cost Adjustment | @ | - | /kWh | Energy Cost Adjustment | @ | | | | /kWh |
| Property Tax Surcharge | @ | - | /kWh | Property Tax Surcharge | @ | | | | /kWh |
| **Real -Time Pricing (13-RTP)** | | | | **Real -Time Pricing (13-RTP)** | | | | | |
| Customer Charge | @ | $251.55 | /mo. | Customer Charge | @ | $251.55 | $251.55 | $251.55 | /mo. |
| Delivery Charge | @ | $0.07814 | /kWh | Delivery Charge | @ | $0.07814 | $0.07814 | $0.07814 | /kWh |
| **Transmission Level Service (18-STR)** | | | | **Transmission Level Service (18-STR)** | | | | | |
| **Service at 34.5 kV Voltage** | | | | **Service at 34.5 kV Voltage** | | | | | |
| Customer Charge | @ | $116.52 | /mo. | Customer Charge | @ | $116.52 | $116.52 | $116.52 | /mo. |
| Local Access Charge | @ | $5.00 | /kW | Local Access Charge | @ | $5.00 | $5.00 | $5.00 | /kW |
| Delivery Energy Charge | @ | $0.00194 | /kWh | Delivery Energy Charge | @ | $0.00194 | $0.00194 | $0.00194 | /kWh |
| Property Tax Surcharge | | | | Property Tax Surcharge | @ | $0.000054 | $0.000054 | $0.000054 | /kWh |
| Jan | @ | $0.000054 | /kWh | | | | | | |
| Feb-Dec | @ | $0.000066 | /kWh | | | | | | |
| Wholesale Power Cost | | | | Wholesale Power Cost | | | | | |
| Demand | @ | | /kW | Demand | @ | | | | /kW |
| Energy | @ | | /kWh | Energy | @ | | | | /kWh |
| Energy Cost Adjustment | @ | | /kWh | Energy Cost Adjustment | @ | | | | /kWh |
| Transmission | | | | Transmission | | | | | |
| HLF, FCC, MWP | | | | HLF, FCC, MWP | | | | | |
| **Service at 115 kV Voltage** | | | | **Service at 115 kV Voltage** | | | | | |
| Customer Charge | @ | $116.52 | /mo. | Customer Charge | @ | $116.52 | $116.52 | $116.52 | /mo. |
| Local Access Charge | @ | $5.00 | /kW | Local Access Charge | | $5.00 | $5.00 | $5.00 | |
| Delivery Energy Charge | @ | $0.00194 | /kW | Delivery Energy Charge | @ | $0.00194 | $0.00194 | $0.00194 | /kW |
| Property Tax Surcharge | | | | Property Tax Surcharge | @ | $0.000054 | $0.000054 | $0.000054 | /kWh |
| Jan | @ | $0.000054 | /kWh | | | | | | |
| Feb-Dec | @ | $0.000066 | /kWh | | | | | | |
| Power Factor Charge | | | | | | | | | |
| Wholesale Power Cost | | | | Wholesale Power Cost | | | | | |
| Demand | @ | | /kW | Demand | @ | | | | /kW |
| Energy | @ | | /kWh | Energy | @ | | | | /kWh |
| Energy Cost Adjustment | @ | | /kWh | Energy Cost Adjustment | @ | | | | /kWh |
| Transmission | | | | Transmission | | | | | |
| HLF, FCC, MWP, ECIR | | | | HLF, FCC, MWP, ECIR | | | | | |

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**Present and Proposed Rate Schedules**

| Present Rates [1] | | | | Proposed Rates [1] | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Municipal Power Service (18-M-I)** | | | | **Municipal Power Service (19-M-I)** | | | | | |
| Customer Charge | @ | $13.77 | /mo. | Customer Charge | @ | $14.97 | $16.17 | $17.37 | /mo. |
| Delivery Charge | | | | Delivery Charge | | | | | |
| Summer (Jul-Oct) | @ | $0.12619 | /kWh | Summer (Jul-Oct) | @ | $0.12619 | $0.12619 | $0.12619 | /kWh |
| Winter (Nov-Jun) | @ | $0.11519 | /kWh | Winter (Nov-Jun) | @ | $0.11519 | $0.11519 | $0.11519 | /kWh |
| Energy Cost Adjustment | @ | $0.00166 | /kWh | Energy Cost Adjustment | @ | $0.00166 | $0.00166 | $0.00166 | /kWh |
| Property Tax Surcharge | | | | Property Tax Surcharge | @ | | | | /kWh |
| Jan | @ | $0.003105 | /kWh | | | | | | |
| Feb-Dec | @ | $0.004074 | /kWh | | | | | | |
| **Water Pumping Service (18-WP)** | | | | **Water Pumping Service (19-WP)** | | | | | |
| Customer Charge | @ | $20.34 | /mo. | Customer Charge | @ | $20.34 | $20.34 | $20.34 | /mo. |
| Delivery Charge | | | | Delivery Charge | | | | | |
| Summer (Jul-Oct) | @ | $0.12238 | /kWh | Summer (Jul-Oct) | @ | $0.12238 | $0.12238 | $0.12238 | /kWh |
| Winter (Nov-Jun) | @ | $0.11138 | /kWh | Winter (Nov-Jun) | @ | $0.11138 | $0.11138 | $0.11138 | /kWh |
| Energy Cost Adjustment | @ | $0.00129 | /kWh | Energy Cost Adjustment | @ | $0.00129 | $0.00129 | $0.00129 | /kWh |
| Property Tax Surcharge | | | | Property Tax Surcharge | @ | | | | /kWh |
| Jan | @ | $0.003105 | /kWh | | | | | | |
| Feb-Dec | @ | $0.004074 | /kWh | | | $0.00 | | | |
| **Irrigation Service (18-IP-I)** | | | | **Irrigation Service (19-IP-I)** | | | | | |
| Demand Charge per horsepower contracted | | | | Demand Charge per horsepower contract | | | | | |
| per month | @ | $3.1675 | /HP | per month | @ | $3.1675 | $3.1675 | $3.1675 | /HP |
| Delivery Charge | | | | Delivery Charge | | | | | |
| Summer (Jul-Oct) | @ | $0.09902 | /kWh | Summer (Jul-Oct) | @ | $0.09902 | $0.09902 | $0.09902 | /kWh |
| Winter (Nov-Jun) | @ | $0.08802 | /kWh | Winter (Nov-Jun) | @ | $0.08802 | $0.08802 | $0.08802 | /kWh |
| Energy Cost Adjustment | @ | $0.00826 | /kWh | Energy Cost Adjustment | @ | $0.00826 | $0.00826 | $0.00826 | /kWh |
| Property Tax Surcharge | | | | Property Tax Surcharge | @ | | | | /kWh |
| Jan | @ | $0.003105 | /kWh | | | | | | |
| Feb-Dec | @ | $0.004074 | /kWh | | | | | | |
| **Temporary Service (18-CS)** | | | | **Temporary Service (19-CS)** | | | | | |
| Delivery Charge | @ | $0.24473 | /kWh | Delivery Charge | @ | $0.24473 | $0.24473 | $0.24473 | /kWh |
| plus equipment service chg. | | | | plus equipment service chg. | | | | | |
| Energy Cost Adjustment | @ | ($0.00255) | /kWh | Energy Cost Adjustment | @ | ($0.00255) | ($0.00255) | ($0.00255) | /kWh |
| Property Tax Surcharge | | | | Property Tax Surcharge | @ | | | | /kWh |
| Jan | @ | $0.003105 | /kWh | | | | | | |
| Feb-Dec | @ | $0.004074 | /kWh | | | | | | |
| **Private Area / Street Lighting (18-PAL-SL-I)** | | | | **Private Area / Street Lighting (19-PAL-** | | | | | |
| **Private Area Light (Coop owned)** | | | | **Private Area Light (Coop owned)** | | | | | |
| On Existing Pole | | | | On Existing Pole | | | | | |
| 100 W P.A.L. Cust 0% | @ | $12.09 | /mo. | 100 W P.A.L. Cust 0% | @ | $12.09 | $12.09 | $12.09 | /mo. |
| 100 W P.A.L. Cust 100% | @ | $5.35 | /mo. | 100 W P.A.L. Cust 100% | @ | $5.35 | $5.35 | $5.35 | /mo. |
| 150 W P.A.L. Cust 0% | @ | $19.11 | /mo. | 150 W P.A.L. Cust 0% | @ | $19.11 | $19.11 | $19.11 | /mo. |
| 150 W P.A.L. Cust 100% | @ | $7.65 | /mo. | 150 W P.A.L. Cust 100% | @ | $7.65 | $7.65 | $7.65 | /mo. |
| 200 W P.A.L. Cust 0% | @ | $21.87 | /mo. | 200 W P.A.L. Cust 0% | @ | $21.87 | $21.87 | $21.87 | /mo. |
| 200 W P.A.L. Cust 50% | @ | $15.64 | /mo. | 200 W P.A.L. Cust 50% | @ | $15.64 | $15.64 | $15.64 | /mo. |
| 200 W P.A.L. Cust 100% | @ | $9.68 | /mo. | 200 W P.A.L. Cust 100% | @ | $9.68 | $9.68 | $9.68 | /mo. |
| On New Pole (Wood) | | | | On New Pole (Wood) | | | | | |
| 100 W P.A.L. Cust 0% | @ | $19.33 | /mo. | 100 W P.A.L. Cust 0% | @ | $19.33 | $19.33 | $19.33 | /mo. |
| 100 W P.A.L. Cust 100% | @ | $5.82 | /mo. | 100 W P.A.L. Cust 100% | @ | $5.82 | $5.82 | $5.82 | /mo. |
| 150 W P.A.L. Cust 0% | @ | $21.97 | /mo. | 150 W P.A.L. Cust 0% | @ | $21.97 | $21.97 | $21.97 | /mo. |
| 150 W P.A.L. Cust 100% | @ | $7.82 | /mo. | 150 W P.A.L. Cust 100% | @ | $7.82 | $7.82 | $7.82 | /mo. |
| 200 W P.A.L. Cust 0% | @ | $24.04 | /mo. | 200 W P.A.L. Cust 0% | @ | $24.04 | $24.04 | $24.04 | /mo. |
| 200 W P.A.L. Cust 100% | @ | $9.81 | /mo. | 200 W P.A.L. Cust 100% | @ | $9.81 | $9.81 | $9.81 | /mo. |

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**Present and Proposed Rate Schedules**

| Present Rates | | | | Proposed Rates | | | | |
|---|---|---|---|---|---|---|---|---|
| **Private Area / Street Lighting (18-PAL-SL-I)** Continued | | | | **Private Area / Street Lighting (19-PAL-** Continued | | | | |
| **Flood Lights** | | | | **Flood Lights** | | | | |
| On Existing Pole | | | | On Existing Pole | | | | |
| 150 W Flood Cust 0% | @ | $22.28 | /mo. | 150 W Flood Cust 0% | @ | $22.28 | $22.28 | /mo. |
| 150 W Flood Cust 100% | @ | $7.85 | /mo. | 150 W Flood Cust 100% | @ | $7.85 | $7.85 | /mo. |
| 400 W Flood Cust 0% | @ | $42.42 | /mo. | 400 W Flood Cust 0% | @ | $42.42 | $42.42 | /mo. |
| 400 W Flood Cust 50% | @ | $30.14 | /mo. | 400 W Flood Cust 50% | @ | $30.14 | $30.14 | /mo. |
| 400 W Flood Cust 100% | @ | $18.45 | /mo. | 400 W Flood Cust 100% | @ | $18.45 | $18.45 | /mo. |
| 1000 W Flood M.H. Cust 0% | @ | $67.56 | /mo. | 1000 W Flood M.H. Cust 0% | @ | $67.56 | $67.56 | /mo. |
| 1000 W Flood M.H. Cust 100% | @ | $44.27 | /mo. | 1000 W Flood M.H. Cust 100% | @ | $44.27 | $44.27 | /mo. |
| On New Pole (Wood) | | | | On New Pole (Wood) | | | | |
| 150 W P.A.L. Cust 0% | @ | $24.92 | /mo. | 150 W P.A.L. Cust 0% | @ | $24.92 | $24.92 | /mo. |
| 150 W P.A.L. Cust 100% | @ | $8.05 | /mo. | 150 W P.A.L. Cust 100% | @ | $8.05 | $8.05 | /mo. |
| 400 W P.A.L. Cust 0% | @ | $44.47 | /mo. | 400 W P.A.L. Cust 0% | @ | $44.47 | $44.47 | /mo. |
| 400 W P.A.L. Cust 100% | @ | $18.63 | /mo. | 400 W P.A.L. Cust 100% | @ | $18.63 | $18.63 | /mo. |
| 1000 W Flood M.H. Cust 0% | @ | $87.41 | /mo. | 1000 W Flood M.H. Cust 0% | @ | $87.41 | $87.41 | /mo. |
| 1000 W Flood M.H. Cust 100% | @ | $43.12 | /mo. | 1000 W Flood M.H. Cust 100% | @ | $43.12 | $43.12 | /mo. |
| **Street Lights** | | | | **Street Lights** | | | | |
| On Existing Pole | | | | On Existing Pole | | | | |
| 100 W P.A.L. Cust 0% | @ | $13.28 | /mo. | 100 W P.A.L. Cust 0% | @ | $13.28 | $13.28 | /mo. |
| 100 W P.A.L. Cust 100% | @ | $5.44 | /mo. | 100 W P.A.L. Cust 100% | @ | $5.44 | $5.44 | /mo. |
| 150 W P.A.L. Cust 0% | @ | $16.05 | /mo. | 150 W P.A.L. Cust 0% | @ | $16.05 | $16.05 | /mo. |
| 150 W P.A.L. Cust 100% | @ | $7.44 | /mo. | 150 W P.A.L. Cust 100% | @ | $7.44 | $7.44 | /mo. |
| 200 W P.A.L. Cust 0% | @ | $19.92 | /mo. | 200 W P.A.L. Cust 0% | @ | $19.92 | $19.92 | /mo. |
| 200 W P.A.L. Cust 100% | @ | $9.54 | /mo. | 200 W P.A.L. Cust 100% | @ | $9.54 | $9.54 | /mo. |
| On New Pole (Wood) | | | | On New Pole (Wood) | | | | |
| 100 W P.A.L. Cust 0% | @ | $19.33 | /mo. | 100 W P.A.L. Cust 0% | @ | $19.33 | $19.33 | /mo. |
| 100 W P.A.L. Cust 100% | @ | $5.82 | /mo. | 100 W P.A.L. Cust 100% | @ | $5.82 | $5.82 | /mo. |
| 150 W P.A.L. Cust 0% | @ | $21.97 | /mo. | 150 W P.A.L. Cust 0% | @ | $21.97 | $21.97 | /mo. |
| 150 W P.A.L. Cust 100% | @ | $7.82 | /mo. | 150 W P.A.L. Cust 100% | @ | $7.82 | $7.82 | /mo. |
| 200 W P.A.L. Cust 0% | @ | $24.04 | /mo. | 200 W P.A.L. Cust 0% | @ | $24.04 | $24.04 | /mo. |
| 200 W P.A.L. Cust 100% | @ | $9.81 | /mo. | 200 W P.A.L. Cust 100% | @ | $9.81 | $9.81 | /mo. |
| On Existing Pole | | | | On Existing Pole | | | | |
| 100 W Cobra Head Cust 0% | @ | $13.28 | /mo. | 100 W Cobra Head Cust 0% | @ | $13.28 | $13.28 | /mo. |
| 100 W Cobra Head Cust 100% | @ | $5.44 | /mo. | 100 W Cobra Head Cust 100% | @ | $5.44 | $5.44 | /mo. |
| 150 W Cobra Head Cust 0% | @ | $16.05 | /mo. | 150 W Cobra Head Cust 0% | @ | $16.05 | $16.05 | /mo. |
| 150 W Cobra Head Cust 100% | @ | $7.44 | /mo. | 150 W Cobra Head Cust 100% | @ | $7.44 | $7.44 | /mo. |
| 200 W Cobra Head Cust 0% | @ | $19.92 | /mo. | 200 W Cobra Head Cust 0% | @ | $19.92 | $19.92 | /mo. |
| 200 W Cobra Head Cust 100% | @ | $9.54 | /mo. | 200 W Cobra Head Cust 100% | @ | $9.54 | $9.54 | /mo. |
| 250 W Cobra Head Cust 0% | @ | $22.24 | /mo. | 250 W Cobra Head Cust 0% | @ | $22.24 | $22.24 | /mo. |
| 250 W Cobra Head Cust 100% | @ | $11.55 | /mo. | 250 W Cobra Head Cust 100% | @ | $11.55 | $11.55 | /mo. |
| 400 W Cobra Head Cust 0% | @ | $28.27 | /mo. | 400 W Cobra Head Cust 0% | @ | $28.27 | $28.27 | /mo. |
| 400 W Cobra Head Cust 100% | @ | $17.51 | /mo. | 400 W Cobra Head Cust 100% | @ | $17.51 | $17.51 | /mo. |
| On New Pole (Wood) | | | | On New Pole (Wood) | | | | |
| 100 W Cobra Head Cust 0% | @ | $22.40 | /mo. | 100 W Cobra Head Cust 0% | @ | $22.40 | $22.40 | /mo. |
| 100 W Cobra Head Cust 100% | @ | $6.02 | /mo. | 100 W Cobra Head Cust 100% | @ | $6.02 | $6.02 | /mo. |
| 150 W Cobra Head Cust 0% | @ | $24.63 | /mo. | 150 W Cobra Head Cust 0% | @ | $24.63 | $24.63 | /mo. |
| 150 W Cobra Head Cust 100% | @ | $8.03 | /mo. | 150 W Cobra Head Cust 100% | @ | $8.03 | $8.03 | /mo. |
| 200 W Cobra Head Cust 0% | @ | $26.28 | /mo. | 200 W Cobra Head Cust 0% | @ | $26.28 | $26.28 | /mo. |
| 200 W Cobra Head Cust 100% | @ | $9.97 | /mo. | 200 W Cobra Head Cust 100% | @ | $9.97 | $9.97 | /mo. |
| 250 W Cobra Head Cust 0% | @ | $29.56 | /mo. | 250 W Cobra Head Cust 0% | @ | $29.56 | $29.56 | /mo. |
| 250 W Cobra Head Cust 100% | @ | $12.46 | /mo. | 250 W Cobra Head Cust 100% | @ | $12.46 | $12.46 | /mo. |
| 400 W Cobra Head Cust 0% | @ | $35.60 | /mo. | 400 W Cobra Head Cust 0% | @ | $35.60 | $35.60 | /mo. |
| 400 W Cobra Head Cust 100% | @ | $18.40 | /mo. | 400 W Cobra Head Cust 100% | @ | $18.40 | $18.40 | /mo. |
| On New Pole (Steel) | | | | On New Pole (Steel) | | | | |
| 100 W Cobra Head Cust 0% | @ | $34.26 | /mo. | 100 W Cobra Head Cust 0% | @ | $34.26 | $34.26 | /mo. |
| 100 W Cobra Head Cust 100% | @ | $6.83 | /mo. | 100 W Cobra Head Cust 100% | @ | $6.83 | $6.83 | /mo. |
| 150 W Cobra Head Cust 0% | @ | $36.48 | /mo. | 150 W Cobra Head Cust 0% | @ | $36.48 | $36.48 | /mo. |
| 150 W Cobra Head Cust 100% | @ | $8.81 | /mo. | 150 W Cobra Head Cust 100% | @ | $8.81 | $8.81 | /mo. |
| 200 W Cobra Head Cust 0% | @ | $39.02 | /mo. | 200 W Cobra Head Cust 0% | @ | $39.02 | $39.02 | /mo. |
| 200 W Cobra Head Cust 100% | @ | $10.81 | /mo. | 200 W Cobra Head Cust 100% | @ | $10.81 | $10.81 | /mo. |
| 250 W Cobra Head Cust 0% | @ | $43.86 | /mo. | 250 W Cobra Head Cust 0% | @ | $43.86 | $43.86 | /mo. |
| 250 W Cobra Head Cust 100% | @ | $12.99 | /mo. | 250 W Cobra Head Cust 100% | @ | $12.99 | $12.99 | /mo. |
| 400 W Cobra Head Cust 0% | @ | $49.85 | /mo. | 400 W Cobra Head Cust 0% | @ | $49.85 | $49.85 | /mo. |
| 400 W Cobra Head Cust 100% | @ | $18.93 | /mo. | 400 W Cobra Head Cust 100% | @ | $18.93 | $18.93 | /mo. |

**Present and Proposed Rate Schedules**

| Present Rates | | | | Proposed Rates | | | | |
|---|---|---|---|---|---|---|---|---|
| **Security (Decorative) Lighting Service (18-DOL-I)** | | | | **Security (Decorative) Lighting Service (** | | | | |
| **Acorn** | | | | **Acorn** | | | | |
| 35 W HPS Cust 0% | @ | $25.27 | /mo. | 35 W HPS Cust 0% | @ | $25.27 | $25.27 | $25.27 /mo. |
| 35 W HPS Cust 100% | @ | $4.03 | /mo. | 35 W HPS Cust 100% | @ | $4.03 | $4.03 | $4.03 /mo. |
| 100 W HPS Cust 0% | @ | $37.52 | /mo. | 100 W HPS Cust 0% | @ | $37.52 | $37.52 | $37.52 /mo. |
| 100 W HPS Cust 50% | @ | $22.07 | /mo. | 100 W HPS Cust 50% | @ | $22.07 | $22.07 | $22.07 /mo. |
| 100 W HPS Cust 100% | @ | $7.32 | /mo. | 100 W HPS Cust 100% | @ | $7.32 | $7.32 | $7.32 /mo. |
| 250 W HPS Cust 0% | @ | $45.35 | /mo. | 250 W HPS Cust 0% | @ | $45.35 | $45.35 | $45.35 /mo. |
| 250 W HPS Cust 100% | @ | $13.42 | /mo. | 250 W HPS Cust 100% | @ | $13.42 | $13.42 | $13.42 /mo. |
| **Single Globe** | | | | **Single Globe** | | | | |
| 35 W HPS Cust 0% | @ | $19.61 | /mo. | 35 W HPS Cust 0% | @ | $19.61 | $19.61 | $19.61 /mo. |
| 35 W HPS Cust 100% | @ | $3.64 | /mo. | 35 W HPS Cust 100% | @ | $3.64 | $3.64 | $3.64 /mo. |
| 70 W HPS Cust 0% | @ | $32.43 | /mo. | 70 W HPS Cust 0% | @ | $32.43 | $32.43 | $32.43 /mo. |
| 70 W HPS Cust 100% | @ | $5.83 | /mo. | 70 W HPS Cust 100% | @ | $5.83 | $5.83 | $5.83 /mo. |
| 100 W HPS Cust 0% | @ | $33.93 | /mo. | 100 W HPS Cust 0% | @ | $33.93 | $33.93 | $33.93 /mo. |
| 100 W HPS Cust 100% | @ | $7.09 | /mo. | 100 W HPS Cust 100% | @ | $7.09 | $7.09 | $7.09 /mo. |
| 150 W HPS Cust 0% | @ | $36.15 | /mo. | 150 W HPS Cust 0% | @ | $36.15 | $36.15 | $36.15 /mo. |
| 150 W HPS Cust 100% | @ | $9.09 | /mo. | 150 W HPS Cust 100% | @ | $9.09 | $9.09 | $9.09 /mo. |
| **Multi Globe** | | | | **Multi Globe** | | | | |
| 70 W HPS Cust 0% | @ | $87.78 | /mo. | 70 W HPS Cust 0% | @ | $87.78 | $87.78 | $87.78 /mo. |
| 70 W HPS Cust 100% | @ | $20.97 | /mo. | 70 W HPS Cust 100% | @ | $20.97 | $20.97 | $20.97 /mo. |
| 100 W HPS Cust 0% | @ | $95.11 | /mo. | 100 W HPS Cust 0% | @ | $95.11 | $95.11 | $95.11 /mo. |
| 100 W HPS Cust 100% | @ | $27.07 | /mo. | 100 W HPS Cust 100% | @ | $27.07 | $27.07 | $27.07 /mo. |
| 150 W HPS Cust 0% | @ | $106.36 | /mo. | 150 W HPS Cust 0% | @ | $106.36 | $106.36 | $106.36 /mo. |
| 150 W HPS Cust 100% | @ | $37.07 | /mo. | 150 W HPS Cust 100% | @ | $37.07 | $37.07 | $37.07 /mo. |
| **Lantern** | | | | **Lantern** | | | | |
| 35 W HPS Cust 0% | @ | $22.83 | /mo. | 35 W HPS Cust 0% | @ | $22.83 | $22.83 | $22.83 /mo. |
| 35 W HPS Cust 100% | @ | $3.88 | /mo. | 35 W HPS Cust 100% | @ | $3.88 | $3.88 | $3.88 /mo. |
| 100 W HPS Cust 0% | @ | $40.42 | /mo. | 100 W HPS Cust 0% | @ | $40.42 | $40.42 | $40.42 /mo. |
| 100 W HPS Cust 100% | @ | $7.50 | /mo. | 100 W HPS Cust 100% | @ | $7.50 | $7.50 | $7.50 /mo. |
| 250 W HPS Cust 0% | @ | $47.94 | /mo. | 250 W HPS Cust 0% | @ | $47.94 | $47.94 | $47.94 /mo. |
| 250 W HPS Cust 100% | @ | $13.58 | /mo. | 250 W HPS Cust 100% | @ | $13.58 | $13.58 | $13.58 /mo. |
| **Security (Decorative) Lighting Service (18-DOL-I)** | | | | **Security (Decorative) Lighting Service (** | | | | |
| Continued | | | | Continued | | | | |
| **Shoebox** | | | | **Shoebox** | | | | |
| 100 W HPS Cust 0% | @ | $47.02 | /mo. | 100 W HPS Cust 0% | @ | $47.02 | $47.02 | $47.02 /mo. |
| 100 W HPS Cust 100% | @ | $7.94 | /mo. | 100 W HPS Cust 100% | @ | $7.94 | $7.94 | $7.94 /mo. |
| 250 W HPS Cust 0% | @ | $54.39 | /mo. | 250 W HPS Cust 0% | @ | $54.39 | $54.39 | $54.39 /mo. |
| 250 W HPS Cust 100% | @ | $14.02 | /mo. | 250 W HPS Cust 100% | @ | $14.02 | $14.02 | $14.02 /mo. |
| 400 W HPS Cust 0% | @ | $61.20 | /mo. | 400 W HPS Cust 0% | @ | $61.20 | $61.20 | $61.20 /mo. |
| 400W HPS Cust 100% | @ | $20.30 | /mo. | 400W HPS Cust 100% | @ | $20.30 | $20.30 | $20.30 /mo. |
| 800 W HPS Cust 0% | @ | $87.66 | /mo. | 800 W HPS Cust 0% | @ | $87.66 | $87.66 | $87.66 /mo. |
| 800 W HPS Cust 100% | @ | $37.37 | /mo. | 800 W HPS Cust 100% | @ | $37.37 | $37.37 | $37.37 /mo. |
| **Vapor Street Lighting Ornamental Ser** | | | | **Vapor Street Lighting Ornamental Serv** | | | | |
| 175 W MV | @ | $15.22 | /mo. | 175 W MV | @ | $15.22 | $15.22 | $15.22 /mo. |
| 250 W MV | @ | $19.04 | /mo. | 250 W MV | @ | $19.04 | $19.04 | $19.04 /mo. |
| 400 W MV | @ | $25.97 | /mo. | 400 W MV | @ | $25.97 | $25.97 | $25.97 /mo. |
| 100 W HPS | @ | $13.28 | /mo. | 100 W HPS | @ | $13.28 | $13.28 | $13.28 /mo. |
| 150 W HPS | @ | $16.05 | /mo. | 150 W HPS | @ | $16.05 | $16.05 | $16.05 /mo. |
| 200 W HPS | @ | $19.92 | /mo. | 200 W HPS | @ | $19.92 | $19.92 | $19.92 /mo. |
| **Controlled Private Area Lighting (18-PAL-I) Frozen** | | | | **Controlled Private Area Lighting (19-P** | | | | |
| 175 W MV | @ | $14.04 | /mo. | 175 W MV | @ | $14.04 | $14.04 | $14.04 /mo. |
| 400 W MV | @ | $27.93 | /mo. | 400 W MV | @ | $27.93 | $27.93 | $27.93 /mo. |
| 400 W MV (Flood) | @ | $30.05 | /mo. | 400 W MV (Flood) | @ | $30.05 | $30.05 | $30.05 /mo. |
| 1000 W MV (Flood) | @ | $59.00 | /mo. | 1000 W MV (Flood) | @ | $59.00 | $59.00 | $59.00 /mo. |
| 100 W HPS | @ | $12.09 | /mo. | 100 W HPS | @ | $12.09 | $12.09 | $12.09 /mo. |
| 200 W HPS | @ | $21.87 | /mo. | 200 W HPS | @ | $21.87 | $21.87 | $21.87 /mo. |
| 150 W HPS (Flood) | @ | $22.28 | /mo. | 150 W HPS (Flood) | @ | $22.28 | $22.28 | $22.28 /mo. |
| 400 W HPS (Flood) | @ | $42.42 | /mo. | 400 W HPS (Flood) | @ | $42.42 | $42.42 | $42.42 /mo. |

**Present and Proposed Rate Schedules**

| Present Rates | | | | Proposed Rates | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Street Lighting Service Dusk to Dawn (18-SL-I)** | | | | **Street Lighting Service Dusk to Dawn (1** | | | | | |
| Inc 1000 lumen lamps | @ | $6.41 | /mo. | Inc 1000 lumen lamps | @ | $6.41 | $6.41 | $6.41 | /mo. |
| MV 7000 lumen lamps | @ | $14.69 | /mo. | MV 7000 lumen lamps | @ | $14.69 | $14.69 | $14.69 | /mo. |
| Energy Cost Adjustment - Lighting | @ | $0.000396 | /kWh | Energy Cost Adjustment - Lighting | @ | $0.000396 | $0.000396 | $0.000396 | /kWh |
| Property Tax Surcharge - Lighting | | | | Property Tax Surcharge - Lighting | @ | | | | /kWh |
| Jan | @ | $0.003105 | /kWh | | | | | | |
| Feb-Dec | @ | $0.004074 | /kWh | | | | | | |
| **Local Access Charge (18-LAC)** | | | | **Local Access Charge (18-LAC)** | | | | | |
| Demand Charge | @ | $5.00 | /kW | Demand Charge | @ | $5.00 | $5.00 | $5.00 | /kW |
| Property Tax Surcharge | @ | $0.54173 | /kW | Property Tax Surcharge | @ | $0.54173 | $0.54173 | $0.54173 | /kW |

**VERIFICATION OF RICHARD J. MACKE**

STATE OF MINNESOTA )
) ss
COUNTY OF ANOKA )

The undersigned, Richard J. Macke, upon oath first duly sworn, states that he is an employee of Power System Engineering, Inc., and that the foregoing testimony was prepared by him or under his supervision, that he is familiar with the contents thereof, and that the statements contained therein are true and correct to the best of his knowledge and belief.

Richard J. Macke

Richard J. Macke

Subscribed and sworn to before me this 30th day of September, 2019.

Marilyn M. Cuellar

Notary Public

My appointment expires: 1/31/20

MARILYN M. CUELLAR
NOTARY PUBLIC - MINNESOTA
My Commission Expires Jan. 31, 2020

## CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that a true and correct copy of the foregoing testimony was electronically served this 10th day of October, 2019 to:

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/s/ Glenda Cafer
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