

SMALL COMMERCIAL CUSTOMER DEMAND CHARGE STUDY

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Austin, Texas



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EXECUTIVE SUMMARY

Some of the changes to the rate design resulting from the 2011 Rate Study had a significant impact on certain Secondary Voltage Greater than or Equal to 10 kW but Less than 50 kW (S2) customers' monthly electric bills. To better understand the cause of these bill impacts and the appropriateness of the current S2 rate design, Austin Energy (AE) retained NewGen Strategies & Solutions (NewGen) to examine the change in S2 customers' electric bills since the October 1, 2012 implementation of new rates. Specifically, NewGen has analyzed the historical usage characteristics of S2 customers to determine if the allocation of costs in the 2011 Rate Study was appropriate; examined historical S2 customer bill impacts with specific attention to the introduction of a demand charge to customers with monthly maximum demands between 10 kW and less than 20 kW; and compared the S2 rate structure with the rate structures of other utilities in Texas and across the country, all with the goal of determining if the current S2 rate structure is equitable and appropriate.

Rate Design Objectives

The S2 rate structure, along with other AE retail rates were designed to meet specific objectives that align with AE's long run business objectives. These business objectives, among other things, promote the environmentally responsible and efficient use of energy. Under this business paradigm, AE is incentivizing customers to use less energy. An effective rate structures is designed with the intention of supporting these objectives. Recognizing the rate design implications identified in the 2011 Rate Study, the following rate design objectives were established:

1. Ensuring the long-term financial strength of the utility by setting rates that meet AE's revenue requirement and achieve sustained revenue stability;
2. Improving fixed cost recovery to align AE's rate structure more closely to its cost of serving its customers;
3. Aligning rates with AE's Strategic Plan by designing rates that encourage efficient energy use and meet changing customer needs by supporting technologies like solar electricity generation and electric vehicles; and
4. Updating rates and rate structures to distribute costs fairly among customer classes and encourages efficient energy use.

Commercial Class Rate Design

With the above rate design objectives in mind, AE reviewed historical customer class designations and established the following three new commercial classes.

| Class | Criteria |
|----------------------|------------|
| S1 Secondary Service | 0 < 10 kW |
| S2 Secondary Service | 10 < 50 kW |
| S3 Secondary Service | 50 + kW |



Justification for these changes to commercial secondary voltage customer classes was as follows:

- Customer usage characteristics indicated that customer monthly load factor, size (measured in kW) and coincidence with the AE system peak varied significantly at usage levels of less than 10 kW, equal to or greater than 10 kW but less than 50 kW, and 50 kW or more. These changes resulted in cost of service differences between these three groups of customers.
- PUCT regulation of Transmission and Distribution Utilities (TDUs) operating in the deregulated retail markets in Texas made a rate design distinction at 10 kW, where customers with maximum monthly demand of less than 10 kW did not have demand charges and customers with maximum monthly demands of 10 kW or greater did have demand charges. Given that AE's rates may be reviewed by the PUCT, commission precedent was an important consideration.
- Expanding the application of demand charges to smaller commercial customers improved fixed cost recovery and encouraged these customers to reduce demand or improve efficiency as measured by monthly load factor.

Alignment of S2 Class Rate Design with Cost of Service Results

NewGen reviewed the S2 rate design with the 2011 Rate Study cost of service results and found the following.

- ***Rate design aligns with cost of service results.*** Cost of service principles dictate that customer monthly load factor, rather than size (as measured in kW), is a primary indicator of average cost. Load factor is defined as average load divided by peak load over a predefined period, and is a measure of efficiency where a higher value (closer to 100 percent) is more efficient. Approximately 47 percent of S2 customers have average monthly load factors of 30 percent or less. AE's S2 rate structure is in alignment with cost of service results and principles – more efficient high load factor customers have a lower average rate than less efficient low load factor customers.
- ***Customer usage characteristics are different than those used in the 2011 Rate Study.*** Recent customer usage characteristics for S2 customers differ from the class usage characteristics used in the 2011 Rate Study. Differences pertain to customer size (as measured in kW), monthly energy usage, monthly load factor, and seasonality of load. Because these differences do not impact cost allocation in a uniform manner, the impact of these differences on cost of service results pertaining to the S2 class are unknown until an update of the cost of service analysis is completed.

Impact of Commercial Rate Design on S2 Customer Usage Characteristics

Customers in the S2 commercial class have maximum demand in the months June through September of between 10 kW and less than 50 kW. As a result of changes in rate design and customer class designations, customers with maximum demand in the months June through September of between 10 kW and less than 20 kW were introduced to a demand charge and, if applicable, a power factor penalty charge for the first time. Given these changes, NewGen

reviewed the impact on all customers in the S2 class using information provided to us by AE. Based on our review of this information, we have reached the following conclusions:

- ***Pricing signals associated with the S2 rate structure appear to be accomplishing rate design objectives as established in the 2011 Rate Study.*** AE's S2 rate structure appears to be lowering the class contribution to on-peak demand, promoting conservation and efficiency, and improving AE's fixed cost recovery.
- ***AE's current power factor penalty threshold of 90 percent is reasonable compared to its peers in the industry.*** Power factor penalty charges are uniformly applied throughout the industry to recover the added cost associated with serving customers with electric motors or other loads that reduce the efficient delivery of real power to customers. These penalties are often assessed via the demand charge. From a cost of service perspective, power factor penalty charges are an equitable means of recovering costs directly from customers adding costs to the system.
- ***A relatively small number of S2 customers with low monthly load factors and poor power factors have experienced large increases in their monthly power bills.*** Prior to the creation of the S2 class, approximately 1,475 of the 7,442 customers now in the S2 class who have monthly demand between 10 kW and 20 kW, or about 20 percent of S2 customers currently paying power factor penalty charges, were in a non-demand rate class and, therefore, were not subject to power factor penalty charges. These customers experienced greater bill impacts as they were introduced to a demand charge and a power factor penalty charge simultaneously when the S2 class was formed.

Customer Feedback

Based on our observation of S2 customer feedback as conducted by Creative Consumer Research and direct phone conversations with two customers who have expressed concern over the S2 rate to the Austin City Council, as discussed in Section 4 of this report, NewGen reached the following conclusions:

- ***At the class level, there appears to be limited concern over the impact of the S2 rate on customer finances.*** This is evidenced by the general difficulty in getting customers to attend a customer feedback discussion on this issue.
- ***Some customers are reacting to the S2 pricing signals by considering investments in energy efficiency or changes in energy use.*** Customers who did participate in the feedback session did indicate that some customers are reacting to the S2 pricing signals by considering investments in energy efficiency or changes in energy use. The focus group conducted by Creative Consumer Research indicated most customers are supportive of the goals of the demand rate structure, including charging customers that cause additional cost more for service. These responses are in alignment with AE's 2011 Rate Study objectives.
- ***One customer that contacted Austin City Council felt the rate being charged to him was unduly burdensome.*** NewGen attempted to survey select customers that had contacted Austin City Council in order to gather direct feedback on S2 rate design bill impacts. A total of six customers were called and two customers were surveyed. One customer contacted felt the rate being charged to him was unduly burdensome. The

customer's monthly power bill has increased dramatically under the S2 rate structure as this customer's usage characteristics resulted in maximum demands of 33 kW, low monthly load factors, and poor power factor as the business operation requires use of a significant amount of motors. This customer might benefit from an energy audit to identify cost-effective means to reduce their electric bills.

- ***Concern over the S2 rate structure and the impact on customer bills appears to be limited to a small group of customers with low load factors and poor power factors.***

Benchmarking

Based on our benchmarking analyses, as discussed in Section 5 of this report, NewGen reached the following conclusions:

- ***For small commercial customers, there is no standard approach in determining commercial class size.*** Customer class sizes range significantly between utilities. Of the utilities benchmarked, the Texas utilities have customer classes that include customers between 10 kW and 50 kW in the same rate class, consistent with the current S2 class. In utilities benchmarked outside the state of Texas, a greater variation of small commercial rate classes was identified; for example, Sacramento Power identifies rates for customers with 10 kW to 20 kW monthly demand and a separate rate for customers with 20 kW to 299 kW of monthly demand.
- ***For small commercial customers, there is no standard rate design approach.*** Customer class sizes, as measured in kW, range significantly between utilities. Most utilities, but not all, have a small commercial class that does not have a demand charge. However, two utilities in the benchmarking analysis (CPS Energy and Los Angeles Department of Water and Power) have demand charges, or similar charges, applicable to all commercial customers regardless of size. Conversely, three utilities in the benchmarking analysis (Bluebonnet Electric Cooperative, Pedernales Electric Cooperative and Reliant/CenterPoint) do not apply demand charges to any small commercial customers.
- ***For those utilities that do have demand or similar types of charges for these small commercial customers, the demand charges are lower than AE's in most cases.*** For customers with maximum demands ranging from 10 kW to 20 kW, the benchmarking results were similarly mixed. Of the eight utilities included in the benchmarking study, five do not have a demand, or similar, charge and three do have a demand, or similar, charge.
- ***All things considered, AE's current S2 rate structure impacts all customers in the class (10 kW - 50 kW) in a similar manner as that of CPS Energy, Los Angeles Department of Water and Power, and TXU/Oncor (as well as Sacramento Municipal Utility District for some S2 customers).*** It is worth noting that CPS Energy has a rate mechanism in place to shield low load factor customers from significant bill impacts, which is something that does not currently exist in AE's S2 rate structure.
- ***If AE were to adopt a rate structure similar to most utilities included in this benchmarking analysis, the most likely result would be a shift of costs from low load factor customers to high load factor customers, contrary to the intent embedded in the rate design adopted by the Austin City Council in 2012.*** Approximately, 47 percent

of S2 customers have average monthly load factors of 30 percent or less and 53 percent have monthly load factors of 30 percent or greater.

Alternate Rate Structures

Based on our review of hypothetical rate changes to the S2 customer class, as discussed in Section 6 of this report, any rate change that reduces or eliminates the current S2 demand charge will shift costs from low load factor customers to high load factor customers. Such a shift would be contrary to cost of service principles and would not align with the rate design objectives identified by AE in the 2011 Rate Study.

Further, simply adjusting the rate for customers in the 10 kW to 20 kW range of demands will not necessarily assist “small, local” businesses, as some of these businesses exhibit much larger demands in their operations. Thus, if an objective is to support the small, local business community in Austin, altering the rate for customers in a narrow range of demands will be an imprecise means to achieve this policy goal and many of the intended beneficiaries of such a policy would not be assisted by this change. Other support, such as energy audits or efficiency investment subsidies, could be more targeted to the intended recipients and, thus, would likely achieve a much better outcome.

Recommendations

Based on our analyses, NewGen recommends AE update the detailed customer usage information for the S2 class in AE’s next cost of service study to capture more accurately the current cost of service implications for this class of customers based on changes to their usage characteristics and additional data provided by the wider use of demand meters. AE should also perform a detailed multi-year weather normalization study for the S2 class to clearly understand the influence of the current rate structure on customer electricity consumption patterns.

To the extent possible, AE should maintain current pricing signals as they reflect cost of service results and customer reactions to these signals generally appear to be meeting the utility’s rate design objectives. However, AE should consider options to minimize “rate shock” for low load factor and poor power factor customers.

In the short term, for the S2 customer class, AE may consider temporarily rolling back the power factor penalty charge from 90 percent to 85 percent until the next comprehensive rate review. This adjustment would reduce power factor penalty revenues for customers in the S2 class by approximately 54 percent. . Modifying the penalty to apply only to power factor of less than 85 percent, consistent with AE’s former policy on power factor, is estimated to reduce AE’s revenues by approximately \$400,000 per year. It should be noted that AE would not recover this lost revenue from other sources. It is important to note that this would not be a change supported by cost of service principles but, rather, it would serve as a policy decision to mitigate bill impacts for certain poor power factor customers. The largest impact of this temporary measure would be experienced by the less than 200 customers that currently experience an increase in their demand charges of 29 percent or greater.

In the long term, AE could consider modifications to the existing rate structure that would limit the amount a low load factor and/or poor power factor customer would pay (on an average

rate basis). A limit can be applied to the rate structure without undermining important demand pricing signals embedded in the current rate structure and deviating from cost of service results. Such a limit may result in a subsidy that must be borne by other customers in the class; therefore, the size and breadth of the cap must meet AE policy objectives. This strategy would minimize the amount of subsidy and target the subsidy more directly to low load factor and poor power factor customers. Once such modifications are made, we recommend that the power factor penalty charge for this class of customers be reinstated to the same level as for other AE customer classes (if it was reduced as a short term mitigation measure).

A comprehensive cost of service analysis should be conducted in advance of a long term strategy so that rate structure modifications properly consider the true cost of serving the lowest load factor customers.

Section 1

INTRODUCTION AND OVERVIEW

Introduction and Overview

At the request of Austin Energy (AE), NewGen Strategies and Solutions (NewGen) has performed a review of AE's retail rate structure applicable to commercial customers with maximum demand in the months June through September of between 10 kilowatts (kW) and less than 50 kW. These customers are served under AE's Secondary Voltage Greater Than or Equal to 10 kW but less than 50 kW (S2) rate schedule. Two separate schedules, with similar rate structures but slightly different rates are applicable to customers inside and outside the Austin City Limits. Hereinafter, within this report, these customers will be referred to as "S2" customers.

On October 1, 2012, AE implemented retail rates as a result of a comprehensive rate study that represented a detailed and in-depth review of AE costs, customer classes, and rate structures (the "2011 Rate Study"). The 2011 Rate Study represented the first time AE had examined its costs in such thorough detail in over 17 years. As a result of this effort, many changes were made to AE customer class designations and rate structures. Some of these changes had significant impact on certain S2 customers' monthly utility bills. To better understand the cause of these impacts and the appropriateness of the current S2 rate design, AE retained NewGen to examine the change in S2 customers' electric bills since the October 1, 2012 implementation of customer classes and rate designs. Specifically, NewGen has performed the following analyses:

1. Examine historical usage characteristics of S2 customers over the period October 2011 through September 2014. Based on this review, determine if the allocation of costs in the 2011 Rate Study was appropriate.
2. Examine historical S2 customer bill impacts with specific attention to the introduction of a demand charge to customers with monthly maximum demands between 10 kW and less than 20 kW. This examination includes a quantitative analysis where historical bills are calculated and evaluated and a qualitative analysis where a sample of commercial customers were interviewed regarding the current rate structure.
3. Compare the S2 rate structure with the rate structure of other utilities in Texas and across the country. Based on this review:
 - a. Determine if the application of a demand charge for customers with maximum monthly demands of 10 kW and greater is appropriate.
 - b. Determine if the current rate structure and rates are appropriate.

Our analyses is organized within the body of the Report as follows:

- Section 2 – Small Commercial Demand Rate Design History provides a brief summary of the process, goals, and objectives, which led to the current S2 rate design.
- Section 3 – Secondary Service 10 <50 kW Rate Class describes the usage characteristics of customers in this class and the applicable rate.



Section 1

- Section 4 – Customer Feedback describes information directly received from S2 customers.
- Section 5 – Rate Benchmarking describes the differences between the S2 rate structure and the structures of other utilities serving similarly sized customers.
- Section 6 – Rate Structure Sensitivity examines the impact on existing S2 customers if the current rate structure is changed.
- Section 7 – Recommendations provides NewGen’s assessment of the information studied.

Based upon the information gathered in the conduct of the above analyses, NewGen has made conclusions, as described in Sections 3 to 5, and recommendations as described in Section 7 of this report.

Section 2

SMALL COMMERCIAL DEMAND RATE DESIGN HISTORY

History

Prior to October 1, 2012, AE had not increased its base electric rates (which excludes the fuel charge) since 1994. It had become apparent that the prior rate structures had become outdated, as they no longer represented AE's cost structure, no longer considered changes in customer values and perceptions related to electricity consumption and did not reflect AE business goals and objectives. Because of changes in costs, customer values and business objectives, a comprehensive rate review was conducted. Of the many factors considered in the 2011 Rate Study, two fundamental objectives had significant influence on rate design. These two objectives were to improve AE's fixed cost recovery and develop rates with strong pricing signals that supported AE's commitment to energy conservation and renewable energy.

As stated in the 2011 Rate Study Report,

"AE's electric sales has trended downward from average growth of 6 percent a year between 1994 and 2000 to 1.8 percent from 2001 to 2009. The decline in the annual growth rate is attributed to changing customer demographics, the current economic downturn, and reduced customer consumption due to AE's successful implementation of energy efficiency programs and promotion of conservation, which have helped keep rates stable for the last 17 years. Low load growth is anticipated well into the future. Although load growth is expected to remain low, the costs of operating the utility continue to rise at a steady rate, placing financial stress on the utility.

Additionally, the price of goods and services related to providing electric services has increased since 1994, and the utility has added a number of new business functions and expanded others. While AE customers have experienced the benefits of many new services and programs for several years, the increased costs of these services have been largely unaccounted for in the current rates. New programs and services that have been added, in no particular order or representation of magnitude, include solar rebates, the GreenChoice® renewable energy program, a new unit to coordinate AE generation scheduling activities with the state grid operator, the key accounts function, and a compliance program needed to meet federal grid reliability requirements, among others. AE has expanded its energy efficiency programs, Customer Assistance Program for low-income and other disadvantaged customers, and several programs to build and maintain the smart grid and related communication equipment improving system reliability.

To date, about 800 MW of new electric power generation has been offset through one of the most comprehensive and successful energy efficiency and load shifting programs in the nation. Smart meters have been installed at no direct cost to AE customers, while many electric utilities in Texas have placed a surcharge on customer electric bills to account for these costs. Since AE last set base rates, it has brought online the Sand Hill Energy Center, a 600 MW natural gas-fired facility with highly

efficient combined-cycle units and peaking units to help meet demand during the hot summer months. These new generation resources, which helped meet the utility's energy needs after the Holly Power Plant closure, were funded by AE with no base rate increase."¹

In short, AE was aggressively promoting programs that sold less energy per customer, yet utility costs per customer continued to rise as a large portion of utility costs are fixed and do not vary with the amount of energy consumed. This phenomenon is not unique to AE, as electric utilities across the country have been faced with a similar circumstance. Customers across the country are increasingly concerned with the environmental impact associated with electricity consumption. This concern, combined with technological advances in end-use products and renewable energy options, have reduced load growth compared to historical levels. In consideration of this change in the electric utility business environment, the 2011 Rate Study proposed rates that improved fixed cost recovery and encouraged conservation.

This rate strategy is confirmed by AE rate design objectives included in the 2011 Rate Study report:

1. Ensure long-term financial strength by setting rates that meet AE's revenue requirement and achieve sustained revenue stability;
2. Improve fixed cost recovery to align AE's rate structure more closely with its cost to serve its customers;
3. Align rates with AE's Strategic Plan by designing rates that encourage efficient energy use and meet changing customer needs by supporting technologies like solar electricity generation and electric vehicles; and
4. Update rates and rate structures to distribute costs fairly among customer classes and encourage efficient energy use.

Rate Design Changes Impacting Small Commercial Customers

Prior to the 2011 Rate Study, most commercial customers qualified for service under one of two classes: a General Service Non-Demand class, which did not include a demand charge and was applicable to commercial customers with maximum monthly demands of less than 20 kW; and a General Service Demand class, which did have a demand charge and was applicable to customers with maximum monthly demands of 20 kW or greater. There was no upper limit on the maximum monthly demand of customers in the General Service Demand class.

As a result of the 2011 Rate Study, commercial rate classes were changed. Most commercial customers qualified for service under one of three following classes.

- Secondary Voltage less than 10 kW (S1), which does not include a demand charge.
- Secondary Voltage greater than 10 kW but less than 50 kW (S2), which does include a demand charge.
- Secondary Voltage greater than or equal to 50 kW (S3), which does include a demand charge.

¹ Austin Energy. (December 19, 2011) Rate Analysis and Recommendation Report. Provided to the Austin City Council. Page 1-4, 1-5.

Changes were made to the commercial customer classes for the following reasons:

1. Customer usage characteristics indicated that customer monthly load factor², size (measured in kW) and coincidence with the AE system peak varied significantly at usage levels of less than 10 kW, equal to or greater than 10 kW but less than 50 kW, and 50 kW or more. These changes resulted in cost of service differences between these three groups of customers.
2. Public Utility Commission of Texas (PUCT) regulation of Transmission and Distribution Utilities (TDU) serving the deregulated retail markets in Texas made a rate design distinction at 10 kW, where customers with maximum monthly demand of less than 10 kW did not have demand charges and customers with maximum monthly demands of 10 kW or greater, did have demand charges. Given that AE's rates may be reviewed by the PUCT, commission precedent was an important consideration.
3. Expanding the application of demand charges to smaller commercial customers improved fixed cost recovery and encouraged these customers to reduce demand or improve efficiency as measured by monthly load factor.

As a result of these changes, AE's current rates applicable to most commercial customers are summarized in the following table.

² Load factor is defined as average load divided by peak load over a predefined period, and is a measure of efficiency where a higher value (closer to 100 percent) is more efficient.

Table 2-1
AE Current Secondary Voltage Commercial Rates (S1-S3)

| Current Commercial Rates ⁽¹⁾ | Secondary Service <10 kW (S1) | Secondary Service 10 to <50 kW (S2) | Secondary Service ≥50 kW (S3) |
|--|---|---|--|
| Customer Charge (\$/month) | 18.00 | 25.00 | 65.00 |
| Electric Delivery (\$/kW billed) | N/A | 4.00 | 4.50 |
| Demand Charge (\$/kW billed) | | | |
| Summer ⁽²⁾ | N/A | 6.15 | 7.85 |
| Non-Summer ⁽²⁾ | N/A | 5.15 | 6.85 |
| Energy Charge (¢/kWh) | | | |
| Summer | 6.198 | 2.914 | 2.247 |
| Non-Summer | 4.598 | 2.414 | 1.747 |
| Pass-Throughs ⁽³⁾ | | | |
| Power Supply Adjustment (¢/kWh) | 3.709 | 3.709 | 3.709 |
| Customer Assistance Program (¢/kWh) | 0.065 | 0.065 | 0.065 |
| Service Area Street Lighting (¢/kWh) | 0.096 | 0.076 | 0.068 |
| Energy Efficiency Services (¢/kWh) | 0.466 | 0.522 | 0.274 |
| Regulatory Charge | | | |
| (¢/kWh) | 0.859 | N/A | N/A |
| (\$/kW billed) | N/A | 2.56 | 2.49 |

Notes:

(1) Rates shown are for Inside City Limits customers.

(2) Summer rates are for June 1 through September 30 and non-summer rates are for October 1 through May 31.

(3) Pass-throughs are effective as of November 1, 2013.

For some small commercial customers, particularly those with demand requirements between 10 kW and 20 kW, the change in customer class designations and rate design may have created large changes in customer monthly bills as these customers migrated from an old rate without a demand charge to a new rate with a demand charge. Customers in this category with low monthly load factors likely experienced large increases in their monthly bills and some customers with high monthly load factors may have experienced a reduction in their monthly bills. If customers with low monthly load factors did not change their usage characteristics as a result of the rate change, higher monthly bills would be expected to persist.

Section 3

SECONDARY SERVICE 10 < 50 KW (S2) RATE CLASS

Introduction

The term Customer Usage Characteristics refers to the way customers use electricity. Important characteristics that influence utility costs include customer delivery voltage (i.e., secondary, primary, or transmission), coincidence with the system peak measured by demand (measured in kW), load factor and to a lesser degree size (measured in kW). Load factor is a measure of efficiency based on the relationship between demand and energy used by a customer. Variations in these characteristics mean that some customers are more or less expensive to serve than others. A cost of service study examines these characteristics by customer class, or groups of customers, and allocates costs to classes based on these characteristics. Once costs are allocated then rates can be designed. To the extent practical, rate design reflects these underlying costs and aligns those costs with common usage characteristics, such as the number of customers, size of demand and energy usage.

During the 2011 Rate Study, AE used detailed load research data to examine and understand these customer usage characteristics for all customers classes. The research data was gathered over the period October 2008 through September 2009 and was normalized for various factors, including weather. The result of the analyses and the corresponding cost of service is summarized in the following table.

Table 3-1
Secondary Voltage Customer Usage and Characteristics

| 2011 Rate Study Usage Characteristics | Secondary Service <10 kW (S1) | Secondary Service 10 to <50 kW (S2) | Secondary Service ≥50 kW (S3) |
|---|---|---|--------------------------------------|
| Number of Customers | 32,001 | 10,360 | 3,214 |
| Average Max Demand Per Customer (kW) | 3.01 | 23.83 | 267.57 |
| Coincidence Factor (Coincident Demand/ Maximum Demand) | 88.0% | 78.1% | 81.9% |
| Average Monthly Energy Used (kWh) | 987 | 7,939 | 107,415 |
| Average Monthly Load Factor | 44.9% | 45.6% | 55.0% |
| Average Cost of Service (\$/kWh) | \$0.12240 | \$0.09743 | \$0.08708 |
| Average Cost of Service as a Percent of Secondary Voltage <10 kW Cost | n/a | 79.6% | 71.1% |

As shown in the above table, variations in usage characteristics between the three commercial secondary voltage customer classes resulted in meaningful differences in cost of service results. On average, the cost of serving S2 and S3 customers is approximately 20 percent to

30 percent less than serving S1 customers. These differentials generally provide cost of service justification for grouping these customer classes as currently defined.

Customer Usage Characteristics

Supplementing load research data used in the 2011 Rate Study, AE provided NewGen with three years of historical data for customers in the S2 class. The data represents actual customer usage over the period October 2011 through September 2014 and has not been weather normalized. The table below compares the customer usage characteristics included in the 2011 Rate Study and the current dataset.

Table 3-2
Customer Usage Characteristics

| Class Usage Characteristics | Sample Dataset | 2011 Rate Study | Difference |
|---|-----------------------|------------------------|-------------------|
| Number of Customers | 13,522 | 7,939 | 5,583 |
| Average Monthly Demand Per Customer (kW) | 20.92 | 23.83 | (2.91) |
| Average Monthly Energy Per Customer (kWh) | 5,292 | 7,939 | (2,647) |
| Average Monthly Load Factor (%) | 34.7 | 45.6 | (10.9) |

The above table indicates the S2 class has grown considerably since the 2011 Rate Study. The number of customers within this class has grown by approximately 70 percent. Also, energy usage per customer, average monthly demand per customer, and monthly load factor are lower than indicated in the 2011 Rate Study load research data.

A closer examination of the recent data reveals that S2 average customer peak demands (measured in kW) occurred in the winter months. Non-summer peak demands have grown over the last three years. Conversely, summer peak demands have reduced compared to FY 2012. As a result, there has been an observed shifting of peak from the summer season (June through September) to the non-summer season as shown in the following graph.

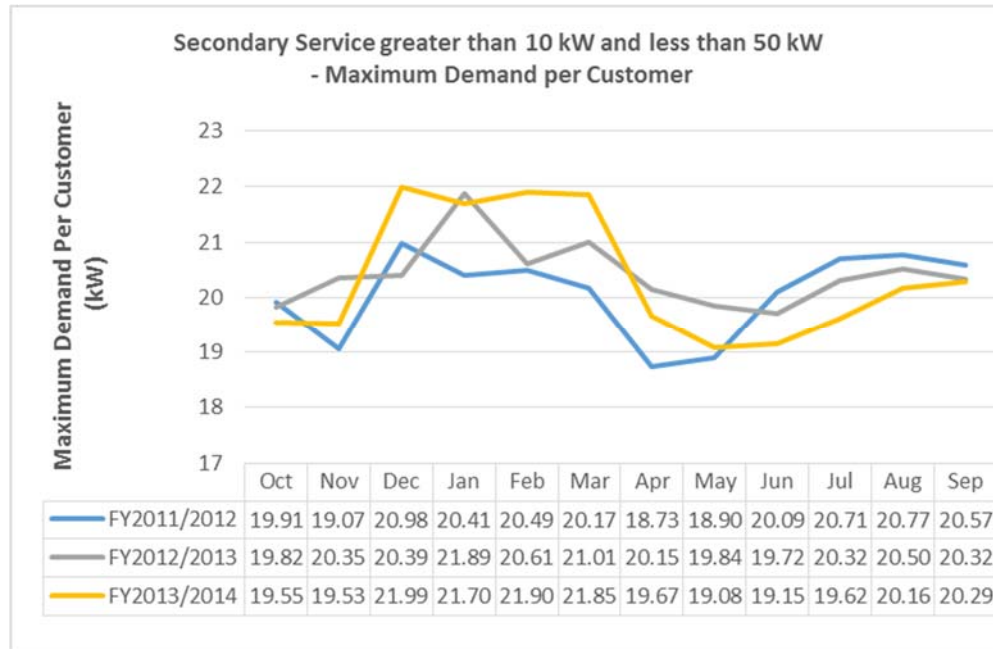
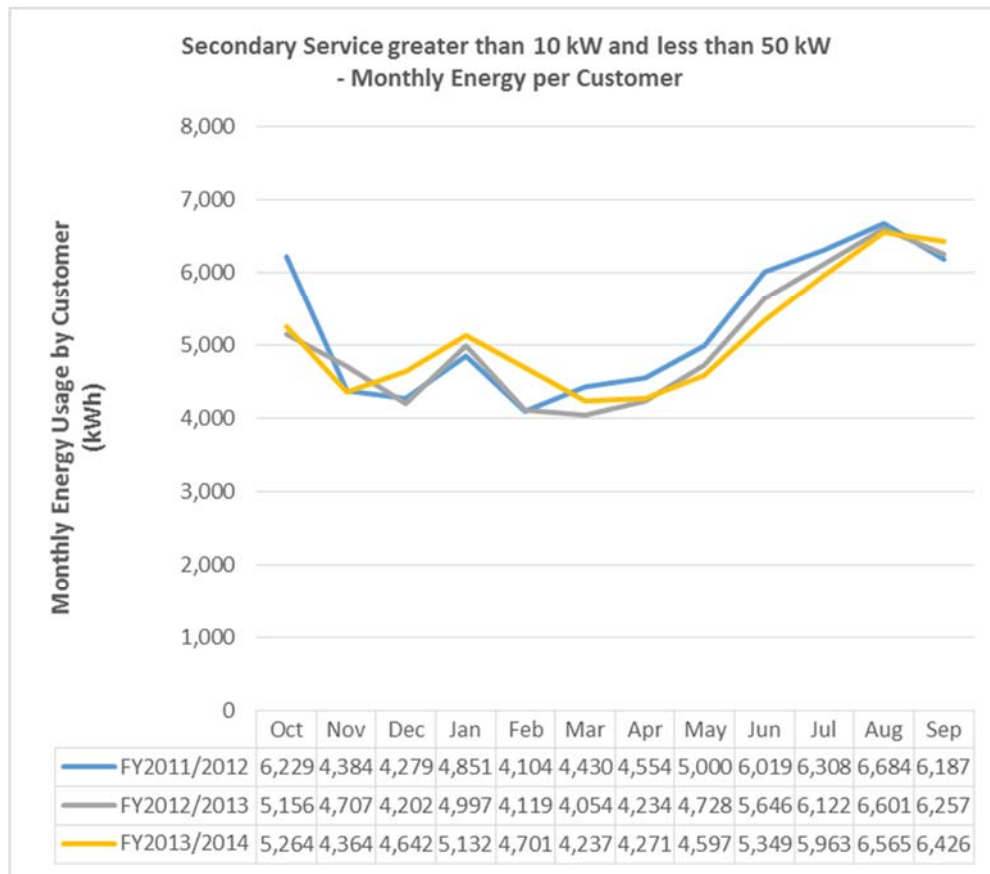


Figure 3-1. Secondary Service Greater Than 10 kW and Less Than 50 kW – Maximum Demand per Customer

The information shown in the above graph reflects actual S2 customer class data and has not been normalized for weather or adjusted for other factors. Given that Texas has experienced relatively similar average temperatures during the summers over this period, one possible explanation for the shifting of demand is customer reaction to the current S2 pricing structure, specifically the summer/non-summer rate differential adopted in the 2011 Rate Study (although this explanation cannot be certain without further study).

S2 customers' energy use is primarily driven by seasonal variations and ranges between 4,000 kWh and 6,700 kWh per customer for the S2 class. FY 2014 exhibited slightly lower use per customer in the summer months and slightly higher use per customer in the non-summer months as compared with the prior two years. Energy usage per customer is highest during the summer months for the S2 class, and the utility overall, as shown in the following graph.



**Figure 3.2. Secondary Service Greater Than 10 kW and Less Than 50 kW –
Monthly Energy per Customer**

The shifting demand and energy load patterns appear to be moving together with minimal impact on monthly load factors, which range between 25 percent and 45 percent for the S2 class. Class monthly load factor has not changed meaningfully over the last three years, as evidenced in Figure 3-3 on the following page.

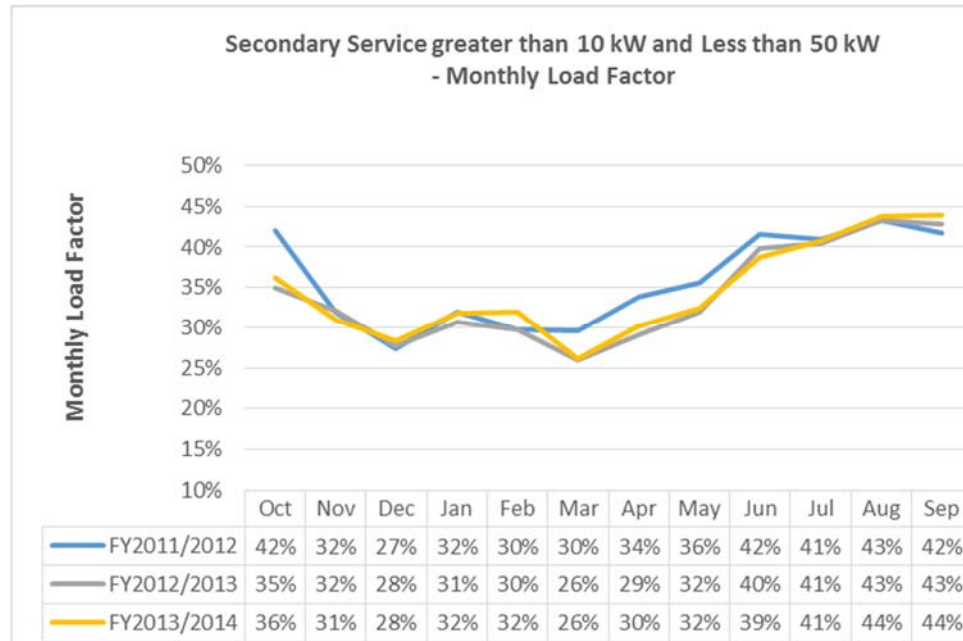


Figure 3-3. Secondary Service Greater Than 10 kW and Less Than 50 kW – Monthly Load Factor

Based on our review of this historical information, we conclude the following:

- Current class usage characteristics differ from that used in the 2011 Rate Study. It is difficult to predict the impact of these differences on cost of service results as the observed changes have counteracting influences (i.e., some changes tend to increase the cost of service while other changes tend to lower the cost of service). For example, the recent data suggests that the S2 class peak demands occur during the non-summer season. Because this would imply S2 class demands contribute less to the summer system peak than originally thought, cost allocation of peak demands to this class of customers would be lower than originally calculated in the 2011 Rate Study. However, customer monthly load factors are significantly lower (nearly 11 percent lower) as compared to the 2011 Rate Study assumptions. Lower load factors tend to increase the cost of service. Therefore, we can only conclude that customer usage characteristics are different from those used in the 2011 Rate Study and the impacts of these differences on cost of service results is unknown pending an update to the 2011 Rate Study.
- Class peak demands have shifted from the summer season to the non-summer season. This load shift, reducing class contribution to the AE summer system peak, is beneficial to AE's cost structure and was one of the 2011 Rate Study objectives. Underlying causes associated with this shift may be related to changes in customer usage behavior and/or weather. The impact of weather is unknown at this time, as the data have not been weather normalized.
- Observed lower energy and demand use per customer aligns with AE's rate design objectives for this class. These observed changes in electricity consumption may be attributable to customers reacting to the S2 pricing signals which encourage energy conservation by reducing demand and corresponding energy consumption. Changing customer behavior may also contribute to lower observed monthly load factors.

However, further detailed study is required to fully understand the underlying cause of these observed different usage patterns compared to the load research data used in the 2011 Rate Study.

Power Factor

Power Factor is another measure of efficiency. Power Factor measures the difference between the “total power” that AE must produce to serve customers versus the “real or usable power” observed by a customer. Real power performs work such as running an electric motor or heating an oven. Often, commercial customers operating large motors have poor power factors as the startup and operation of the motors require AE to deliver more “total power” to achieve the customers desired amount of motor performance. The delivery of more electric current results in greater system losses and requires the utility to install additional capacity, at additional cost, throughout the electric system. Therefore, customers with higher power factors have a lower cost to serve, and vice-versa; so, this cost of service difference is commonly reflected in commercial rate structures. A power factor penalty is a charge that compensates AE for the added capacity and energy needed to meet the power requirements of poor power factor customers. From a cost of service perspective, power factor penalty charges are an equitable means of recovering costs directly from customers adding costs to the system.

AE applies a power factor penalty to all demand customers with power factors less than 90 percent, as measured by AE’s metering devices. Of the 13,522 customers in the S2 class, approximately 3,452 customers have been assessed a power factor penalty charge at an annual cost of approximately \$750,000 to these customers. The class average power factor is 92.6 percent, which is above the penalty threshold. The application of the power factor penalty charge is such that billed demand is adjusted upward when power factor is below the minimum required level of 90 percent. The farther a customer’s power factor is below 90 percent, the larger the upward adjustment of billed demand.³

The following statistics summarize the estimated impact on customers in the S2 class assessed the power factor penalty.

- Approximately 0.25 percent (or 34 customers) experience an increase in their billing demand and corresponding charges of at least 100 percent.

³ For example, if a commercial customer inside the City Limits were on the S2 rate with 3,000 kWh and metered demand of 15 kW in June 2014, then their total electric bill would have been \$434.23 if they achieved 90% power factor (or better). This would be calculated as a \$25 customer charge plus \$12.71 per kW in demand charges plus \$0.07286 per kWh in energy charges (\$25 + \$12.71 x 15 kW + \$0.07286 x 3,000 kWh). However, if the customer only achieved 80% power factor, then the demand charge would have been increased. The demand component of the bill would have changed from being based on the metered demand of 15 kW to an adjusted (or billed) demand of 16.875 kW. The formula for this adjustment is billed demand equals metered demand times power factor requirement divided by power factor achieved. Or, in this example, billed demand = 15 kW x 0.90 / 0.80. The total electric bill based on 80% power factor would have been \$458.06, calculated as \$25 + \$12.71 x 16.875 kW + \$0.07286 x 3,000 kWh. This represents an increase of \$23.83 in the demand charge as well as the total bill. This is a 12.5% increase in the demand charge alone or a 5.5% increase in the total bill.

- Approximately 0.24 percent (or 33 customers) experience an increase in their billing demand and corresponding charges of between 50 percent to 80 percent.
- Approximately 0.92 percent (or 124 customers) experience an increase in their billing demand and corresponding charges of between 29 percent to 50 percent.
- Approximately 3.8 percent (or 512 customers) experience an increase in their billing demand and corresponding charges of between 13 percent to 29 percent.
- Approximately 20.3 percent (or 2,749 customers) experience an increase in their billing demand and corresponding charges of between 0 percent to 13 percent.
- Approximately 74.5 percent (or 10,070 customers) experience no increase in their billing demand and corresponding charges as a result of the power factor penalty.

NewGen estimates that completely eliminating the power factor penalty for the S2 class is estimated to reduce AE's revenues by approximately \$750,000 per year. This represents less than 1 percent of the class revenue but, for some customers in the S2 class that are subject to the penalty, this may represent a significant portion of their bill. Modifying the penalty to apply only to power factor of less than 85 percent, consistent with AE's former policy on power factor, is estimated to reduce AE's revenues by approximately \$400,000 per year. Also, it is important to note that S2 customers with demands greater than or equal to 20 kW have been subject to power factor penalty charges for many years. These customers account for \$540,000 or approximately 72 percent of the annual power factor penalty charges.

The table below lists the power factor requirements for various other utilities included in our benchmarking analyses as described in Section 5 of the Report. As indicated, AE's current policy is more lenient than almost all utilities listed in the table (only CPS Energy has a lower requirement).

**Table 3-3
Power Factor Benchmarking**

| Utility | State | Ownership Structure | Power Factor Adjustment |
|---------------------------------------|------------|--------------------------|-------------------------|
| Austin Energy | Texas | Municipal | <90% |
| Bluebonnet Electric Cooperative | Texas | Distribution Cooperative | <97% |
| CPS Energy | Texas | Municipal | <85% |
| Fort Collins Utilities | Colorado | Municipal | <90% |
| Los Angeles Power and Light | California | Municipal | <95% |
| Pedernales Electric Cooperative | Texas | Distribution Cooperative | <97% |
| Reliant/CenterPoint | Texas | Investor Owned Utility | <95% |
| Sacramento Municipal Utility District | California | Municipal | <95% |
| TXU-Oncor | Texas | Investor Owned Utility | <95% |

Current Rate Design

The current S2 rate contains fixed monthly, demand and energy charges. These rate components ensure that the cost of service is recovered by rates that reflect the cost drivers. For example, metering costs, which are a fixed monthly cost incurred for each customer, regardless of demand placed on the system by the customer or energy used during the billing period, are recovered through a fixed monthly cost. AE has developed the current S2 rate structure based on the 2011 cost of service study, to ensure there is proper cost causation in the rate structure, leading to more efficient use of the system by customers. The current AE S2 rate structure for inside the City Limits is as follows:

Table 3-4
AE Current Secondary Voltage Commercial Rates (S2)

| Current Commercial Rates ⁽¹⁾ | Secondary Service 10 to <50 kW (S2) |
|--|---|
| Customer Charge (\$/month) | 25.00 |
| Electric Delivery (\$/kW billed) | 4.00 |
| Demand Charge (\$/kW billed) | |
| Summer ⁽²⁾ | 6.15 |
| Non-Summer ⁽²⁾ | 5.15 |
| Energy Charge (¢/kWh) | |
| Summer | 2.914 |
| Non-Summer | 2.414 |
| Pass-Throughs ⁽³⁾ | |
| Power Supply Adjustment (¢/kWh) | 3.709 |
| Customer Assistance Program (¢/kWh) | 0.065 |
| Service Area Street Lighting (¢/kWh) | 0.076 |
| Energy Efficiency Services (¢/kWh) | 0.522 |
| Regulatory Charge | |
| (¢/kWh) | N/A |
| (\$/kW billed) | 2.56 |

Notes:

(1) Rates shown are for Inside City Limits customers.

(2) Summer rates are for June 1 through September 30 and non-summer rates are for October 1 through May 31.

(3) Pass-throughs are effective as of November 1, 2013.

We can present the S2 rate graphically by comparing the change in the average rate over changing customer usage patterns. Rate structures with demand and energy components, like the S2 rate, recognize and incentivize customers to improve their monthly load factors. Monthly load factor is one of the most important factors in determining cost of service. In recognition of the relationship between monthly load factor and average rates, we have developed graphs presented within this report that demonstrate this relationship. Information on each graph is as follows:

- **Average Rate Compared to Average Monthly Load Factor.** The Primary Y-axis indicates the average rate a customer would pay under the identified rate(s). The X-axis indicates the varying monthly load factor of a customer.
- **Number of Customer Bills in the Class.** The Secondary Y-axis indicates the number of customer bills at a given monthly load factor which are illustrated in a bar graph. Information on the distribution of customer monthly load factors provides valuable insight as to the impact and importance of the identified rate(s) on the overall class.

The following graph shows the impact of the S2 rate structure on customers within the class.

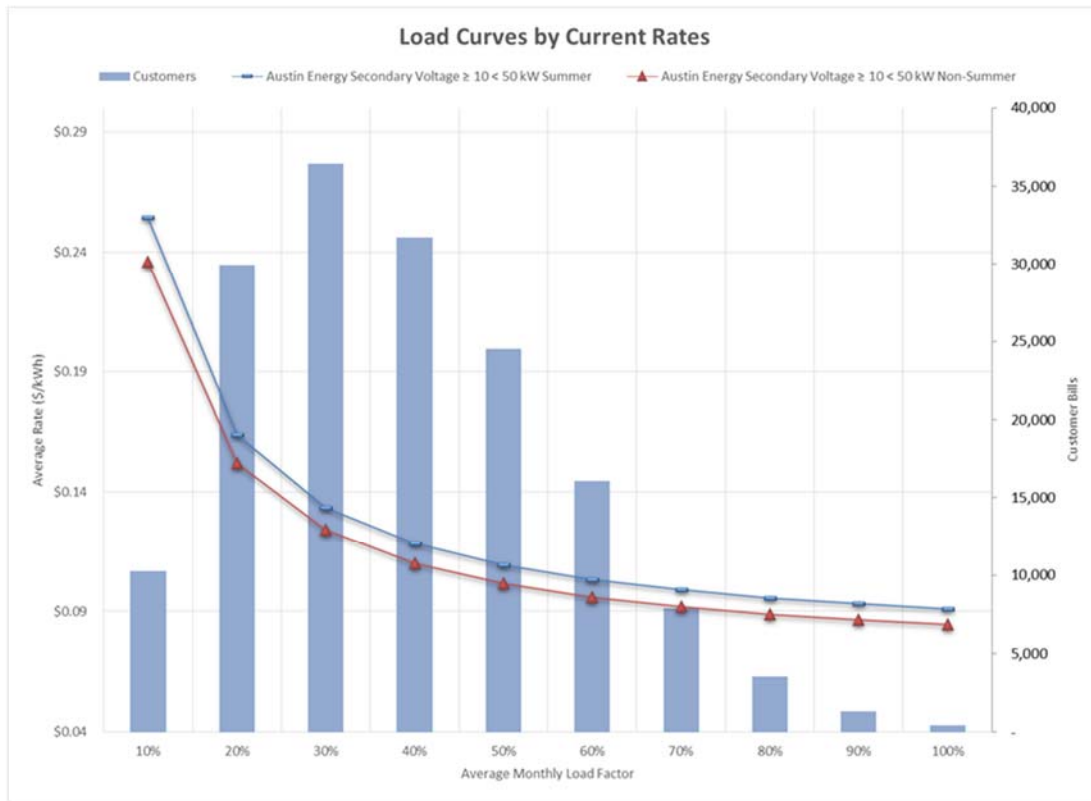


Figure 3-4. Load Curves by Current Rates

The existing rate structure rewards high load factor customers with a lower average rate. For example, customers with a 30 percent load factor have an average rate that is nearly \$0.10 per kWh lower than customers with a 10 percent load factor. This result is consistent with cost of service results and reflects that high load factor customers use more energy per kW of demand than low load factor customers. Therefore, high load factor customers can spread the fixed costs associated with meeting their demand over more units of energy (kWhs), thereby lowering their average rate (in \$ per kWh).

S2 Class Revenue Requirement

NewGen developed a revenue requirement for the S2 customer class utilizing historical, three-year average billing units applied to the S2 rate with current pass-through adjustments. Developing a revenue requirement for the S2 class is an important step in analyzing the rate structure of the S2 class. Any sensitivity analysis on rate structure and rate benchmarking in this report presents rate structures that generate the same amount of revenue as the current S2 rates. The S2 revenue requirement calculation is shown in the table below.

SECONDARY SERVICE 10 < 50 kW (S2) RATE CLASS

**Table 3-5
AE Proof of Revenue Under Current Rates**

| Rate Schedule | Inside City Limits (ICL) | | | Outside City Limits (OCL) | | | Total |
|---|--------------------------|----------------|---------------------|---------------------------|----------------|---------------------|----------------------|
| | Billing Units | Rate | Revenue | Billing Units | Rate | Revenue | Revenue |
| Customer Charge | 138,187 | \$25.00 | \$3,454,675 | 24,077 | \$25.00 | \$601,925 | \$4,056,600 |
| Demand Charges | | | | | | | |
| Winter ⁽¹⁾ (\$/kW-billed) | 1,877,111 | \$5.15 | \$9,667,124 | 339,867 | \$5.12 | \$1,740,119 | \$11,407,243 |
| Summer ⁽¹⁾ (\$/kW-billed) | 1,012,365 | \$6.15 | <u>6,226,042</u> | 164,792 | \$6.11 | <u>1,006,881</u> | <u>7,232,923</u> |
| Subtotal Demand Charges | | | \$15,893,166 | | | \$2,747,000 | \$18,640,166 |
| Electric Delivery (\$/kW-billed) | 2,889,476 | \$4.00 | \$11,557,904 | 504,659 | \$3.98 | \$2,008,544 | \$13,566,448 |
| Regulatory Charge (\$/kW) | 2,889,476 | \$2.56 | <u>7,397,059</u> | 504,659 | \$2.56 | <u>1,291,928</u> | <u>8,688,986</u> |
| Subtotal Demand Charges and Adjustment Charges | | | \$34,848,129 | | | \$6,113,077 | \$40,961,206 |
| Energy Charge (¢/kWh) | | | | | | | |
| Winter Energy ⁽¹⁾ (¢/kWh) | 433,209,672 | \$0.02414 | \$10,457,681 | 70,674,283 | \$0.02399 | \$1,695,476 | \$12,153,158 |
| Summer Energy ⁽¹⁾ (¢/kWh) | 307,959,288 | \$0.02914 | <u>8,973,934</u> | 46,783,352 | \$0.02896 | <u>1,354,846</u> | <u>10,328,780</u> |
| Subtotal Energy Charge | | | \$19,431,615 | | | \$3,050,322 | \$22,481,937 |
| Power Supply Adjustment ⁽²⁾ (\$/kWh) | 741,168,960 | \$0.03709 | \$27,489,957 | 117,457,635 | \$0.03709 | \$4,356,504 | \$31,846,460 |
| Customer Assistance Program ⁽²⁾ (\$/kWh) | 741,168,960 | \$0.00065 | 481,760 | 117,457,635 | \$0.00065 | 76,347 | 558,107 |
| Service Area Street Lighting ⁽²⁾ (\$/kWh) | 741,168,960 | \$0.00076 | 563,288 | 117,457,635 | \$- | - | 563,288 |
| Energy Efficiency Services ⁽²⁾ (\$/kWh) | 741,168,960 | \$0.00522 | <u>3,868,902</u> | 117,457,635 | \$0.00522 | <u>613,129</u> | <u>4,482,031</u> |
| Subtotal Energy Charge and Adjustment Charges | | | \$51,835,522 | | | \$8,096,302 | \$59,931,824 |
| Total Revenue | | | \$90,138,326 | | | \$14,811,304 | \$104,949,630 |

Notes:

(1) Summer rates are for June 1 through September 30 and non-summer rates are for October 1 through May 31.

(2) Pass-throughs are effective as of November 1, 2013.

As shown above, the S2 customer class generates \$104,949,630 in annual revenue.

Conclusions

Based on our review of the 2011 Rate Study and current customer usage characteristics of S2 customers, we conclude the following:

- Load research data used in the 2011 Rate Study yielded meaningful differences in cost of service results for S1, S2, and S3 customers. These differences support three different rate classes.
- For the period October 2011 through September 2014, customer usage characteristics for S2 customers differ from the class usage characteristics used in the 2011 Rate Study. Differences pertain to customer size (as measured in kW), monthly energy usage, monthly load factor, and seasonality of load. Because these differences do not impact cost allocation in a uniform manner, the impact of these differences on cost of service results pertaining to the S2 class are unknown.
- Over the three-year period studied, S2 customer summer demands have been lower while non-summer demands have increased. Loads have shifted from on-peak summer months to off-peak non-summer months, consistent with the pricing incentives embedded in AE's rate design.
- Over the three-year period studied, energy consumption has not materially increased and in many months has declined. Monthly load factor, which is a measure of the relationship between customer demand and energy use, has remained relatively steady over the period evaluated.
- Weather during the three summers (2012-2014) included in the period evaluated was relatively similar and on average cooler when compared to the record hot summers observed in 2011 and earlier. Recognizing that weather is an important factor influencing consumption of electricity, and the weather was less extreme over this three year period, it appears that the pricing signals associated with the S2 rate are accomplishing AE's rate design objectives as established in the 2011 Rate Study. AE's S2 rate structure appears to be lowering the class contribution to on-peak demand, promoting conservation and efficiency and improving AE's fixed cost recovery. This conclusion is subject to further study and verification pending the completion of a detailed load normalization study.
- Cost of service principles dictate that customer monthly load factor, rather than size (as measured in kW), is a primary indicator of average cost. Approximately, 47 percent of S2 customers have average monthly load factors of 30 percent or less. One-third of these low load factor customers have maximum demands between 20 kW and 50 kW and two-thirds have maximum demands between 10 kW and 20 kW in the months of June through September.
- Power factor penalty charges are uniformly applied throughout the industry to recover the added cost associated with serving customers with electric motors or other loads that reduce the efficient delivery of real power to customers. These penalties are often assessed via the demand charge.
- AE's current power factor penalty threshold of 90 percent is reasonable compared to its peers in the industry.

- From a cost of service perspective, power factor penalty charges are an equitable means of recovering costs directly from customers adding costs to the system.
- Power factor penalty charges generate approximately \$750,000 annually for the S2 class, or approximately 0.7 percent of annual class revenues. The cost is borne by approximately 3,500 customers in the S2 class.
- Prior to the creation of the S2 class, approximately 20 percent of the S2 customers currently paying power factor penalty charges were in a non-demand rate class and, therefore, were not subject to power factor penalty charges. These customers experienced greater bill impacts as they were introduced to a demand charge and a power factor penalty charge simultaneously when the S2 class was formed.
- The S2 customer class is projected to generate approximately \$105 million in revenue annually under the current rates.
- AE's S2 rate structure is in alignment with cost of service results and principles – high load factor customers have a lower average rate than low load factor customers.

Section 4

CUSTOMER FEEDBACK

NewGen endeavored to obtain customer feedback on the rates resulting from the 2011 Rate Study. Some of the feedback received was positive and some was negative. One source of feedback was via a focus group conducted by Creative Consumer Research and the other was from NewGen contacting individual customers that had contacted Austin City Council members regarding their rates. It is difficult to draw concrete conclusions regarding the sentiment of the overall customer class from these small samples, but these results add some context to the rate discussion.

Focus Group

AE contracted with Creative Consumer Research to develop and facilitate a focus group comprised of customers in the S2 customer class. The customers participating in the focus group included one (1) customer that currently has a 10 kW to 20 kW load and six (6) customers that currently have 20 kW to 50 kW loads. The focus group interaction occurred on February 12, 2015 and represented a range of user types, including a retail shop, a gymnasium, apartment management, an ice cream shop, and a construction services company.

The seven participants were selected from a pool of 158 commercial customers whose energy usage fell within the 10 kW to 20 kW or 20 kW to 50 kW ranges. The 158 customers were selected to represent a range of load factors, a diversity of business types, and representation for locally-owned businesses. As reported by Creative Consumer Research, all 158 potential participants were contacted; however, several declined participation because they did not believe they were significantly impacted by the rate change implemented by AE on October 1, 2012. Further, the majority of the participants in the focus group reported that they were not adversely affected by the new rate structure.

When given a written description of the rate structure for the S2 class, the participants generally reacted positively indicating that customers whose energy use had an impact on the system should pay more to reflect that impact. A few participants did indicate that a higher energy bill would cause them to consider making adjustments in their use of power (either through changes in behavior or energy savings investments) in an effort to reduce their bills. The participants agreed that anything which causes them to pay higher energy bills could be bad for their bottom line, but most participants reported that their energy costs amounted to a small part of their overall business expense and several indicated they would simply pass along the cost to their customers. Most of the participants had completed some type of energy efficiency improvement to their business or implemented an energy saving policy (e.g., installing programmable thermostats, installing energy efficient lighting, or creating policies to minimize energy usage).

Most, if not all, of the participants gave AE high ratings for customer satisfaction despite the fact that several of them had experienced some issues with AE in the recent past (e.g., incorrect utility bills, failing to receive their utility bill, and general frustration with the customer service they received via the call center).

In general, NewGen's assessment of the focus group is that the customers are reacting to the rate structure for the S2 class in a manner that is consistent with the design of the rate structure. The rate structure was intended to send a pricing signal to users of the electric utility to encourage conservation, energy efficiency investments, peak shaving, and other changes in customer behavior that align with AE's strategic objectives. Based on the responses from the focus group, this seems to be the response the rate design has engendered.

Select Customers

NewGen attempted to contact six (6) customers in the S2 class that had contacted Austin City Council members regarding their rates. NewGen spoke with two (2) of these customers and their comments are summarized below.

Temporary S2 Customer

One of the customers that had contacted Austin City Council was assigned to the S2 class for a short period of time. This is a customer that typically has demands less than 10 kW but an event beyond his control caused his demand to spike beyond 10 kW in June, which caused his business to be moved to the S2 rate and incur demand charges. The event that caused the spike in demand was apparently related to some work a contractor was doing on the roof of his building.

The customer's first indication that his rate had changed was when he received a letter from AE discussing retroactive billing, which he did not understand. When his bill arrived, it reflected significant charges resulting not only from the move to a demand rate (i.e., the S2 rate), but also the impact of the retroactive billing issue. He contacted AE to dispute the charges and, eventually, identified the cause of the spike in demand. He also contacted Austin City Council to help address his issue as he did not feel he was getting appropriate redress from AE. He indicated AE eventually resolved the issue to his satisfaction by removing the demand charges. Also, since his demand subsequent to the spike has been below 10 kW, he is now back in the S1 class.

He characterized the event in retrospect as "no big deal" but did indicate that AE made it harder than it needed to be in order to resolve the issue. The issue could have been addressed, in his view, without as much effort on his part to identify and correct the problem. He did acknowledge that, at the time, AE was being inundated with calls due to the retroactive billing issue.

Dissatisfied S2 Customer

One of the other customers that contacted Austin City Council exhibits demands in the June through September billing months that routinely place his business in the S2 class. His demands during these four months in the last three years have averaged approximately 16 kW. Thus, his business was categorized as General Service Non-Demand (or E02) under the rate classes as they existed prior to the October 1, 2012 rate adjustments. As a result, this customer transitioned from a \$6.00 per month customer charge plus energy charges to the S2 rate structure, which includes demand charges.

This business operates three-phase equipment, typically three days per week. The building the business leases for operations has electric heat, as there is no natural gas service to the

property. This results in a fairly significant heating load, which drives electric demands higher in the winter. In fact, the greatest demand for this customer in each of the last three years has occurred in January of each year. The average demand in the last three Januarys has been approximately 33 kW. The customer self-reported that his electric bill for January 2015 was approximately \$750 and this is consistent with the bills received in January 2013 and 2014 (all subsequent to the October 1, 2012 rate adjustments). If on-site propane heat is an option for this customer, it could potentially reduce the electric bill significantly.

The load factor for this customer is at the lower end of the possible range. This customer's average monthly load factor over the past three years is approximately 16 percent with a maximum of approximately 26 percent and a minimum of approximately 7 percent. This has significant implications for the cost of providing service to this customer and, as a result, bills under the S2 rates. Previously, under the E02 rate, this customer's poor load factor was subsidized by the other (more efficient) customers in the class. However, under the S2 rate the costs associated with poor load factor are directly billed to the customer.

In addition to the transition to a rate with demand charges, and low load factor, this customer's bills are also impacted by AE's 90 percent power factor requirement (which is only applicable to customers with demand charges). This customer's energy use exhibits power factor of less than the 90 percent requirement roughly half of the months of the year, likely due to the three-phase equipment used in the business operation. The power factor for this customer has been as low as approximately 85 percent in at least one month of each of the last three years. Power factor of less than 90 percent results in greater demand charges. It is possible that capacitors, or some other change in operation or investment, could bring this customer's power factor up to at least 90 percent and eliminate the penalty associated with this issue.

Energy is one of the key costs in this business, according to the customer. His business has seven (7) employees and well under \$1 million in gross revenue annually. The customer observed that his is a small, local business and that these types of businesses are critical to the local and broader economy. As proof of this claim, the customer cited multiple statistics regarding the importance of small business, including some that can be found at the United States (U.S.) Small Business Administration's website.⁴

This customer has not made any changes recently, but has made efforts in the past to make changes to the building (e.g., lighting replacement) and operations in order to conserve energy and lessen his demands. Since he does not own the building, additional changes to the building (e.g., insulation) are difficult. The owner of the building does not want to pay for the investment since he does not receive the financial benefit (as the building owner does not pay the utility bills) and the business does not want to invest in improvement to a building it does not own. Thus, the most practical changes to improve energy efficiency for this customer might be tied directly to operations or subsidized investments.

This customer expressed extreme frustration and dissatisfaction with AE. He sincerely feels that AE is not concerned with his problems. In NewGen's opinion, this represents a failure on the part of AE as well as an opportunity for AE to improve its relationship with this customer. There are likely operational changes or investments that could be made to improve this customer's load and, by extension, lower his bills. Some of these opportunities might include options that have been mentioned here (e.g., on-site propane heat, capacitors, operational

⁴ https://www.sba.gov/sites/default/files/FAQ_Sept_2012.pdf

changes), but a comprehensive energy audit should identify the most appropriate and cost-effective changes for this customer's particular circumstances.

Best of all, the customer reacted positively to the prospect of having an energy audit conducted. NewGen is not aware if this option has been presented to this customer in the past, but this might be the perfect means for AE to assist this customer and improve its relationship with one of its small business customers.

Conclusions

Based on our observations of S2 customer feedback as conducted by Creative Consumer Research and direct phone conversations with two customers who have expressed concern over the S2 rate to the City Council, we conclude the following:

- Overall, at the class level, there appears to be limited concern over the impact of the S2 rate on customer finances. This is evidenced by the general difficulty in getting customers to attend a customer feedback discussion on this issue.
- Customers who did participate in the feedback session did indicate that some customers are reacting to the S2 pricing signals by considering investments in energy efficiency or changes in energy use. The focus group conducted by Creative Consumer Research indicated most customers are supportive of the goals of the demand rate structure, recognizing that customer costs increase and decrease with changes in monthly load factor. These responses are in alignment with AE's 2011 Rate Study objectives.
- Concern over the S2 rate structure and the impact on customer bills appears to be limited to a small group of customers with low load factors and poor power factors.
- One customer that contacted Austin City Council felt the rate being charged to him was unduly burdensome. The customer's monthly power bill has increased dramatically under the S2 rate structure as this customer's usage characteristics resulted in maximum demands of 33 kW (in the winter), low monthly load factors, and poor power factor as the business operation requires use of a significant amount of motors.

Section 5

RATE BENCHMARKING

Introduction

The objective of this benchmarking analysis is to compare AE's S2 rate structure with the rate structures of other utilities. The term rate structure refers to the design and components of the rate. For example, commercial rate components may include a customer charge, demand charges, and energy charges. Rates associated with each component may vary by season or time of day. Rate structures have a significant impact on customer bills within a class. A simple energy-only rate structure tends to minimize variations in effective rates paid by customers within a class, even if they exhibit very different usage characteristics. Conversely, a demand/energy rate structure will recognize these variations in usage characteristics creating a greater variation in effective rates for customers in the same rate class.

This benchmarking process differs from a traditional rate comparison analysis in that the benchmarking as described herein analyzes the differences in utility rate structures, not utility costs. In a traditional rate comparison analysis with two utilities having identical rate structures, but different cost structures, the utility with lower costs would result in customers having a lower monthly bill. However, in this rate structure benchmarking analysis, utility cost differentials are eliminated, so comparing two utilities having identical rate structures would result in customers having identical bills.

To remove cost differentials from this rate structure benchmarking analysis, we have adjusted comparison utility rates either upward or downward on a prorata basis so that total rate revenues from the comparison utility are equal to rate revenue generated from AE's current S2 rate. This ensures the benchmarking analysis is isolated to a comparison of rate structures, rather than reflecting the differences in the costs to provide service.

Comparable Utilities

For the rate structure benchmarking analysis, we have selected eight (8) comparable utilities that exhibit some or all of the following criteria:

1. Municipal or consumer-owned utilities in the surrounding AE service territory.
2. Retail Electric Providers (REP) operating within competitive areas of the Electric Reliability Council of Texas (ERCOT).
3. Large public power utilities.
4. Municipal utilities with a strong commitment to energy conservation and renewable energy.

Based on these criteria, the utilities listed in Table 5-1 were selected for an in-depth review.

**Table 5-1
Compatible Utilities Benchmarked**

| Utility | State | Ownership Structure | Large Public Power Member | Commitment to Conservation | Commitment to Renewables |
|---------------------------------------|------------|--------------------------|---------------------------|----------------------------|--------------------------|
| Bluebonnet Electric Cooperative | Texas | Distribution Cooperative | N/A | Neutral | Neutral |
| CPS Energy | Texas | Municipal | Yes | Strong | Strong |
| Fort Collins Utilities | Colorado | Municipal | No | Strong | Strong |
| Los Angeles Power and Light | California | Municipal | Yes | Strong | Strong |
| Pedernales Electric Cooperative | Texas | Distribution Cooperative | N/A | Neutral | Neutral |
| Reliant/CenterPoint | Texas | Investor Owned Utility | N/A | Neutral | Neutral |
| Sacramento Municipal Utility District | California | Municipal | Yes | Strong | Strong |
| TXU-Oncor | Texas | Investor Owned Utility | N/A | Neutral | Neutral |

In the above Table, Reliant/CenterPoint and TXU/Oncor are two retail electric providers (REPs) identified in the benchmarking analyses. REPs operate throughout the ERCOT competitive retail market. The designation Reliant/CenterPoint means that Reliant is the REP and is the customer service interface with the customer. Reliant bundles power supply and delivery charges provided by others in the offer of electric service to retail customers. CenterPoint is the Transmission and Distribution Utility (TDU). A TDU serves a specific geographic area and is regulated by the PUCT. As a TDU, CenterPoint provides the wires through which Reliant delivers power to its retail customers. TDU rates change in different geographic areas. Because Reliant bundles power supply and TDU charges, the TDU rate structure influences the retail rates charged by Reliant. Therefore, Reliant/CenterPoint is a unique retail rate offering available to customers physically connected to the CenterPoint TDU. This rate is different than a Reliant-AEP Texas North rate, Reliant-Sharyland rate or any other combination of the six TDU's that Reliant uses to delivery power to customers. Also, REPs can offer multiple rate packages for different service, utilizing different rate structures, to commercial customers. The REP's retail rate can align with the pricing structure from the TDU, or utilize a structure that deviates from the TDU rate structure.

As mentioned in Section 2, the TDU's are subject to PUCT regulation and predominately implement demand charge at 10 kW and greater. This PUCT policy is reflected in the rates set by Reliant/CenterPoint and TXU/Oncor, as listed in Table 5-2.

Commercial Classes

The criteria applied in the development of rate classes varies widely between utilities. For commercial customers, rate classes are typically defined by customer size, as measured by the customer's peak demand. As described in Section 2 of this report, AE serves the majority of its commercial secondary voltage customers with three rate classes defined by size of demand. Class size delineations are set at less than 10 kW, 10 kW and greater but less than 50 kW, and 50 kW and greater. To ensure a valid comparison of rate structures, benchmark utility customer class criteria were compared to AE's criteria so that the rate structures examined were applicable to AE customers receiving service under the S2 rate. The alignment of benchmarked utilities' commercial rate criteria with AE's S2 class is shown in Table 5-2.

Table 5-2
Applicable Rate Schedules By Customer Size

| Utility | Customer Size 0-9.9 kW | Customer Size 10 kW – 49.9 kW | Customer Size >50 kW |
|---|---|--|---|
| Austin Energy | Secondary Service < 10 kW (S1) | Secondary Service 10 kW – 49.9 kW (S2) | Secondary Service >50 kW (S3) |
| Bluebonnet Electric Cooperative | Basic <50kW | Basic <50kW | Large Power < 250 kW |
| CPS Energy | General Service (PL) ⁽¹⁾ | General Service (PL) ⁽¹⁾ | General Service (PL) ⁽¹⁾ |
| Fort Collins Utilities | General Service <25 kW | General Service <25 kW General Service 25 kW to less than 50 kW | General Service 50 kW to less than 750 kW |
| Los Angeles Power and Light | Small General Service <30kW | Small General Service <30 kW Primary Service 30 kW or greater | Primary Service 30 kW or greater |
| Pedernales Electric Cooperative | Small Power <75kW | Small Power <75 kW | Small Power < 75 kW |
| Reliant/CenterPoint | Reliant Rockets Secure Advantage 12 Plan CenterPoint – TDU <10 kW | Reliant Rockets Secure Advantage 12 Plan CenterPoint – TDU >10 kW | Reliant Rockets Secure Advantage 12 Plan CenterPoint – TDU >10 kW |
| Sacramento Municipal Utility District | Small General Service Non-Demand <20 kW | Small General Service Non- Demand <20 kW Small General Service Demand >20 kW but less the 299 kW | Small General Service Demand >20 kW but less the 299 kW |
| TXU/Oncor | TXU Energy Business Monthly Saver 36 Oncor – TDU <10 kW | TXU Energy Business Monthly Saver 36 Oncor – TDU -10 kW | TXU Energy Business Monthly Saver 36 Oncor – TDU >10 kW |

Notes:

- (1) CPS Energy simultaneously offers its commercial customers service under General Service (PL) and Large Light and Power (LLP). The customer can pick the most appropriate tariff for their situation. For the purposes of this benchmarking review, we have compared AE's Secondary Service 10kW – 49.9 kW rate with CPS Energy's General Service (PL) rate.

For the purposes of the benchmarking analysis, rates in the green highlighted column of the table above (10 kW to 49.9 kW) were studied.

Small Commercial Customer Class Designations

Across the industry, commercial customer class qualification criteria is associated with customer metering capabilities, customer size and delivery voltage. Before Advanced Metering Infrastructure (AMI) meters, also known as “smart meters,” only larger commercial customers were demand metered, as the cost of these meters was significant compared with energy-only rate alternatives. Now, with AMI meters becoming more affordable, the cost and capability of the meter is similar for all customers (e.g., residential, commercial, etc.), so it is now more practical to measure demand for all customers. As a result of this technological advancement, class designations such as “Commercial Non-Demand” and “Commercial Demand” based on metering limitations, or meter cost, are becoming less relevant. However,

these legacy class designations remain common in the industry. Beyond initial “non-demand” and “demand” class descriptions, other class designations based on size (kW) vary greatly among utilities. Additionally, common class designations are based on delivery service voltage such as secondary, primary, and transmission. Delivery voltage is an important cost of service differentiator in a rate study.

The following table summarizes class boundaries between small commercial customers for each of the benchmarked utilities. Changes in shading reflect a change in rate structure or class. Boundaries reflect the point where the rate or rate structure changes as customer size changes.

Table 5-3
Small Commercial Customer Class Boundaries

| Customer Demand | | | | | | | | | | | |
|---|--|----|----|----|----|----|----|----|----|----|----|
| Minimum Demand (kW) | | 0 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| Maximum Demand (kW) | | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | + |
| Utility | | | | | | | | | | | |
| Austin Energy | | | | | | | | | | | |
| Bluebonnet Electric Cooperative | | | | | | | | | | | |
| CPS Energy | | | | | | | | | | | |
| Fort Collins Utilities | | | | | | | | | | | |
| Los Angeles Department of Power and Light | | | | | | | | | | | |
| Perdenales Electric Cooperative | | | | | | | | | | | |
| Reliant-CenterPoint | | | | | | | | | | | |
| Sacramento Municipal District | | | | | | | | | | | |
| TXU/Oncor | | | | | | | | | | | |

This small commercial rate comparison indicates that AE, Reliant/CenterPoint, and TXU/Oncor have 10 kW boundaries. The Reliant/CenterPoint and TXU/Oncor boundaries are dictated by PUCT class requirements for TDUs. Both Reliant and TXU pass through their TDU charges to retail customers. Reliant modifies the CenterPoint TDU cost, but TXU passes through Oncor TDU’s as incurred. Per PUCT requirements, TDU’s serve secondary service less than 10 kW customers with a rate structure consisting of a customer and an energy charge. For customers with demands greater than 10 kW, TDU’s rate structures include a customer, demand and energy charge. Because of the change in rate structure, we conclude the REPs rate structures, with TDU pass through provisions, change at 10 kW.

For non-REP utilities in the benchmarking survey, class boundaries vary from 20 kW to upwards of 700 kW. Five (5) non-REP utilities have boundaries ranging from 20 kW to 75 kW. Two non-REP utilities have very large boundaries at 200 kW to 750 kW. Utilities with large variations in size within the class typically use demand charges to track costs and minimize subsidization.

Rate Structure Review

This section of the report provides a detailed comparison of each utility's rate structure with AE's S2 class.

Bluebonnet Electric Cooperative

Bluebonnet Electric Cooperative (BEC) is a consumer owned distribution cooperative serving customers bordering AE's service territory. BEC is a wholesale customer of the Lower Colorado River Authority (LCRA). The LCRA's wholesale power costs are billed to BEC on an energy-only basis; therefore, the majority of BEC's fixed costs are related to its distribution system.

The applicable BEC rate for the rate structure review is the Basic Rate. The Basic Rate is available to all commercial and industrial customers and other consumers whose peak demand is consistently less than 50kW per billing cycle. A summary of the Basic Rate compared to AE's S2 rate is shown in the following table.

Table 5-4
AE and BEC Rate Comparison

| Rate Structure Comparison | AE's Secondary Voltage 10kW to 50kW (S2) | BEC's Basic <50kW | BEC's Basic <50kW (Adjusted) |
|--|---|---------------------------------|--|
| Customer Charge (\$/month) ⁽¹⁾ | 25.00 | 50.00 | 54.64 |
| Electric Delivery (\$/kW billed) | 4.00 | N/A | N/A |
| Demand Charge (\$/kW billed) | | | |
| Summer | 6.15 | N/A | N/A |
| Non-Summer | 5.15 | N/A | N/A |
| Energy Charge (¢/kWh) | | | |
| Summer | 2.914 | 6.457 | 7.056 |
| Non-Summer | 2.414 | 6.457 | 7.056 |
| Pass-Throughs (¢/kWh) | | | |
| Power Supply Adjustment | 3.709 | 0.109 | 0.109 |
| Customer Assistance Program | 0.065 | N/A | N/A |
| Service Area Street Lighting | 0.076 | N/A | N/A |
| Energy Efficiency Services | 0.522 | N/A | N/A |
| Distribution Charge ⁽¹⁾ | N/A | 3.684 | 4.026 |
| Regulatory Charge | | | |
| (¢/kWh) | N/A | N/A | N/A |
| (\$/kW billed) | 2.56 | N/A | N/A |

Notes:

(1) Assumed three-phase customer

BEC's Basic rate does not include a demand charge.

The adjusted BEC rate as shown in the above table reflects a prorata adjustment of the rate so that the BEC rate applied to AE customers served under the S2 rate would generate an equal amount of revenue. In other words, AE would be financially indifferent to either rate as both rates generated the same amount of revenue (although the BEC rate would not necessarily support the City of Austin’s goals and objectives). The analysis supporting this revenue neutral calculation is shown in Exhibit 1 of this report.

Graphical comparisons of BEC’s Basic Rate compared to AE’s S2 rate for customers with monthly maximum demands of 15kW, 25kW, and 45kW are shown in the following graphs.

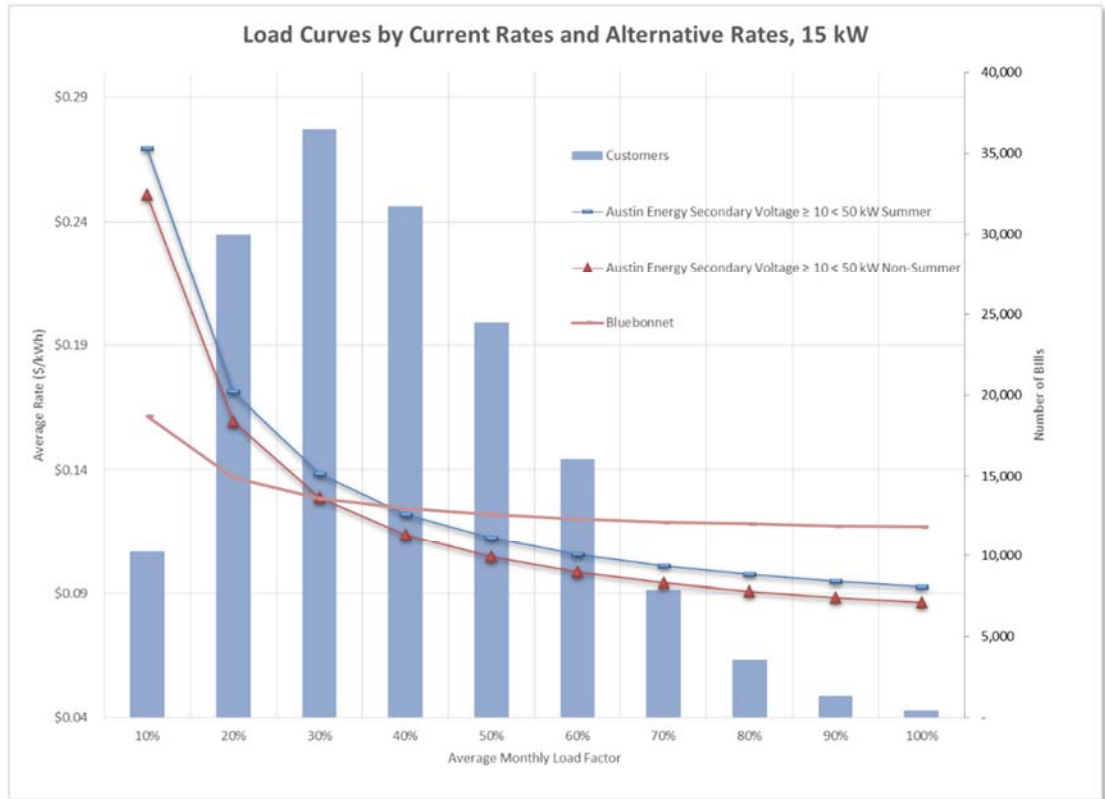


Figure 5.1. BEC Load Curves by Current Rates and Alternative Rates, 15 kW

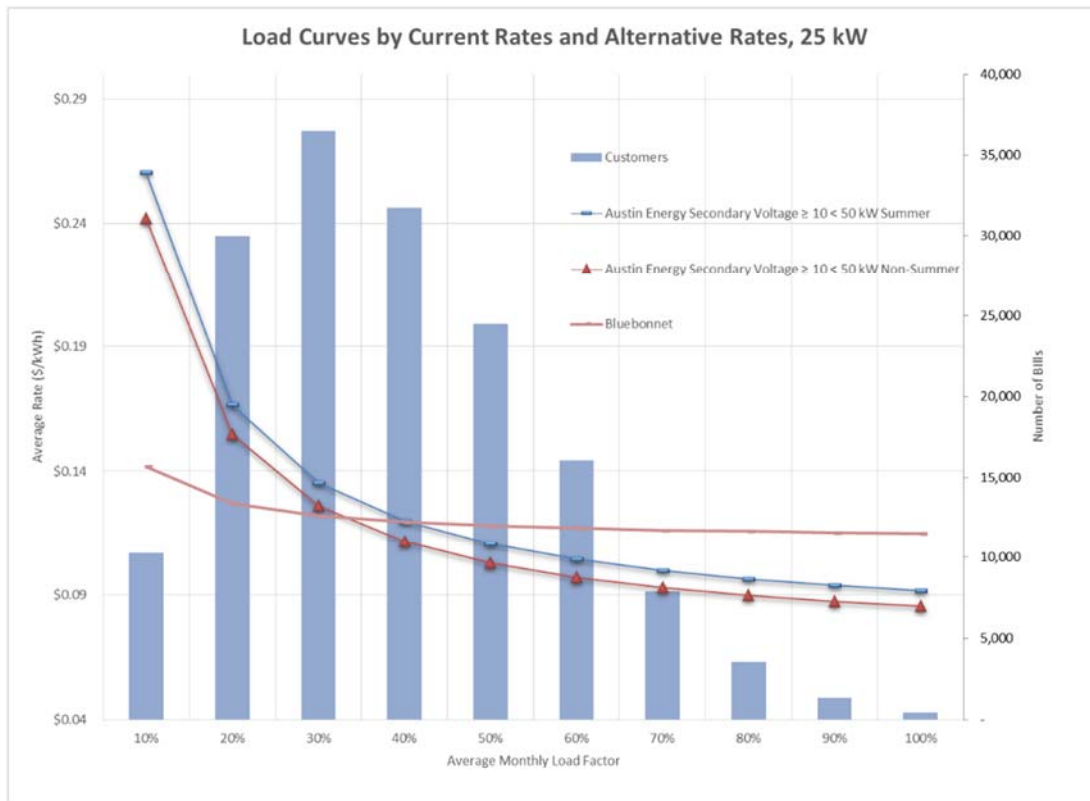


Figure 5-2. BEC Load Curves by Current Rates and Alternate Rates, 25kW

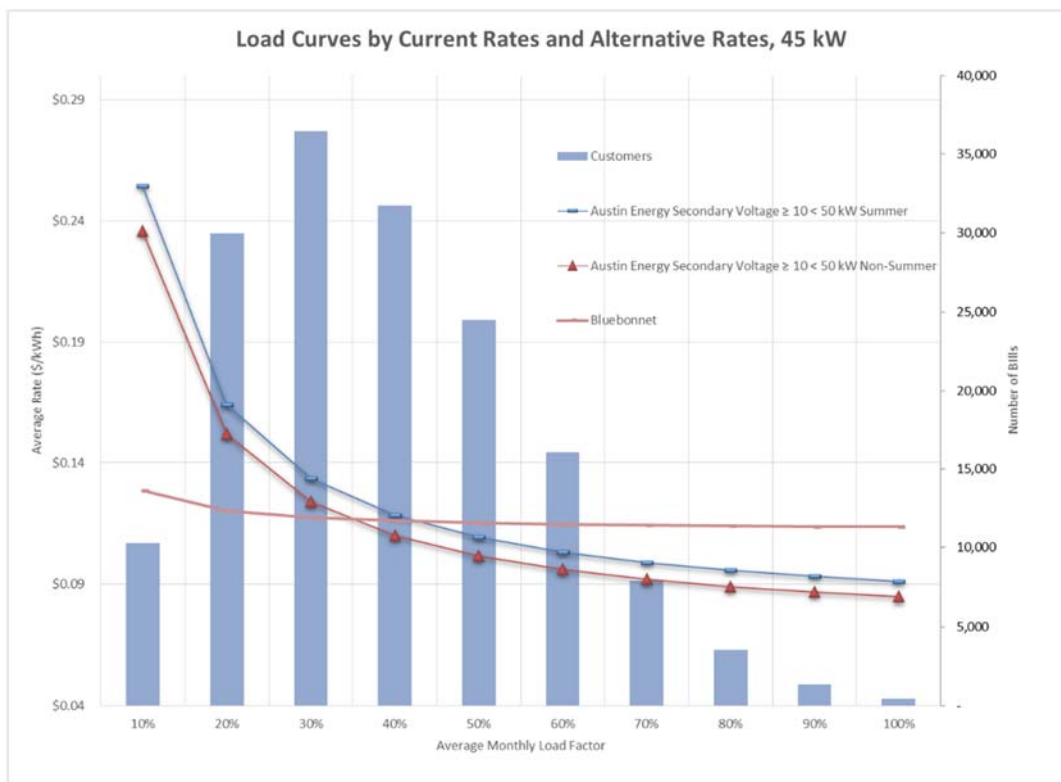


Figure 5-3. BEC Load Curves by Current Rates and Alternate Rates, 45 kW

In all cases, BEC's rate is relatively flat over a range of monthly load factors. Essentially, under the BEC rate structure all customers pay a similar average rate despite large differences in electricity usage and efficiency. As a result, if AE were to adopt the BEC rate structure, high load factor customer monthly bills would increase and low load factor customer bills would decrease. This result is demonstrated in the following table, which shows comparative bills for customers with 15 kW of demand.

Table 5-5
Adjusted BEC Rate Structure Compared to AE's S2 Rate Structure, 15 kW

| Billed Demand (kW) | Monthly Load Factor | Billed Energy (kWh) | Number of Bills for Demand | Number of Bills (% of Total) | BEC Rate Structure | AE Rate Structure | Difference (\$) | Difference (%) |
|--------------------|---------------------|---------------------|----------------------------|------------------------------|--------------------|-------------------|-----------------|----------------|
| 15 | 10% | 1,095 | 7,523 | 8.4% | \$177.17 | \$281.78 | (\$104.61) | -37.1% |
| 15 | 20% | 2,190 | 21,878 | 33.0% | \$299.71 | \$357.91 | (\$58.21) | -15.5% |
| 15 | 30% | 3,285 | 22,457 | 58.2% | \$422.24 | \$434.05 | (\$11.80) | -2.6% |
| 15 | 40% | 4,380 | 15,811 | 75.9% | \$544.78 | \$510.18 | \$34.60 | 6.5% |
| 15 | 50% | 5,475 | 10,229 | 87.4% | \$667.31 | \$586.31 | \$81.00 | 13.2% |
| 15 | 60% | 6,570 | 5,841 | 94.0% | \$789.85 | \$662.44 | \$127.41 | 18.3% |
| 15 | 70% | 7,665 | 2,622 | 96.9% | \$912.38 | \$738.57 | \$173.81 | 22.5% |
| 15 | 80% | 8,760 | 1,702 | 98.8% | \$1,034.92 | \$814.70 | \$220.22 | 25.8% |
| 15 | 90% | 9,855 | 786 | 99.7% | \$1,157.46 | \$890.84 | \$266.62 | 28.6% |
| 15 | 100% | 10,950 | 283 | 100.0% | \$1,279.99 | \$966.97 | \$313.02 | 30.9% |

Approximately 58 percent of S2 customers would experience a rate decrease under the BEC rate structure and 42 percent would experience a rate increase. The BEC rate structure does a poor job of recognizing cost of service results, which indicates that high low factor customers are less expensive to serve than low load factor customers. Therefore, high load factor customers pay too much under this rate structure and subsidize lower load factor customers.

Additionally, with only a customer charge and energy rate, there is no mechanism to measure or enforce power factor, so the cost of poor power factor is distributed among customers in the class.

CPS Energy

Currently, CPS Energy (CPS) is one of the largest public power utilities in the country. CPS Energy owns a diverse generation portfolio comprised of 43 percent natural gas, 28 percent coal, 14 percent nuclear and 14 percent wind. In recent years, CPS has embraced an aggressive strategy surrounding energy efficiency and conservation efforts, expanding renewable energy resources and maintaining a strong commitment to the environment.

The applicable CPS rate for the benchmarking review is the General Service (PL) Rate. The PL Rate has wide applicability to all commercial customers. Although there is no specific maximum demand associated with the PL rate, comparing pricing and rate structures with other alternative applicable CPS rate, Large Lighting and Power Service (LLP), indicates that the

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PL rate would be the best choice for most commercial customers with maximum monthly demands of between 10 kW and 50kW.

A summary of the PL rate compared to AE's S2 rate is shown in the following table.

**Table 5-6
AE and CPS Rate Comparison**

| Rate Structure Comparison | AE's Secondary Voltage 10kW to 50kW (S2) | CPS's PL <50kW | CPS's PL <50kW (Adjusted) |
|---|---|------------------------------|---|
| Customer Charge (\$/month) | 25.00 | 8.75 | 14.07 |
| Electric Delivery (\$/kW billed) | 4.00 | N/A | N/A |
| Demand Charge (\$/kW billed) | | | |
| Summer (kWh > 600) | 6.15 | N/A | N/A |
| Non-Summer (kWh > 600) | 5.15 | N/A | N/A |
| Energy Charge (¢/kWh) | | | |
| Summer First 1,600 kWh ⁽¹⁾ | 2.914 | 1.980 | 3.183 |
| Non-Summer All Other kWh ⁽¹⁾ | 2.414 | 1.000 | 1.607 |
| Hours Use Charge (¢/kWh) | | | |
| Tier 1 ⁽²⁾ | N/A | 7.190 | 11.558 |
| Tier 2 ⁽²⁾ | N/A | 3.320 | 5.337 |
| Pass-Throughs (¢/kWh) | | | |
| Power Supply Adjustment | 3.709 | N/A | N/A |
| Customer Assistance Program | 0.065 | N/A | N/A |
| Service Area Street Lighting | 0.076 | N/A | N/A |
| Energy Efficiency Services | 0.522 | N/A | N/A |
| Delivery Charge | N/A | N/A | N/A |
| Regulatory Charge | | | |
| (¢/kWh) | N/A | N/A | N/A |
| (\$/kW billed) | 2.56 | N/A | N/A |

Notes:

- (1) CPS Summer season is defined as June – September. The seasonal Energy Charge applied by CPS is the Peak Capacity Charge, and is applied to all monthly energy greater than 600 kWh.
- (2) Tier 1 includes the first 1,600 kWh, plus 200 kWh for each 1 kW of demand greater than 5 kW. Tier 2 includes all additional energy over 1,600 kWh.

The PL rate structure is an “Hours-Use” Rate Structure, which is a structure that recovers cost in alignment with customer load factor. As noted in the footnote on the above table, the size of the first block of a two-tier energy rate is based on a customer's maximum demand. For metered demand above 5 kW, the block grows at 200 kWh per kW. For example, the first block of a 10 kW customer would be 2,600 kWh (1,600 kWh + (10-5)*200 kWh), the first block of a 20 kW customer would be 4,600 kWh (1,600 kWh+ (20-5)*200 kWh), etc. For an individual customer, the amount of energy billed under the Tier 1 versus Tier 2 rate is dependent on the customer's monthly load factor. The load factor threshold is about 27 percent (200hrs/730hrs). Therefore, customers with load factors less than 27 percent have all of their energy billed at the Tier 1 rate. Customers with load factors greater than 27 percent benefit

from lower cost energy in Tier 2. Although the rate looks like an energy only rate, the structure of the rate behaves like a demand and energy rate.

The adjusted CPS rate as shown in the above table reflects a prorata adjustment of the rate so that the CPS rate applied to AE customers served under the S2 would generate an equal amount of revenue. In other words, AE would be indifferent to either rate as both rates generated the same amount of revenue. The analysis supporting this revenue neutral calculation is shown in Exhibit 2 - CPS Energy Adjusted and Compared to AE's Secondary Service 10 kW But Less Than 50 kW Rate, attached at the end of this Report.

Graphical comparisons of CPS's PL rate compared to AE's S2 rate for customers with monthly maximum demands of 15 kW, 25 kW, and 45 kW are shown in the following graphs.

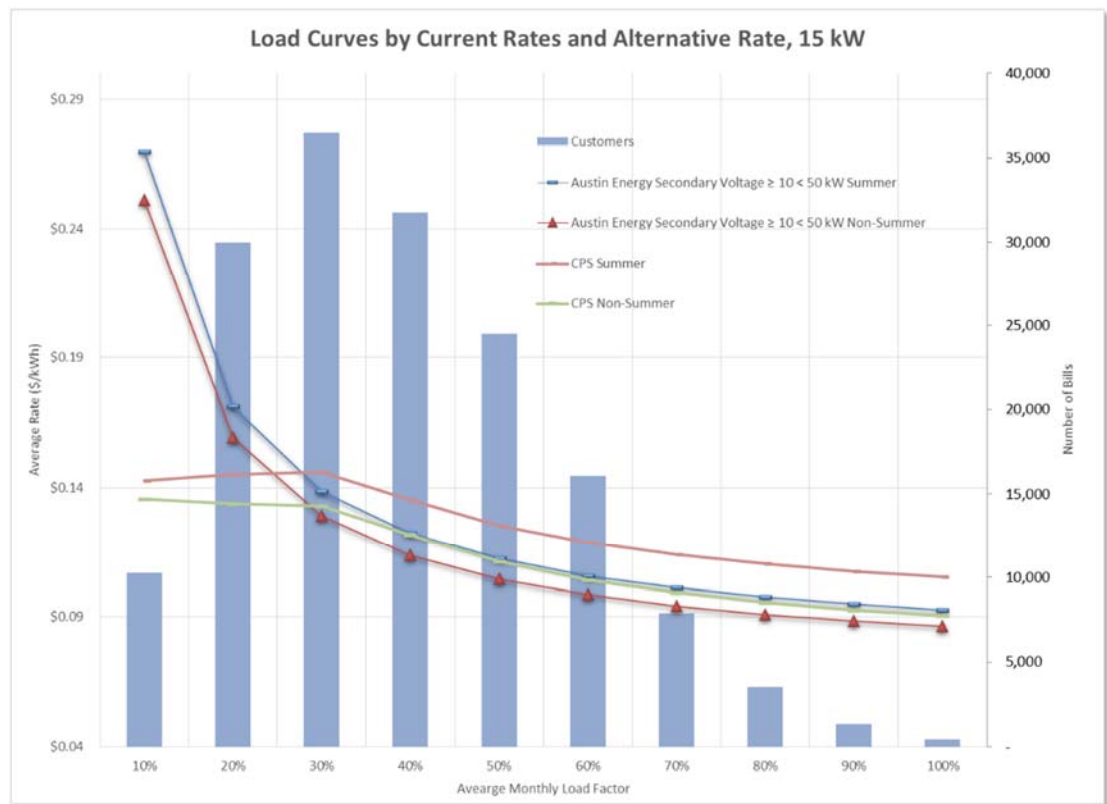


Figure 5-4. CPS Load Curves by Current Rates and Alternative Rate, 15 kW

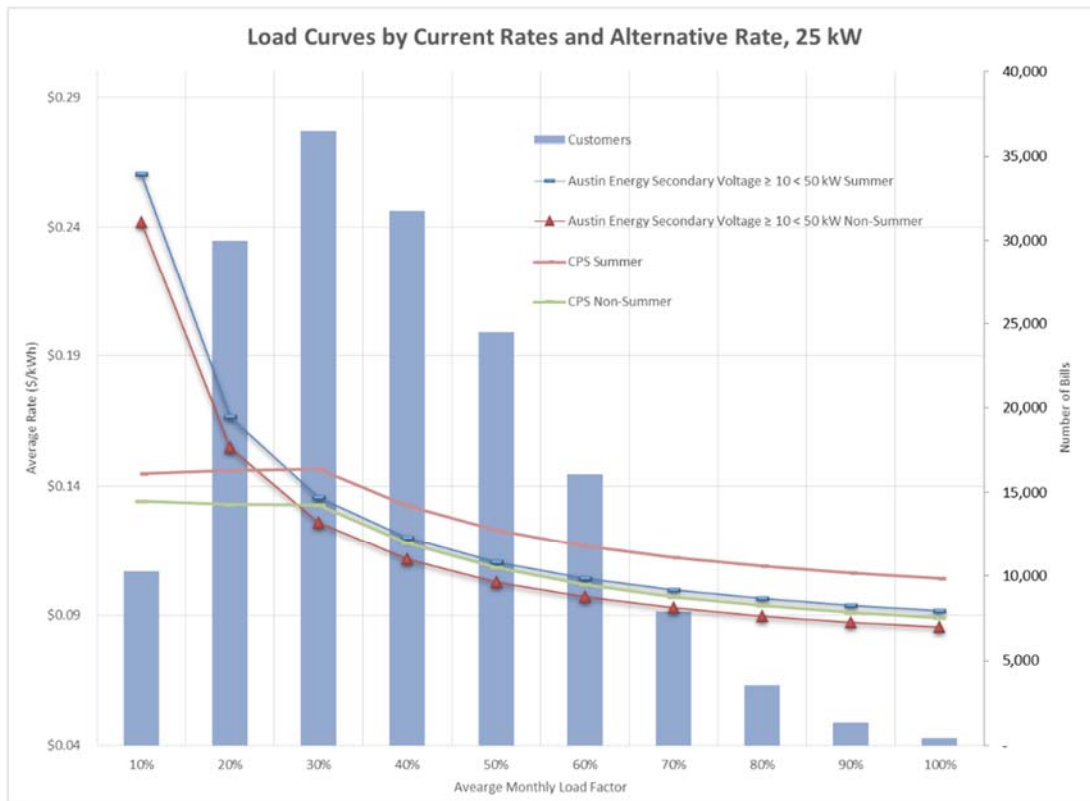


Figure 5-5. CPS Load Curves by Current Rates and Alternative Rate, 25 kW

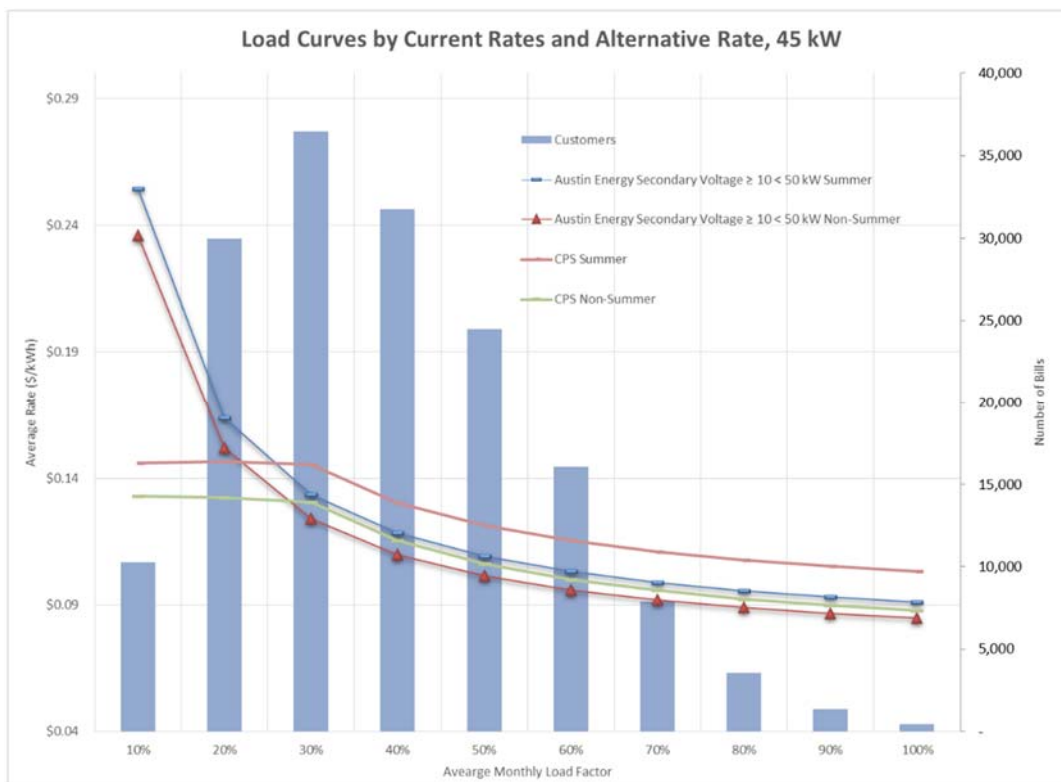


Figure 5-6. CPS Load Curves by Current Rates and Alternative Rate, 45 kW

As indicated in the above graphs, the “Hours-Use” rate structure behaves in a similar manner as a rate structure with a demand and energy charge except that an “Hours-Use” rate structure caps the amount a low load factor customer pays on a \$/kWh basis. In this case, the CPS structure caps the effective rate at about \$0.14 per kWh for customers with load factors less than 30 percent.

Because demand is a key component of the “Hours-Use” calculation, power factor penalty charges apply in a similar manner as that of a demand and energy rate.

If AE were to adopt the CPS rate structure, low load factor customer monthly bills would decrease and high load factor customer bills would experience a slight increase, to provide this rate protection to low load factor customers. This result is demonstrated in the following table, which shows comparative bills for customers with 15 kW of demand.

Table 5-7
Adjusted CPS Rate Structure Compared to AE’s S2 Rate Structure

| Billed Demand (kW) | Monthly Load Factor | Billed Energy (kWh) | Number of Bills for Demand | Number of Bills (% of Total) | CPS Rate Structure | AE Rate Structure | Difference (\$) | Difference (%) |
|---------------------------|----------------------------|----------------------------|-----------------------------------|-------------------------------------|---------------------------|--------------------------|------------------------|-----------------------|
| 15 | 10% | 1,095 | 7,523 | 8.4% | \$151.18 | \$281.78 | (\$130.60) | -46.3% |
| 15 | 20% | 2,190 | 21,878 | 33.0% | \$301.08 | \$357.91 | (\$56.83) | -15.9% |
| 15 | 30% | 3,285 | 22,457 | 58.2% | \$450.99 | \$434.05 | \$16.95 | 3.9% |
| 15 | 40% | 4,380 | 15,811 | 75.9% | \$552.38 | \$510.18 | \$42.20 | 8.3% |
| 15 | 50% | 5,475 | 10,229 | 87.4% | \$634.17 | \$586.31 | \$47.86 | 8.2% |
| 15 | 60% | 6,570 | 5,841 | 94.0% | \$715.95 | \$662.44 | \$53.51 | 8.1% |
| 15 | 70% | 7,665 | 2,622 | 96.9% | \$797.74 | \$738.57 | \$59.17 | 8.0% |
| 15 | 80% | 8,760 | 1,702 | 98.8% | \$879.53 | \$814.70 | \$64.83 | 8.0% |
| 15 | 90% | 9,855 | 786 | 99.7% | \$961.32 | \$890.84 | \$70.49 | 7.9% |
| 15 | 100% | 10,950 | 283 | 100.0% | \$1,043.11 | \$966.97 | \$76.14 | 7.9% |

Approximately 33 percent of S2 customers would experience a rate decrease under the CPS rate structure and 66 percent would experience a rate increase. For customers with monthly load factors of 30 percent or greater, the rate structure follows cost of service principles. Low load factor customers are subsidized but the degree of subsidy is less than those observed under a customer and energy-only rate structure.

Fort Collins Utilities

Fort Collins Utilities (FCU) serves approximately 68,000 customers in Fort Collins, Colorado. FCU is an all requirements wholesale customer of Platte River Power Authority (PRPA). PRPA resource mix predominantly includes 75.4 percent of coal, 18.9 percent of hydropower, 3.6 percent of renewables and other miscellaneous sources. In an effort to minimize its carbon footprint, given that its power supplier has a significant amount of coal resource, FCU has aggressively pursued energy conservation, efficiency, renewable energy, and sustainability

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programs for many years. FCU energy policy goals include high reliability, low rates, and minimizing environmental impacts.

The applicable FCU rate structures for the rate structure review are the General Service <25 kW and the General Service 25-750 kW rates. The General Service <25 kW is available to all commercial customers with maximum demands less than 25 kW per billing cycle. The General Service 25-750 kW is available to all commercial customers with maximum demand greater than 25 kW but less than 750 kW per billing cycle. A summary of each these rates is shown in the following table.

Table 5-7
AE and FCU Rate Comparison

| Rate Structure Comparison | AE's Secondary Voltage 10kW to 50kW | FCU General Service <25kW | FCU General Service 25kW to 50kW | FCU General Service <25kW (Adjusted) | FCU General Service 25kW to 50kW (Adjusted) |
|---|--|---|---|--|--|
| Customer Charge (\$/month) | 25.00 | 11.74 | 11.74 | 16.63 | 16.63 |
| Electric Delivery (\$/kW billed) | 4.00 | N/A | N/A | N/A | N/A |
| Demand Charge (\$/kW billed) | | | | | |
| Summer | 6.15 | N/A | 7.52 | N/A | 10.65 |
| Non-Summer | 5.15 | N/A | 4.37 | N/A | 6.19 |
| Demand Charge (¢/kWh billed) | | | | | |
| Summer | N/A | 2.77 | N/A | 3.92 | N/A |
| Non-Summer | N/A | 1.49 | N/A | 2.11 | N/A |
| Energy Charge (¢/kWh) | | | | | |
| Summer | 2.914 | 4.16 | 4.16 | 5.89 | 5.89 |
| Non-Summer | 2.414 | 4.00 | 4.00 | 5.66 | 5.67 |
| Distribution Charge (¢/kWh) | N/A | 2.27 | 1.76 | 3.22 | 2.49 |
| Pass-Throughs (¢/kWh) | | | | | |
| Power Supply Adjustment | 3.709 | N/A | N/A | N/A | N/A |
| Customer Assistance Program | 0.065 | N/A | N/A | N/A | N/A |
| Service Area Street Lighting | 0.076 | N/A | N/A | N/A | N/A |
| Energy Efficiency Services | 0.522 | N/A | N/A | N/A | N/A |
| Regulatory Charge | | | | | |
| (¢/kWh) | N/A | N/A | N/A | N/A | N/A |
| (\$/kW billed) | 2.56 | N/A | N/A | N/A | N/A |
| Taxes and Franchise Fee | N/A | 6.0% | 6.0% | 6.0% | 6.0% |

FCU provides service to commercial customers between 10 kW and 50 kW of monthly demand under two different rate structures. FCU creates a boundary between customers at less than 25 kW of demand (General Service <25 kW), and customers with 25 kW to 750 kW of monthly demand (General Service 25 kW - 750 kW). Both General Service rates identify a demand

charge; however, the distinction between the two demand charges is that customers with less than 25 kW of demand have a demand charge based on kWh, where customers with monthly demand between 25 kW and 50 kW have a demand charge based on kW.

The adjusted FCU rate as shown in the above table reflects a prorata adjustment of the rate so that the FCU rates in total applied to AE customers served under the AE S2 rate would generate an equal amount of revenue. In other words, AE would be financially indifferent to either rate as both rates generated the same amount of revenue (although the FCU rate would not necessarily support the City of Austin's goals and objectives). The analysis supporting this revenue neutral calculation is shown in Exhibit 3 of this Report.

Graphical comparisons of FCU General Service <25 kW and General Service 25-750 kW rates compared to AE's S2 rate for customers with monthly maximum demands of 15 kW, 25 kW, and 45 kW are shown in the following graphs.

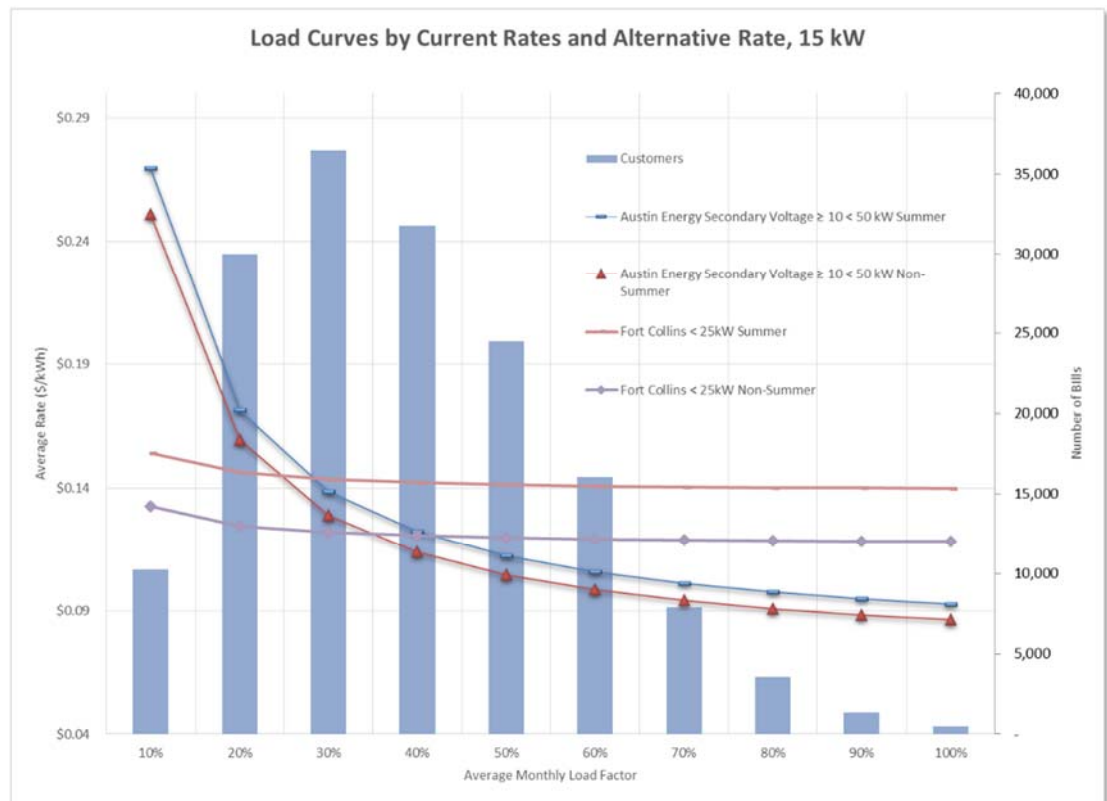


Figure 5-7. FCU Load Curves by Current Rates and Alternate Rate, 15 kW

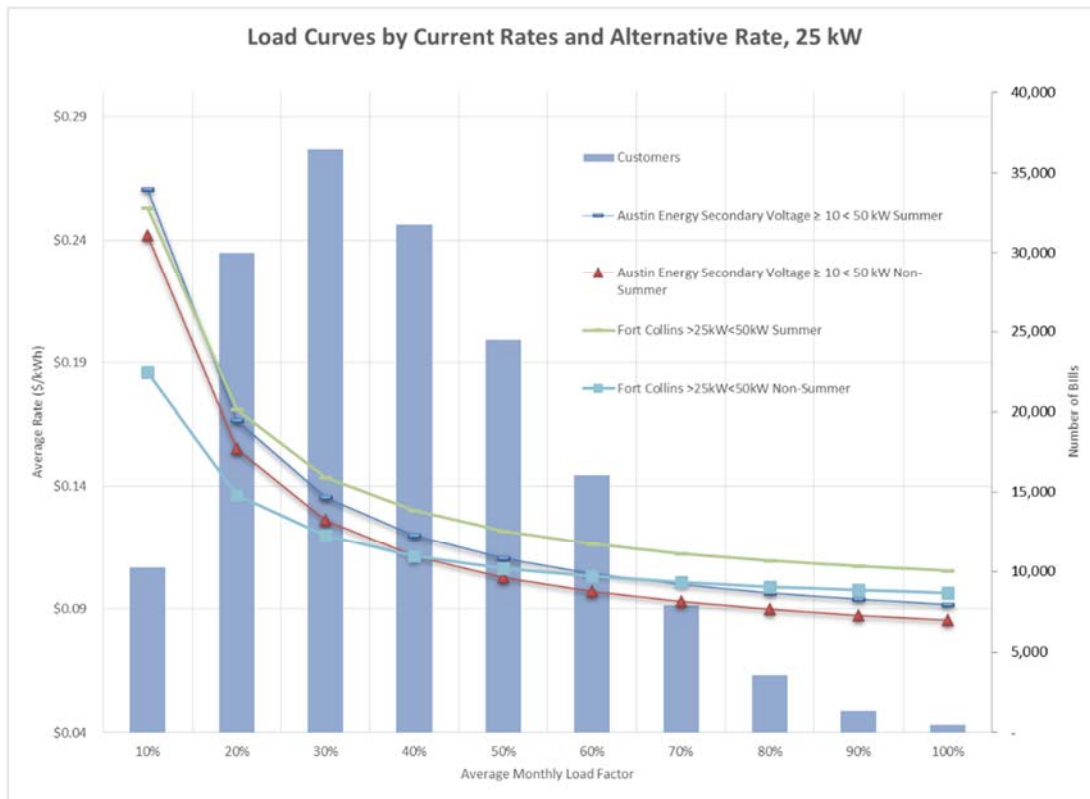


Figure 5-8. FCU Load Curves by Current Rates and Alternate Rate, 25 kW

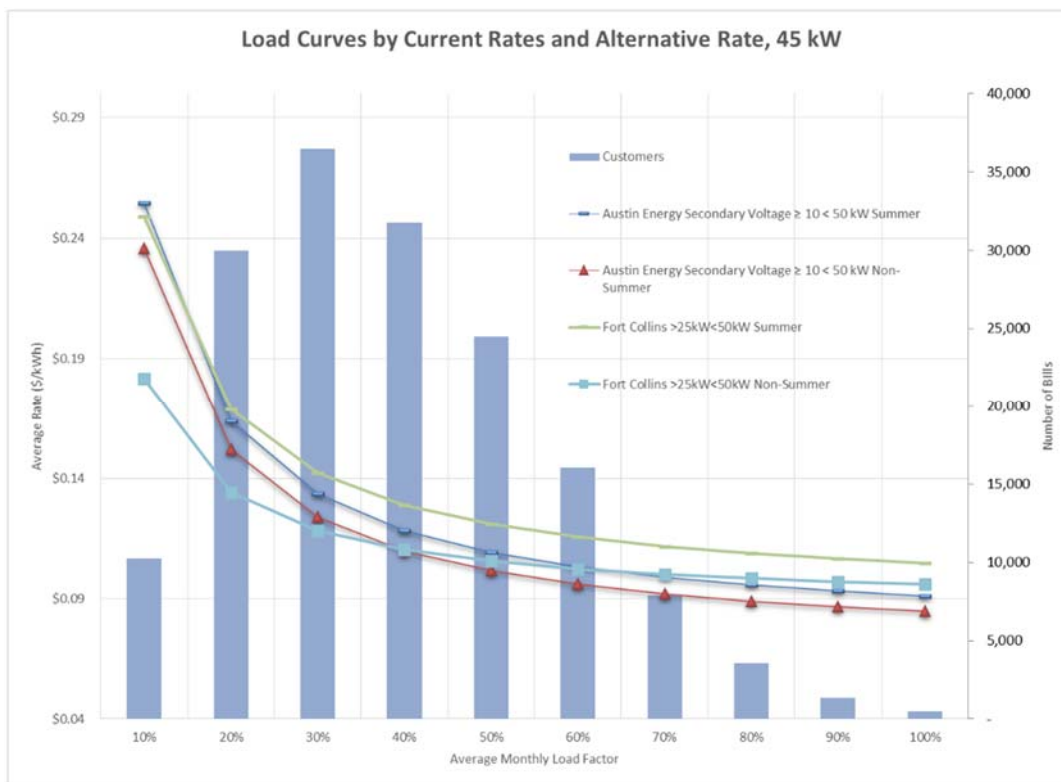


Figure 5-9. FCU Load Curves by Current Rates and Alternate Rate, 45 kW

For customers with demand less than 25 kW, the FCU General Service <25 kW rate is applied. This rate is relatively flat over the range of monthly load factors. Under this rate structure, all customers pay a similar average rate despite potentially large differences in electricity usage and efficiency.

For the two scenarios presented for 25 kW and 45 kW, the FCU General Service 25-750 kW is applied. As shown above, for customers between 25 kW and 50 kW, the rate structure is similar to AE's current rate. The shape of the FCU rate curve is similar to the AE S2 rate curve during the summer season and slightly flatter during the non-summer season. The difference between the season can be attributed to a lower demand charge during the non-summer season. The summer/ non-summer pricing differentials are greater under the FCU rate structure than AE's S2 rate.

If AE were to adopt the FCU's rate structure, the impact on customers would vary depending upon customer size. For customers with demand less than 25 kW, the FCU rate structure is fairly flat and does not vary by monthly load factor. Although most customers in this class would experience an increase in monthly bills under the FCU rate structure, high load factor customers would experience the largest increase. This result is demonstrated in the following table.

Table 5-8
Adjusted FCU Rate Structure Compared to AE's S2 Rate Structure, 15 kW

| Billed Demand (kW) | Monthly Load Factor | Billed Energy (kWh) | Number of Bills for Demand | Number of Bills (% of Total) | Fort Collins Rate Structure | AE Rate Structure | Difference (\$) | Difference (%) |
|--------------------|---------------------|---------------------|----------------------------|------------------------------|-----------------------------|-------------------|-----------------|----------------|
| 15 | 10% | 1,095 | 7,523 | 8.4% | \$255.42 | \$281.78 | (\$26.36) | -9.4% |
| 15 | 20% | 2,190 | 21,878 | 33.0% | \$366.21 | \$357.91 | \$8.30 | 2.3% |
| 15 | 30% | 3,285 | 22,457 | 58.2% | \$477.01 | \$434.05 | \$42.96 | 9.9% |
| 15 | 40% | 4,380 | 15,811 | 75.9% | \$587.80 | \$510.18 | \$77.63 | 15.2% |
| 15 | 50% | 5,475 | 10,229 | 87.4% | \$698.60 | \$586.31 | \$112.29 | 19.2% |
| 15 | 60% | 6,570 | 5,841 | 94.0% | \$809.39 | \$662.44 | \$146.95 | 22.2% |
| 15 | 70% | 7,665 | 2,622 | 96.9% | \$920.18 | \$738.57 | \$181.61 | 24.6% |
| 15 | 80% | 8,760 | 1,702 | 98.8% | \$1,030.98 | \$814.70 | \$216.27 | 26.5% |
| 15 | 90% | 9,855 | 786 | 99.7% | \$1,141.77 | \$890.84 | \$250.94 | 28.2% |
| 15 | 100% | 10,950 | 283 | 100.0% | \$1,252.57 | \$966.97 | \$285.60 | 29.5% |

Approximately 8 percent of S2 customers with demand of less than 25 kW would experience a rate decrease under the FCU rate structure and 92 percent would experience a rate increase. The rate structure does a poor job of recognizing cost of service principles; therefore, high load factor customers pay too much under this rate structure and subsidize lower load factor customers.

Additionally, with only a customer charge and energy rate, there is no mechanism to measure or enforce power factor, so the cost of poor power factor is distributed among customers in the class operating with greater efficiency.

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FCU's rate structure for customers with a demand of 25 kW or greater includes a demand charge and recognizes the cost differentiation between low and high load factor customers. As a result, when comparing FCU bills with AE's S2 rate, bill differentials are generally smaller than for customers with demand less than 25 kW. This result is demonstrated in the following table.

Table 5-9
Adjusted FCU Rate Structure Compared to AE's S2 Rate Structure, 25 kW

| Billed Demand (kW) | Monthly Load Factor | Billed Energy (kWh) | Number of Bills for Demand | Number of Bills (% of Total) | Fort Collins Rate Structure | AE Rate Structure | Difference (\$) | Difference (%) |
|--------------------|---------------------|---------------------|----------------------------|------------------------------|-----------------------------|-------------------|-----------------|----------------|
| 25 | 10% | 1,825 | 2,424 | 3.3% | \$312.14 | \$452.97 | (\$140.83) | -31.1% |
| 25 | 20% | 3,650 | 8,100 | 14.5% | \$483.64 | \$579.86 | (\$96.21) | -16.6% |
| 25 | 30% | 5,475 | 14,013 | 33.7% | \$655.15 | \$706.74 | (\$51.59) | -7.3% |
| 25 | 40% | 7,300 | 15,937 | 55.6% | \$826.65 | \$833.63 | (\$6.97) | -0.8% |
| 25 | 50% | 9,125 | 14,284 | 75.2% | \$998.16 | \$960.51 | \$37.65 | 3.9% |
| 25 | 60% | 10,950 | 10,219 | 89.2% | \$1,169.67 | \$1,087.40 | \$82.26 | 7.6% |
| 25 | 70% | 12,775 | 5,262 | 96.5% | \$1,341.17 | \$1,214.29 | \$126.88 | 10.4% |
| 25 | 80% | 14,600 | 1,843 | 99.0% | \$1,512.68 | \$1,341.17 | \$171.50 | 12.8% |
| 25 | 90% | 16,425 | 550 | 99.8% | \$1,684.18 | \$1,468.06 | \$216.12 | 14.7% |
| 25 | 100% | 18,250 | 178 | 100.0% | \$1,855.69 | \$1,594.95 | \$260.74 | 16.3% |

For customers with a monthly demand of 25 kW or greater, approximately 56 percent of S2 customers would experience a rate decrease under the Fort Collins rate structure and 44 percent would experience a rate increase. The rate structure is similar to AE's current rate; however, the FCU rate places a larger percentage of cost recovery in energy charges resulting in a flatter rate curve. This flatter curve, while following FCU costs, aids low load factor customers. Additionally, the Fort Collins rate structure creates a greater differential between the summer and non-summer demand charges, resulting in a meaningfully higher summer seasons costs compared to the S2 rate.

Los Angeles Department of Water and Power

The Los Angeles Department of Water and Power (LADWP) serves 1.4 million residential and business customers in the City of Los Angeles. LADWP is the largest public power utility in the country. LADWP's resource mix includes 42 percent coal, 23 percent renewables, 17 percent natural gas, 10 percent nuclear, 4 percent hydroelectric, and 4 percent from miscellaneous other sources. LADWP business objectives include the aggressive pursuit of energy efficiency, carbon emission reductions, and achievement of California renewable energy portfolio standards.

The applicable LADWP rate structures for the rate structure review are the Small Commercial <30 kW and the Primary Service 30 kW and Greater rates. The Small Commercial <30 kW rate

is available to all commercial customers with maximum demands less than 30 kW per billing cycle. The Primary Service 30 kW and Greater rate is available to all commercial customers with maximum demand greater than 30 kW per billing cycle. LADWP does not have a Secondary Service >30 kW and Greater rate class. Secondary service customers with demands greater than 30 kW are referred to the Primary Service 30 kW and Greater rate per Small Commercial <30 kW tariff language.

A summary of each these rates is shown in the following table.

**Table 5-10
AE and LAWP Rate Comparison**

| Rate Structure Comparison | AE's Secondary Service 10kW to 50kW | LADWP's Small General Service <30kW | LADWP's Primary Service ≥30kW | LADWP's Small General Service <30kW (Adjusted) | LADWP's Primary Service ≥30kW (Adjusted) |
|---|--|---|--|--|---|
| Customer Charge (\$/month) | 25.00 | 6.50 | 6.50 | 5.91 | 5.91 |
| Electric Delivery (\$/kW billed) | 4.00 | 5.00 | 5.00 | 4.55 | 4.55 |
| Demand Charge (\$/kW billed) | | | | | |
| Summer | 6.15 | N/A | 9.00 | N/A | 8.19 |
| Non-Summer | 5.15 | N/A | 5.50 | N/A | 5.00 |
| Energy Charge (¢/kWh) | | | | | |
| Summer | 2.914 | 6.558 | 3.645 | 5.966 | 3.316 |
| Non-Summer | 2.414 | 4.268 | 2.995 | 3.883 | 2.725 |
| Pass-Throughs (¢/kWh) | | | | | |
| Power Supply Adjustment | 3.709 | 5.690 | 5.690 | 5.176 | 5.176 |
| Customer Assistance Program | 0.065 | N/A | N/A | N/A | N/A |
| Service Area Street Lighting | 0.076 | N/A | N/A | N/A | N/A |
| Energy Efficiency Services | 0.522 | N/A | N/A | N/A | N/A |
| Pass-Throughs (\$/kW) | | | | | |
| Electric Subsidy Adjustment | N/A | 0.46 | 0.46 | 0.42 | 0.42 |
| Reliability Cost Adjustment | N/A | 0.96 | 0.96 | 0.87 | 0.87 |
| Regulatory Charge | | | | | |
| (¢/kWh) | N/A | N/A | N/A | N/A | N/A |
| (\$/kW billed) | 2.56 | N/A | N/A | N/A | N/A |

LADWP's provides service to commercial customers between 10 kW and 50 kW of monthly demand under two different rate structures. LADWP creates a boundary between customers with less than 30 kW of monthly demand (Small Commercial <30 kW), and customers with 30 kW or greater (Primary Service >30 kW). The Small Commercial <30 kW rate structure does

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include a demand charge which recovers the costs of the electric delivery charge and several pass-through charges.

The Primary Service > 30kW rate structure includes demand charges for generation, electric delivery and several pass-through charges. The adjusted LADWP rate as shown in the table above reflects a prorata adjustment of the rate so that the LADWP rate applied to AE customers served under the S2 rate would generate an equal amount of revenue. In other words, AE would be financially indifferent to either rate as both rates generated the same amount of revenue (although the LADWP rate would not necessarily support the City of Austin's goals and objectives). The analysis supporting this revenue neutral calculation is shown in Exhibit 4 of this report.

Graphical comparisons of LADWP's Small Commercial <30 kW and Primary Service 30 kW and Greater rate compared to AE's S2 rate for customers with monthly maximum demands of 15kW, 25kW and 45kW are shown in the following graphs.

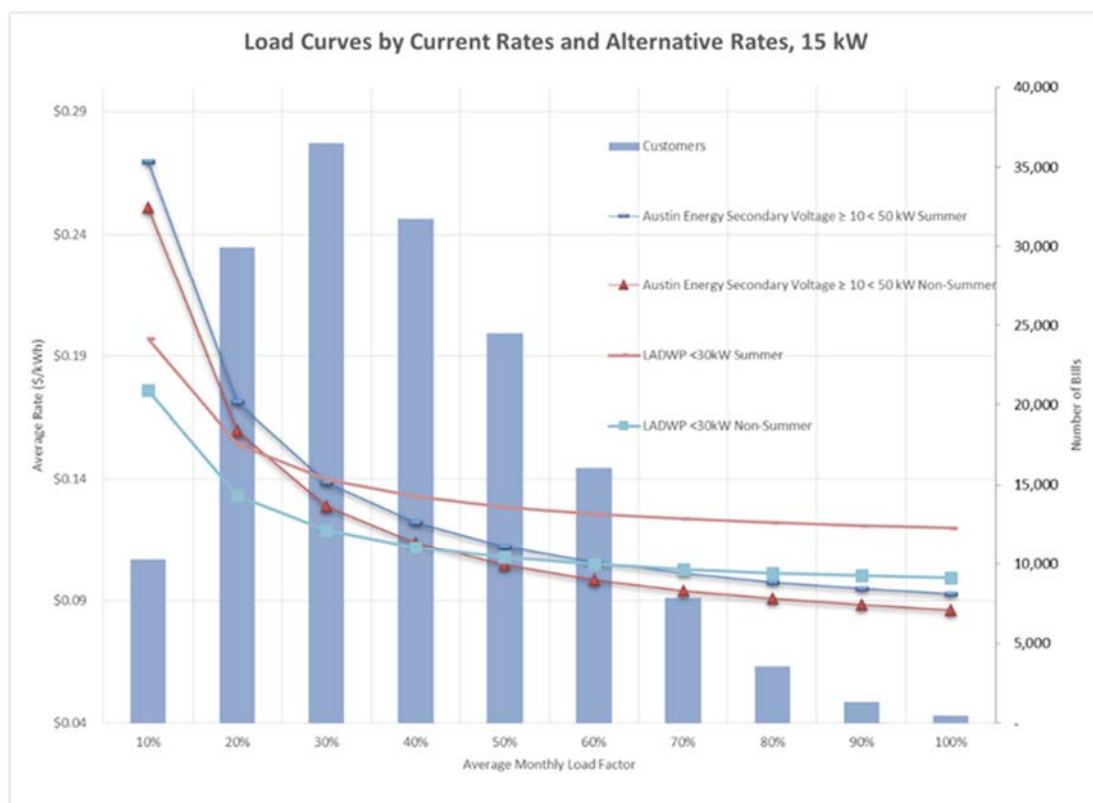


Figure 5-10. LADWP Load Curves by Current Rates and Alternative Rates, 15 kW

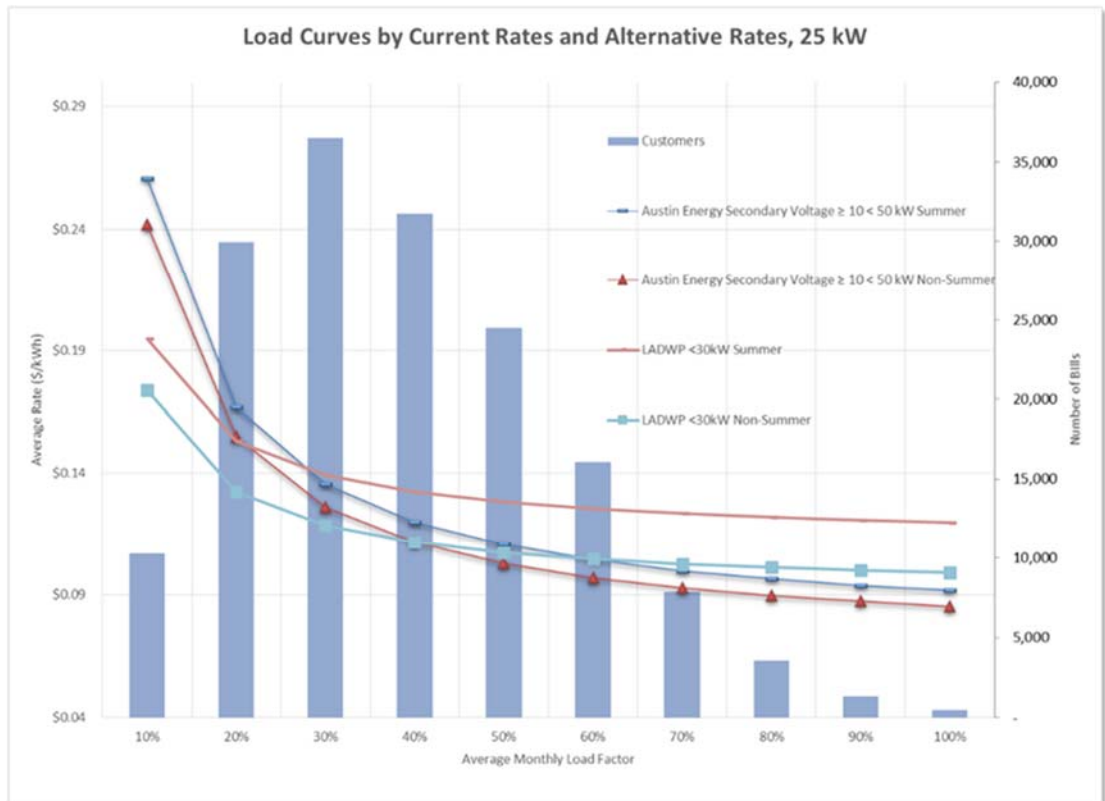


Figure 5-11. LADWP Load Curves by Current Rates and Alternative Rates, 25 kW

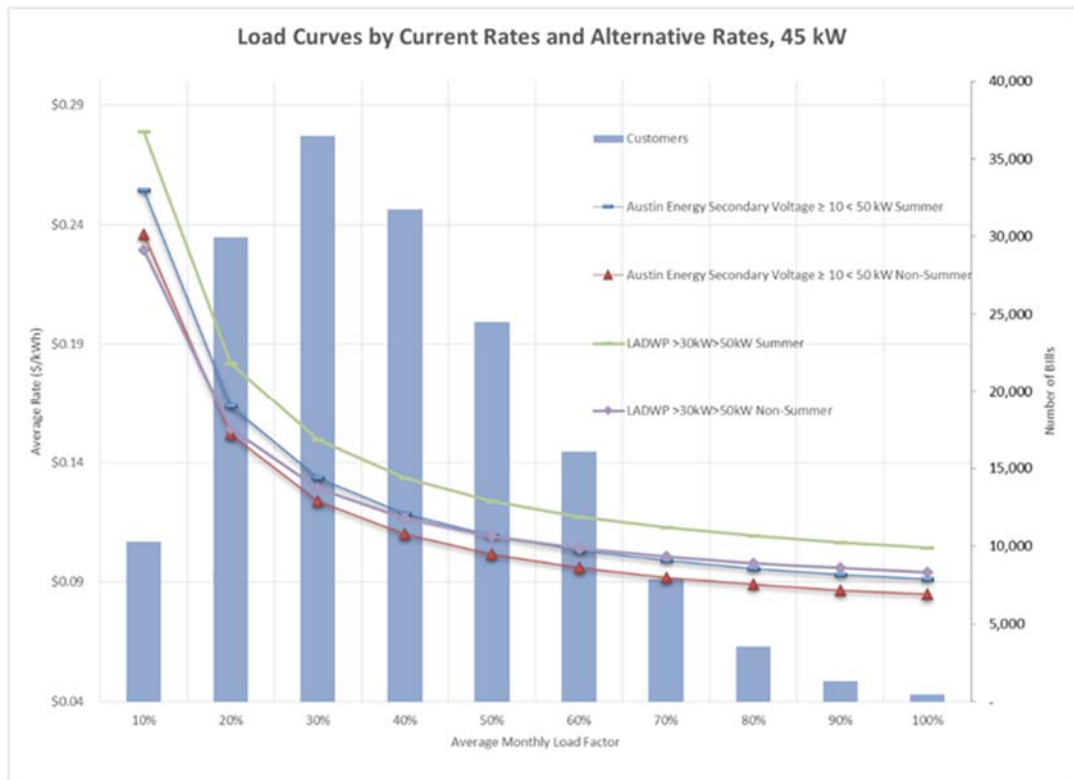


Figure 5-12. LADWP Load Curves by Current Rates and Alternative Rates, 45 kW

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In the 15 kW and 25 kW scenarios shown above, LADWP's Small Commercial rate does recognize cost of service differences associated with load factor and the shape of the curve is similar but flatter than the AE S2 rate. This differential can be directly attributed to a lower demand charge compared to the AE S2 rate. As previously mentioned, the AE rate structure only includes a demand component associated primarily with the distribution delivery charge.

In the 45 kW scenario, the Primary Service rate structure is applied under the LADWP's rate tariff. As shown above, for customers between 30 kW and 50 kW, the Primary Service rate structure is similar to AE's current S2 rate structure.

If AE were to adopt the LADWP's rate structure, customers with a monthly demand of less than 30 kW would experience a cost shift due to the flatter shape of the curve. Customers with load factors less than 30 percent would experience a lower overall average rate compared to AE's S2 rate. This result is demonstrated in the following table.

Table 5-11
Adjusted LADWP Rate Structure Compared to AE's S2 Rate Structure, 15 kW

| Billed Demand (kW) | Monthly Load Factor | Billed Energy (kWh) | Number of Bills for Demand | Number of Bills (% of Total) | LADWP Rate Structure | AE Rate Structure | Difference (\$) | Difference (%) |
|--------------------|---------------------|---------------------|----------------------------|------------------------------|----------------------|-------------------|-----------------|----------------|
| 15 | 10% | 1,095 | 7,523 | 8.4% | \$200.33 | \$281.78 | (\$81.46) | -28.9% |
| 15 | 20% | 2,190 | 21,878 | 33.0% | \$307.13 | \$357.91 | (\$50.78) | -14.2% |
| 15 | 30% | 3,285 | 22,457 | 58.2% | \$413.93 | \$434.05 | (\$20.11) | -4.6% |
| 15 | 40% | 4,380 | 15,811 | 75.9% | \$520.74 | \$510.18 | \$10.56 | 2.1% |
| 15 | 50% | 5,475 | 10,229 | 87.4% | \$627.54 | \$586.31 | \$41.23 | 7.0% |
| 15 | 60% | 6,570 | 5,841 | 94.0% | \$734.34 | \$662.44 | \$71.90 | 10.9% |
| 15 | 70% | 7,665 | 2,622 | 96.9% | \$841.15 | \$738.57 | \$102.57 | 13.9% |
| 15 | 80% | 8,760 | 1,702 | 98.8% | \$947.95 | \$814.70 | \$133.25 | 16.4% |
| 15 | 90% | 9,855 | 786 | 99.7% | \$1,054.75 | \$890.84 | \$163.92 | 18.4% |
| 15 | 100% | 10,950 | 283 | 100.0% | \$1,161.56 | \$966.97 | \$194.59 | 20.1% |

Approximately 58 percent of S2 customers with demand of less than 30 kW would experience a rate decrease under the LADWP rate structure and 42 percent would experience a rate increase. A lower demand charge in the rate structure shifts costs from low load factor customers to high load factor customers. The rate design partially follows cost of service principles as fixed cost associated with the distribution system are appropriately distributed between customers in the class. However, fixed costs associated with production costs are averaged over all customers in the class without consideration of load factor differentials.

LADWP's rate structure for customers with a monthly demand of greater than 30 kW includes a demand charge associated with the production and distribution functions. As a result, when comparing LADWP's bills with AE's S2 rate, bill differentials are generally relatively small. This result is demonstrated in the following table.

Table 5-12
Adjusted LADWP Rate Structure Compared to AE's S2 Rate Structure, 45 kW

| Billed Demand (kW) | Monthly Load Factor | Billed Energy (kWh) | Number of Bills for Demand | Number of Bills (% of Total) | LADWP Rate Structure | AE Rate Structure | Difference (\$) | Difference (%) |
|---------------------------|----------------------------|----------------------------|-----------------------------------|-------------------------------------|-----------------------------|--------------------------|------------------------|-----------------------|
| 45 | 10% | 3,285 | 2,424 | 3.3% | \$807.69 | \$795.35 | \$12.35 | 1.6% |
| 45 | 20% | 6,570 | 8,100 | 14.5% | \$1,073.72 | \$1,023.74 | \$49.98 | 4.9% |
| 45 | 30% | 9,855 | 14,013 | 33.7% | \$1,339.75 | \$1,252.14 | \$87.62 | 7.0% |
| 45 | 40% | 13,140 | 15,937 | 55.6% | \$1,605.78 | \$1,480.53 | \$125.25 | 8.5% |
| 45 | 50% | 16,425 | 14,284 | 75.2% | \$1,871.81 | \$1,708.93 | \$162.89 | 9.5% |
| 45 | 60% | 19,710 | 10,219 | 89.2% | \$2,137.84 | \$1,937.32 | \$200.52 | 10.4% |
| 45 | 70% | 22,995 | 5,262 | 96.5% | \$2,403.87 | \$2,165.72 | \$238.15 | 11.0% |
| 45 | 80% | 26,280 | 1,843 | 99.0% | \$2,669.90 | \$2,394.11 | \$275.79 | 11.5% |
| 45 | 90% | 29,565 | 550 | 99.8% | \$2,935.93 | \$2,622.51 | \$313.42 | 12.0% |
| 45 | 100% | 32,850 | 178 | 100.0% | \$3,201.96 | \$2,850.90 | \$351.05 | 12.3% |

For customers with a monthly demand of 30 kW or greater, all S2 customers would experience a rate increase under the LADWP rate structure. This is related to the manner in which the Small General Services and Primary Service rates are structured to recover the \$104,949,630 revenue generated by the AE S2 class. The LADWP's Primary Service rate structure for customers with a demand greater than 30 kW is very similar to AE's current S2 rate, so the magnitude of the changes would be relatively small.

Pedernales Electric Cooperative

Pedernales Electric Cooperative (PEC) is a consumer owned distribution cooperative serving customers bordering AE's service territory. PEC is a wholesale customer of the LCRA. The LCRA's wholesale power costs are billed to PEC on an energy only basis; therefore, the majority of PEC fixed costs are related to its distribution system.

The applicable PEC rate for the rate structure review is the Small Power <50 kW rate. The Small Power <50 kW rate is available to all commercial and industrial customers and other consumers whose peak demand is consistently less than 50 kW per billing cycle. A summary of the Small Power <50 kW rate compared to AE's S2 rate is shown in the following table.

Table 5-13
AE and PEC Rate Comparison

| Rate Structure Comparison | AE's Secondary Voltage 10kW to 50kW (S2) | PEC's Small Power <50kW | PEC's Small Power <50kW (Adjusted) |
|---|---|---------------------------------------|--|
| Customer Charge (\$/month) | 25.00 | 37.50 | 45.30 |
| Electric Delivery (\$/kW billed) | 4.00 | N/A | N/A |
| Demand Charge (\$/kW billed) | | | |
| Summer | 6.15 | N/A | N/A |
| Non-Summer | 5.15 | N/A | N/A |
| Energy Charge (¢/kWh) | | | |
| Summer | 2.914 | 7.208 | 8.708 |
| Non-Summer | 2.414 | 7.208 | 8.708 |
| Pass-Throughs (¢/kWh) | | | |
| Power Supply Adjustment | 3.709 | 0.100 | 0.100 |
| Customer Assistance Program | 0.065 | N/A | N/A |
| Service Area Street Lighting | 0.076 | N/A | N/A |
| Energy Efficiency Services | 0.522 | N/A | N/A |
| Delivery Charge | N/A | 2.101 | 2.538 |
| Regulatory Charge | | | |
| (¢/kWh) | N/A | N/A | N/A |
| (\$/kW billed) | 2.56 | N/A | N/A |

PEC's Small Power <50 kW rate does not include a demand charge.

The adjusted PEC rate as shown in the table above reflects a prorata adjustment of the rate so that the PEC rate applied to AE customers served under the S2 rate would generate an equal amount of revenue. In other words, AE would be financially indifferent to either rate as both rates generated the same amount of revenue (although the PEC rate would not necessarily support the City of Austin's goals and objectives). The analysis supporting this revenue neutral calculation is shown in Exhibit 5 of this report.

Graphical comparisons of PEC's Small Power Rate <50 kW compared to AE's S2 rate for customers with monthly maximum demands of 15 kW, 25 kW, and 45 kW are shown in the following graphs.

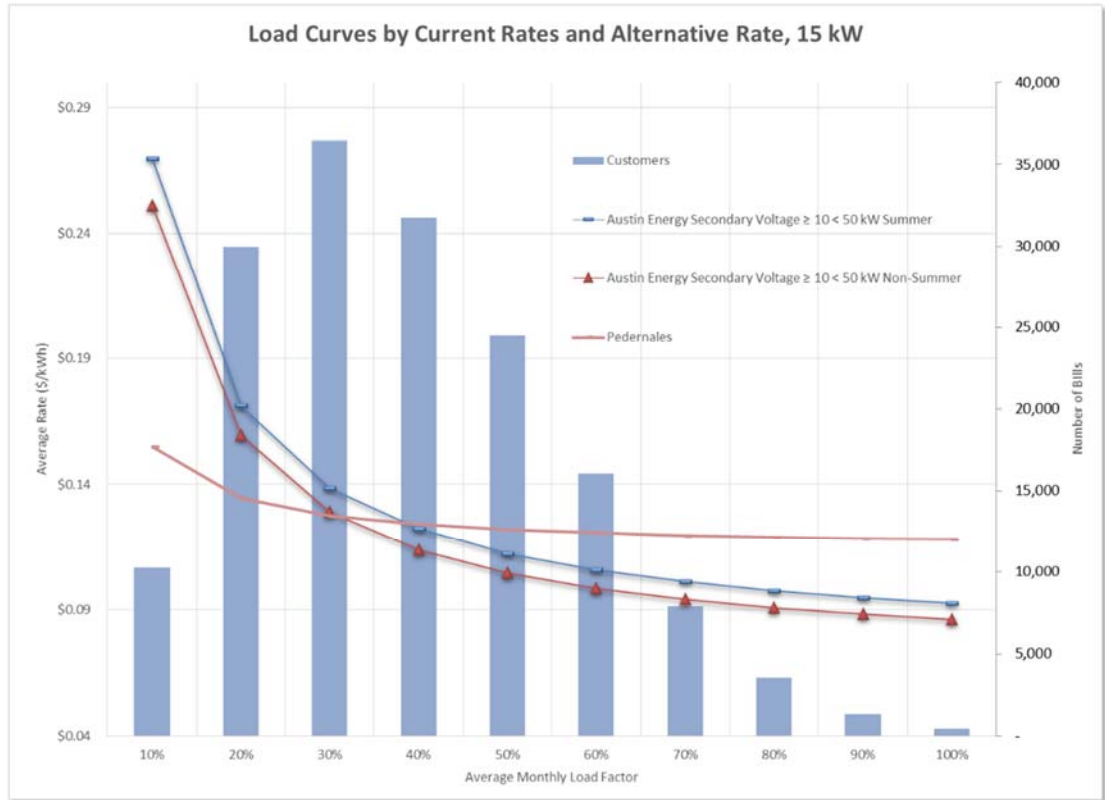


Figure 5-13. PEC Load Curves by Current Rates and Alternative Rate, 15 kW

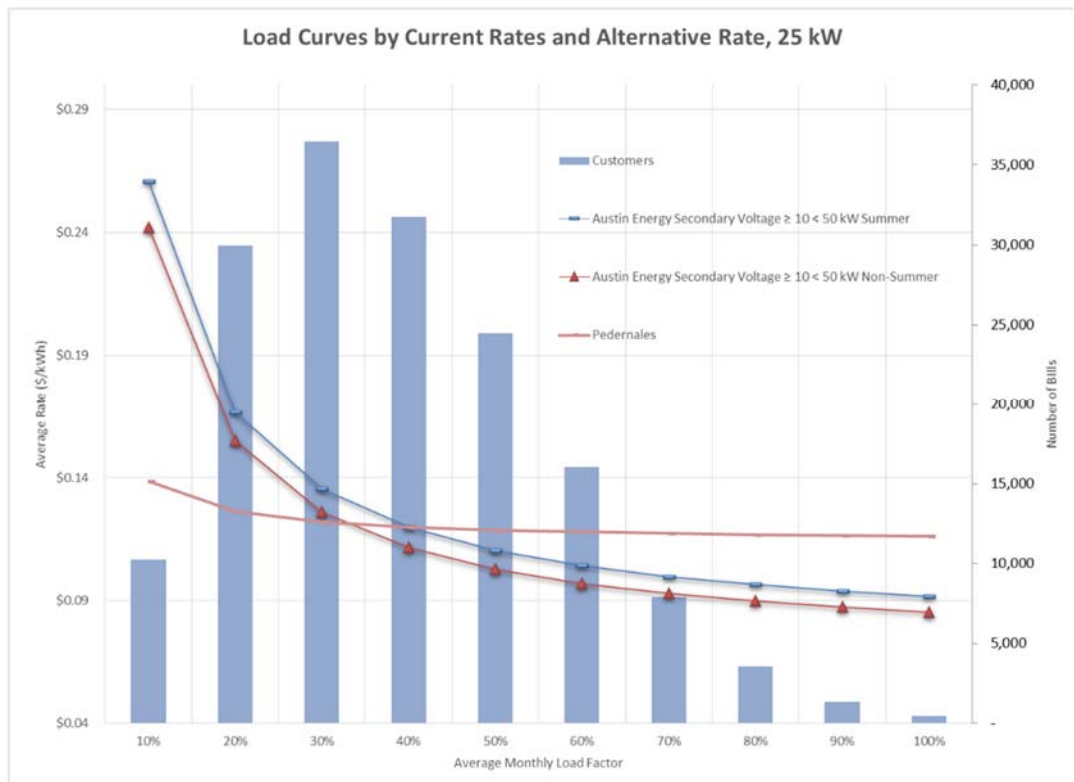


Figure 5-14. PEC Load Curves by Current Rates and Alternative Rate, 25 kW

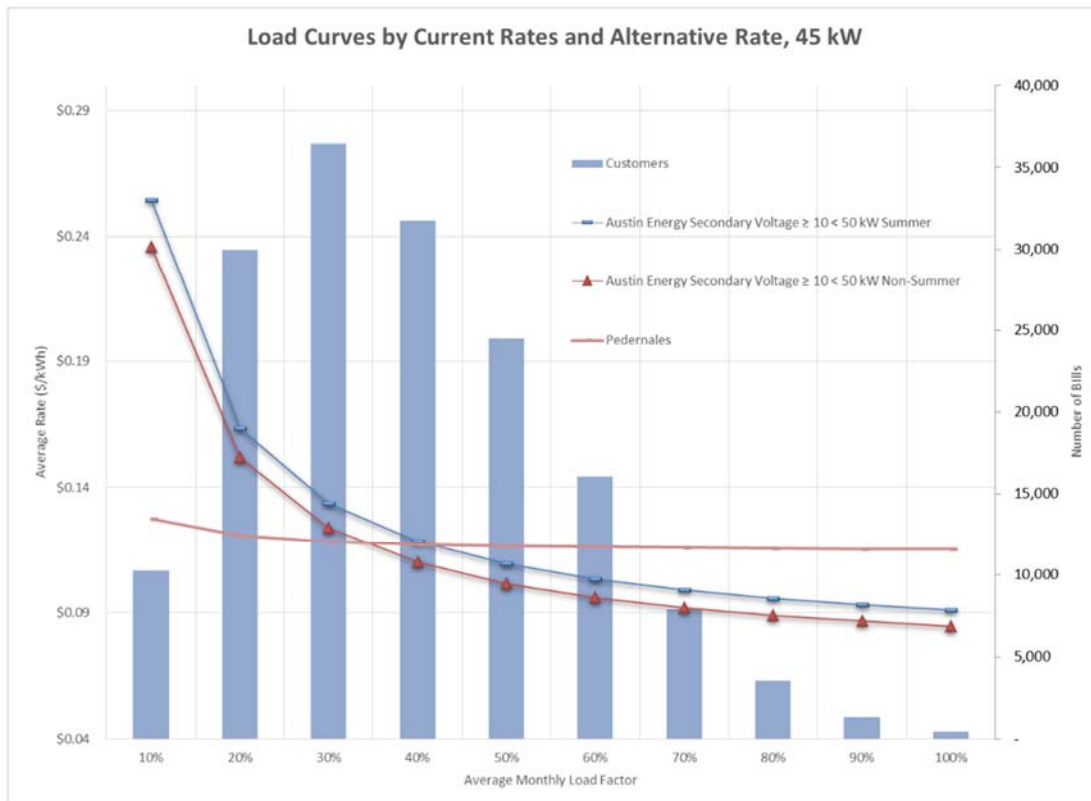


Figure 5-15. PEC Load Curves by Current Rates and Alternative Rate, 45 kW

In all cases, PEC's rate is relatively flat over a range of monthly load factors, which is similar to the BEC rate discussed earlier. Essentially, under the PEC rate structure all customers pay a similar average rate despite potentially large differences in electricity usage and efficiency. As a result, if AE were to adopt the PEC rate structure, high load factor customer monthly bills would increase and low load factor customer bills would decrease. This result is demonstrated in the following table.

Table 5-14
Adjusted PEC Rate Structure Compared to AE's S2 Rate Structure, 15 kW

| Billed Demand (kW) | Monthly Load Factor | Billed Energy (kWh) | Number of Bills for Demand | Number of Bills (% of Total) | PEC Rate Structure | AE Rate Structure | Difference (\$) | Difference (%) |
|--------------------|---------------------|---------------------|----------------------------|------------------------------|--------------------|-------------------|-----------------|----------------|
| 15 | 10% | 1,095 | 7,523 | 8.4% | \$169.77 | \$281.78 | (\$112.01) | -39.8% |
| 15 | 20% | 2,190 | 21,878 | 33.0% | \$294.24 | \$357.91 | (\$63.68) | -17.8% |
| 15 | 30% | 3,285 | 22,457 | 58.2% | \$418.70 | \$434.05 | (\$15.34) | -3.5% |
| 15 | 40% | 4,380 | 15,811 | 75.9% | \$543.17 | \$510.18 | \$32.99 | 6.5% |
| 15 | 50% | 5,475 | 10,229 | 87.4% | \$667.64 | \$586.31 | \$81.33 | 13.9% |
| 15 | 60% | 6,570 | 5,841 | 94.0% | \$792.10 | \$662.44 | \$129.66 | 19.6% |
| 15 | 70% | 7,665 | 2,622 | 96.9% | \$916.57 | \$738.57 | \$178.00 | 24.1% |
| 15 | 80% | 8,760 | 1,702 | 98.8% | \$1,041.04 | \$814.70 | \$226.33 | 27.8% |
| 15 | 90% | 9,855 | 786 | 99.7% | \$1,165.50 | \$890.84 | \$274.67 | 30.8% |
| 15 | 100% | 10,950 | 283 | 100.0% | \$1,289.97 | \$966.97 | \$323.00 | 33.4% |

Approximately 58 percent of S2 customers would experience a rate decrease under the PEC rate structure and 42 percent would experience a rate increase. The PEC rate structure does a poor job of recognizing cost of service principles; therefore, high load factor customers pay too much under this rate structure and subsidize lower load factor customers.

Additionally, with a customer charge and energy rate, there is no mechanism to measure or enforce power factor, so the cost of poor power factor is distributed among customers in the class operating with greater efficiency.

Reliant/CenterPoint

Reliant/CenterPoint is a REP operating throughout the ERCOT competitive retail market. CenterPoint is a Transmission and Distribution provider or TDU. In this example, Reliant and CenterPoint are paired such that Reliant provides the power supply, which is delivered over the CenterPoint transmission and distribution system. While the bundled charges from the Reliant are set competitively, the charges must consider the applicable CenterPoint rate which is set in a rate making process at the PUCT. Reliant/CenterPoint offers several packages to commercial customers that appear to have similar rate structures with slightly different pricing depending on the term of the customer's commitment or contract with the REP. For the purposes of this analysis, we have selected the Reliant Rockets Secure Advantage 12 plan, which requires a 12-month commitment from the customer. The pricing structure of the plan includes a Usage Charge, Energy Charge, and Delivery Charge. The Delivery Charge is related to CenterPoint's TDU costs as reviewed and approved by the PUCT. Pricing information associated with the Reliant Rockets Secure Advantage 12 plan, indicates the following.

"CenterPoint Energy Delivery Charges include all recurring charges from CenterPoint passed through without markup"

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CenterPoint Delivery Charges as approved by the PUCT include customer, demand and energy efficiency charges depending on whether the customer has demand of 10 kW or greater. The following tables summarized the CenterPoint TDU rate structure.

Table 5-15
CenterPoint Delivery Charges

| | <10kVA CenterPoint | >10kVA CenterPoint |
|---|----------------------------------|----------------------------------|
| Customer Charge | \$1.64 | \$2.26 |
| Metering Charge | 4.41 | 18.82 |
| Energy Efficiency Cost Recovery Factor | - | - |
| Energy Efficiency Cost Recovery Factor – Remand Surcharge | 0.0476 | 2.5781 |
| Advanced Metering Cost Recovery Factor | 3.14 | 3.16 |
| Total Per Month Charges | \$9.2076 | \$26.8181 |
| Transmission System Charge | \$0.004437 | \$- |
| Distribution System Charge | 0.012218 | - |
| Nuclear Decommissioning Fee | 0.000007 | - |
| Transmission Recovery Factor | 0.004879 | - |
| Transition Charge (TC1) | - | - |
| Transition Charge (TC2) | 0.002695 | 0.002695 |
| Transition Charge (TC3) | 0.001375 | 0.001375 |
| Transition Charge (TC5) | 0.001302 | 0.001302 |
| Rate Case Surcharge (RCE-R) | - | - |
| Storm Recovery Charge | 0.001349 | - |
| Storm Recovery Tax Credit | (0.000574) | - |
| Energy Efficiency Cost Recovery Factor | (0.000097) | 0.000601 |
| Total per kWh Charges | \$0.027591 | \$0.005973 |
| Transmission System Charge | | \$1.431800 |
| Distribution System Charge | | 3.059429 |
| Nuclear Decommissioning Fee | | 0.001828 |
| Transmission Recovery Factor | | 1.104613 |
| Transition Charge (TC1) | | - |
| Transition Charge (TC2) | | - |
| Transition Charge (TC3) | | - |
| Transition Charge (TC5) | | - |
| Rate Case Surcharge (RCE-R) | | - |
| Storm Recovery Charge | | 0.099644 |
| Storm Recovery Tax Credit | | (0.031644) |
| Energy Efficiency Cost Recovery Factor | | - |
| Total per kVA Charges | | \$5.665670 |

In contacting Reliant regarding their treatment of TDU charges, we were told by a customer service representative that Reliant passes through TDU charges in the form of a customer charge and energy rate for all customers regardless of size. If this information is correct, Reliant averages TDU costs incurred by commercial customers and passes these costs to commercial customers in a different manner than the way costs are incurred by the utility. Further, using this approach, we were able to verify an example bill calculation provide on the Reliant Rockets Secure Advantage 12 plan Electricity Facts Label, a label disclosing plan terms and conditions required by the PUCT. With this understanding, the Reliant Rockets Secure Advantage 12 plan rate structure is compared to the AE S2 rate in the following table.

Table 5-16
AE and Reliant/CenterPoint Rate Comparison

| Rate Structure Comparison | AE's Secondary Voltage 10kW to 50 kW (S2) | Reliant/ CenterPoint's Rockets Secure Advantage 12 <50 kW | Reliant/ CenterPoint's Rockets Secure Advantage 12 <50kW (Adjusted) |
|-------------------------------------|--|---|---|
| Customer Charge (\$/month) | | | |
| Base Charge ⁽¹⁾ | 25.00 | 9.95 | 10.27 |
| CenterPoint Customer Charge | N/A | 8.52 | 8.79 |
| Electric Delivery (\$/kW billed) | 4.00 | N/A | N/A |
| Demand Charge (\$/kW billed) | | | |
| Summer | 6.15 | N/A | N/A |
| Non-Summer | 5.15 | N/A | N/A |
| Energy Charge (¢/kWh) | | | |
| Summer | 2.914 | 11.498 | 11.863 |
| Non-Summer | 2.414 | 11.498 | 11.863 |
| Pass-Throughs (¢/kWh) | | | |
| Power Supply Adjustment | 3.709 | N/A | N/A |
| Customer Assistance Program | 0.065 | N/A | N/A |
| Service Area Street Lighting | 0.076 | N/A | N/A |
| Energy Efficiency Services | 0.522 | N/A | N/A |
| Regulatory Charge | | | |
| (¢/kWh) | N/A | N/A | N/A |
| (\$/kW billed) | 2.56 | N/A | N/A |

Notes:

(1) Base Charge does not apply if the customer's monthly energy usage is greater than 800 kWh.

Reliant's Rockets Secure Advantage 12 Plan rate, for the CenterPoint area, does not include a demand charge, though the underlying charges from CenterPoint approved by the PUCT do include demand charges. It is Reliant's choice, as a competitive REP, to restructure its retail

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rates to exclude a demand charge from the rate structure, as long as Reliant fully compensates CenterPoint for its services.

The adjusted Reliant rate as shown in the above table reflects a prorata adjustment of the rate so that the Reliant rate applied to AE customers served under the S2 rate would generate an equal amount of revenue. In other words, AE would be financially indifferent to either rate as both rates generated the same amount of revenue (although the Reliant rate would not necessarily support the City of Austin's goals and objectives). The analysis supporting this revenue neutral calculation is shown in Exhibit 6 of this report.

Graphical comparisons of Reliant's Rockets Secure Advantage 12 Plan rate compared to AE's S2 rate for customers with monthly maximum demands of 15 kW, 25 kW, and 45 kW are shown in the following graphs.

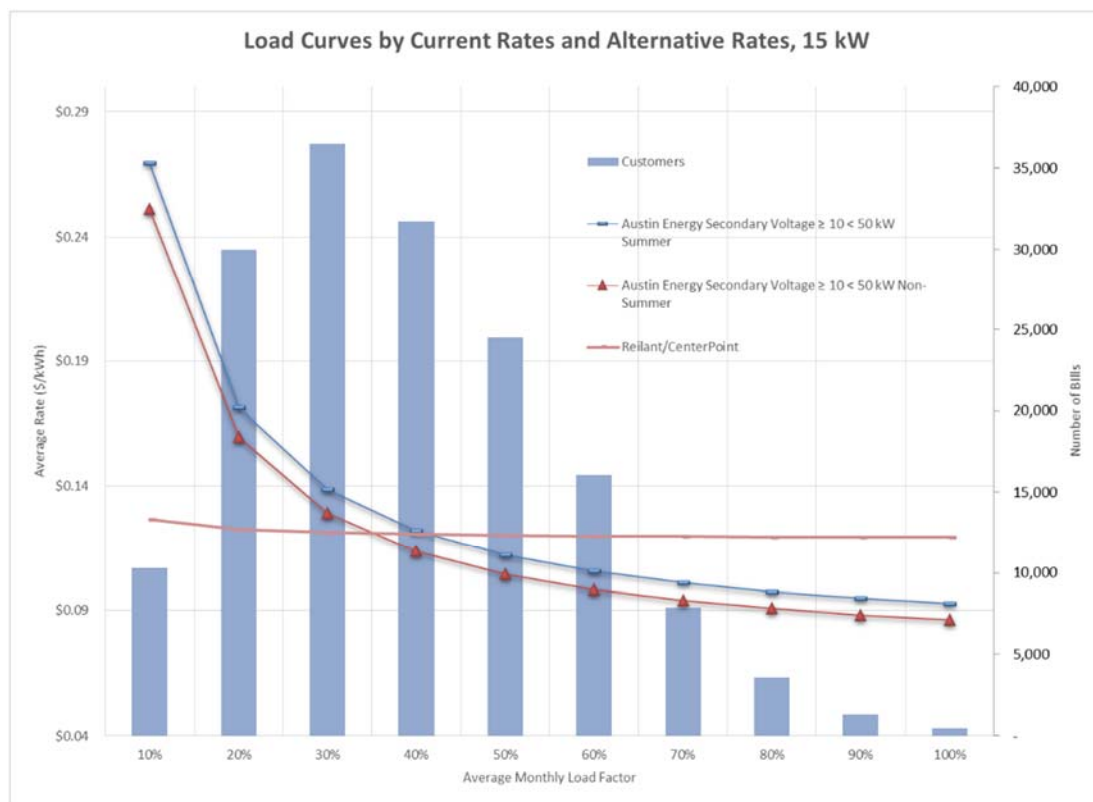


Figure 5-16. Reliant/CenterPoint Load Curves by Current Rates and Alternative Rates, 15 kW

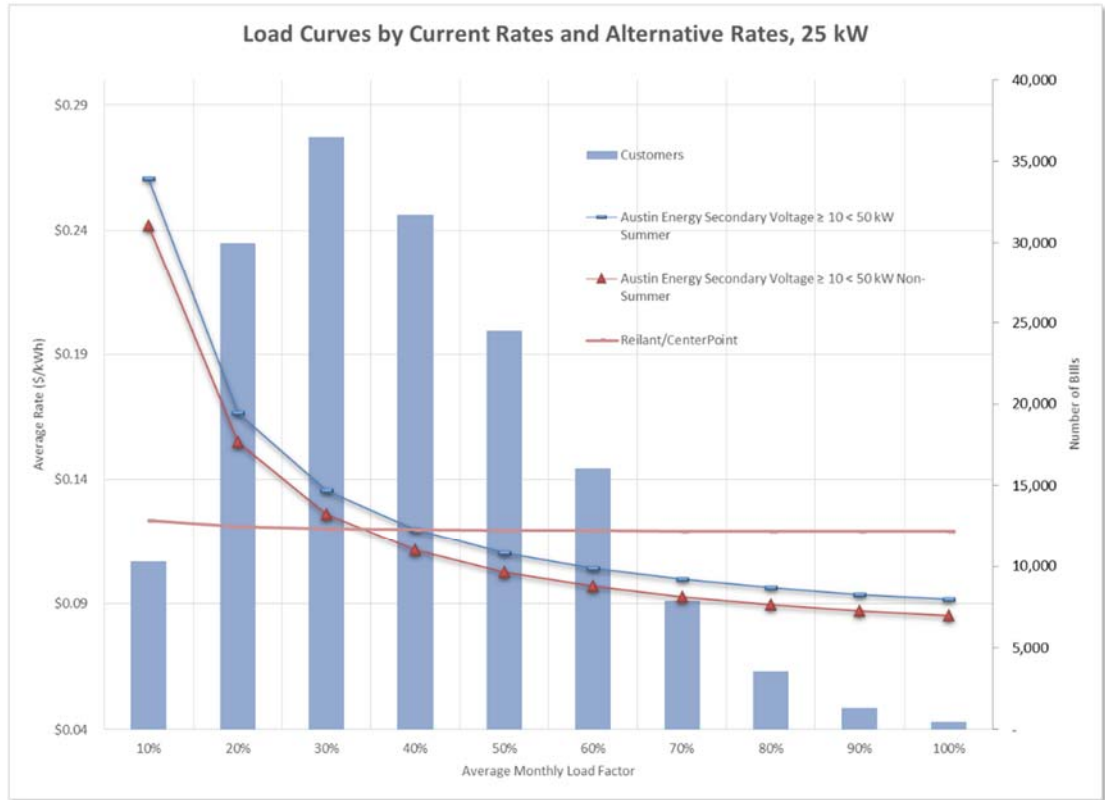


Figure 5-17. Reliant/CenterPoint Load Curves by Current Rates and Alternative Rates, 25 kW

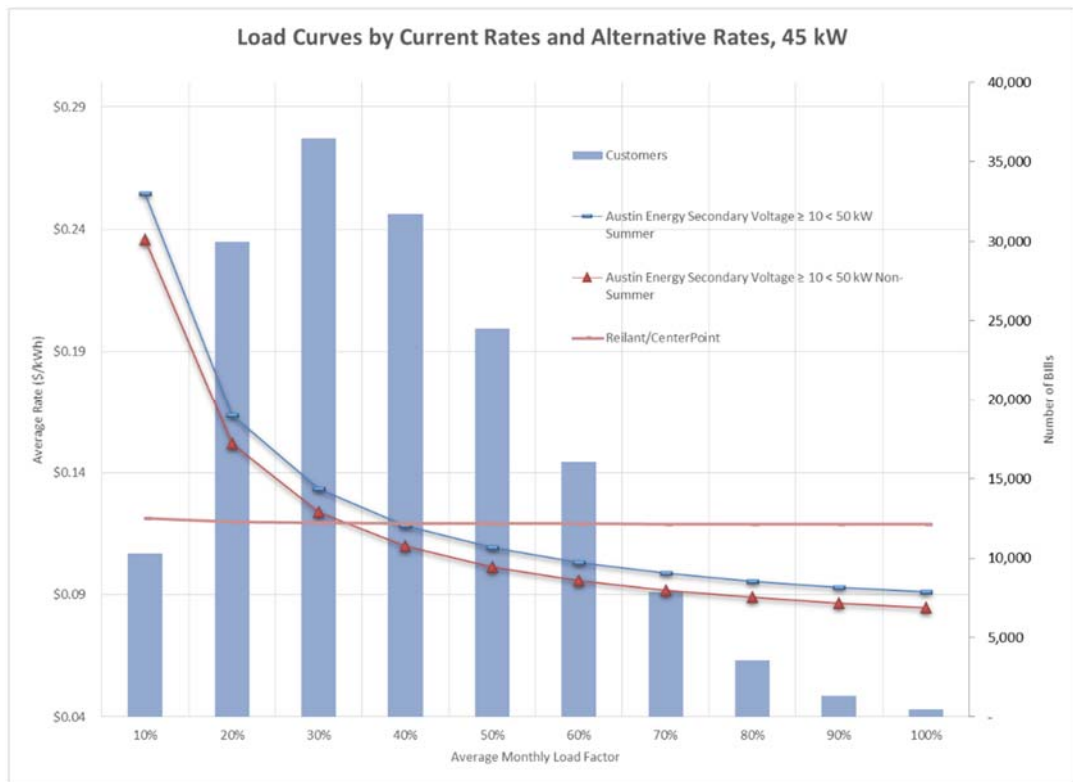


Figure 5-18. Reliant/CenterPoint Load Curves by Current Rates and Alternative Rates, 45 kW

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In all cases, Reliant’s rate is flat over a range of monthly load factors, which is similar to the BEC and PEC rates discussed earlier. Essentially, under the Reliant rate structure all customers pay a similar average rate despite potentially large differences in electricity usage and efficiency. As a result, if AE were to adopt the Reliant rate structure, high load factor customer monthly bills would increase and low load factor customer bills would decrease. This result is demonstrated in the following table.

Table 5-17
Adjusted Reliant Rate Structure Compared to AE’s S2 Rate Structure, 15 kW

| Billed Demand (kW) | Monthly Load Factor | Billed Energy (kWh) | Number of Bills for Demand | Number of Bills (% of Total) | Reliant Rate Structure | AE Rate Structure | Difference (\$) | Difference (%) |
|--------------------|---------------------|---------------------|----------------------------|------------------------------|------------------------|-------------------|-----------------|----------------|
| 15 | 10% | 1,095 | 7,523 | 8.4% | \$138.69 | \$281.78 | (\$143.09) | -50.8% |
| 15 | 20% | 2,190 | 21,878 | 33.0% | \$268.59 | \$357.91 | (\$89.33) | -25.0% |
| 15 | 30% | 3,285 | 22,457 | 58.2% | \$398.48 | \$434.05 | (\$35.56) | -8.2% |
| 15 | 40% | 4,380 | 15,811 | 75.9% | \$528.38 | \$510.18 | \$18.21 | 3.6% |
| 15 | 50% | 5,475 | 10,229 | 87.4% | \$658.28 | \$586.31 | \$71.97 | 12.3% |
| 15 | 60% | 6,570 | 5,841 | 94.0% | \$788.18 | \$662.44 | \$125.74 | 19.0% |
| 15 | 70% | 7,665 | 2,622 | 96.9% | \$918.08 | \$738.57 | \$179.51 | 24.3% |
| 15 | 80% | 8,760 | 1,702 | 98.8% | \$1,047.98 | \$814.70 | \$233.27 | 28.6% |
| 15 | 90% | 9,855 | 786 | 99.7% | \$1,177.87 | \$890.84 | \$287.04 | 32.2% |
| 15 | 100% | 10,950 | 283 | 100.0% | \$1,307.77 | \$966.97 | \$340.80 | 35.2% |

Approximately 58 percent of S2 customers would experience a rate decrease under the Reliant rate structure and 42 percent would experience a rate increase. The rate structure does a poor job of recognizing cost of service principles; therefore, high load factor customers pay too much under this rate structure and subsidize lower load factor customers.

Additionally, the rate structure insulates customers from power factor penalty charges. CenterPoint, as the TDU, bills on a kVa basis. kVa is a measure of “total power” and, therefore, recovers costs appropriately from customers with varying power factors. Although CenterPoint measures kVa for billing purposes, the utility states a power factor requirement greater than or equal to 95 percent. This charge is passed on to Reliant, who apparently averages these costs across all commercial customers it serves.

Sacramento Municipal Utility District

Sacramento Municipal Utility District (SMUD) is a one of the largest public power utilities in the country. SMUD serves about 625,000 customers within its service territory. SMUD’s resource mix includes 41 percent from natural gas, 33 percent from renewables, 18 percent from hydroelectric, and 8 percent from miscellaneous other sources. SMUD business objectives include leadership and innovation in the areas of energy efficiency programs, renewable power technologies, and sustainable solutions for a healthier environment.

The applicable SMUD rate structures for the rate structure review are the Small General Service Non-Demand <20 kW and the General Service Demand 20-299 kW rates. The Small General Service Non-Demand <20 kW rate is available to all commercial customers with maximum demands less than 20 kW per billing cycle. General Service Demand 20 kW to 299 kW rate is available to all commercial customers with maximum demand greater than 20 kW but less than 300 kW per billing cycle. A summary of each of these rates is shown in the following table.

**Table 5-18
AE and SMUD Rate Comparison**

| Rate Structure Comparison | AE's Secondary Voltage 10kW to 50kW (S2) | SMUD's Small General Service Non-Demand <20kW | SMUD's Small General Service Demand 20kW to 299kW | SMUD's Small General Service Non-Demand <20kW (Adjusted) | SMUD's Small General Service Demand 20kW to 299kW (Adjusted) |
|---|---|---|--|--|---|
| Customer Charge (\$/month) | 25.00 | 16.00 | 23.10 | 15.95 | 23.02 |
| Electric Delivery (\$/kW billed) | 4.00 | N/A | N/A | N/A | N/A |
| Demand Charge (\$/kW billed) | | | | | |
| Summer ⁽¹⁾ | 6.15 | N/A | 7.14 | N/A | 7.12 |
| Non-Summer ⁽¹⁾ | 5.15 | N/A | 7.14 | N/A | 7.12 |
| Energy Charge (¢/kWh) | | | | | |
| Summer/ On-peak ⁽²⁾ | 2.914 | 28.52 | 24.55 | 28.52 | 24.47 |
| Non-Summer/ Off-peak ⁽²⁾ | 2.414 | 10.71 | 8.52 | 10.71 | 8.49 |
| Pass-Throughs (¢/kWh) | | | | | |
| Power Supply Adjustment | 3.709 | N/A | N/A | N/A | N/A |
| Customer Assistance Program | 0.065 | N/A | N/A | N/A | N/A |
| Service Area Street Lighting | 0.076 | N/A | N/A | N/A | N/A |
| Energy Efficiency Services | 0.522 | N/A | N/A | N/A | N/A |
| Solar Surcharge | N/A | N/A | 0.15 | N/A | 0.15 |
| Power Factor Adjustment (¢/kVar) | N/A | N/A | 1.03 | N/A | 1.03 |
| Regulatory Charge | | | | | |
| (¢/kWh) | N/A | N/A | N/A | N/A | N/A |
| (\$/kW billed) | 2.56 | N/A | N/A | N/A | N/A |

Notes:

(1) SMUD defines the summer season as June – September.

(2) SMUD defines the On-peak period as summer weekdays (excluding the July 4th and Labor Day holidays), from 1500-1800. The off-peak period is all other hours.

SMUD provides service to commercial customers between 10 kW and 50 kW of monthly demand under two different rate structures. SMUD creates a boundary between customers with less than 20 kW of monthly demand (General Service Non-Demand), and customers with 20 kW or greater (General Service Demand). The General Service Non-Demand rate structure does not include a demand charge.

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The General Service Demand rate structure includes a demand charge for generation and electric delivery. The adjusted SMUD rate as shown in the table above reflects a prorata adjustment of the rate so that the SMUD rate applied to AE customers served under the S2 rate would generate an equal amount of revenue. In other words, AE would be financially indifferent to either rate as both rates generated the same amount of revenue (although the SMUD rate would not necessarily support the City of Austin's goals and objectives). The analysis supporting this revenue neutral calculation is shown in Exhibit 7 of this report.

Graphical comparisons of SMUD's General Service Non-Demand and General Service Demand rates compared to AE's S2 rate for customers with monthly maximum demands of 15 kW, 25 kW, and 45 kW are shown in the following graphs.

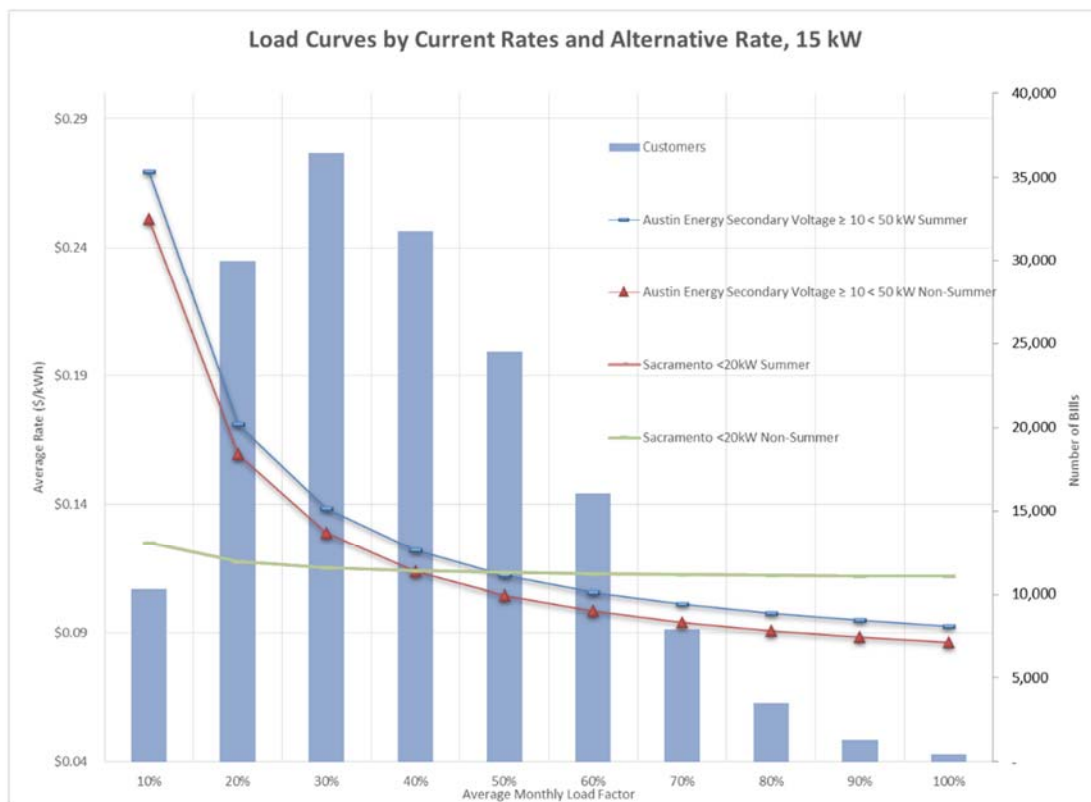


Figure 5-19. SMUD Load Curves by Current Rates and Alternative Rates, 15 kW

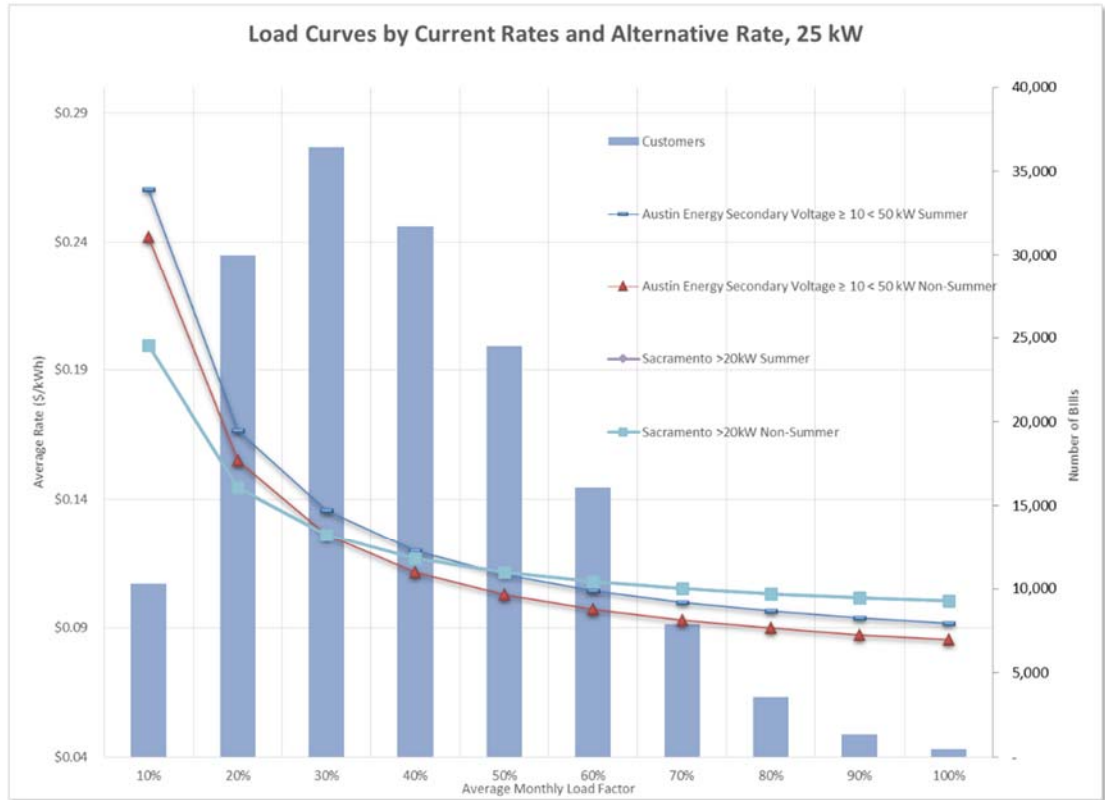


Figure 5-20. SMUD Load Curves by Current Rates and Alternative Rates, 25 kW

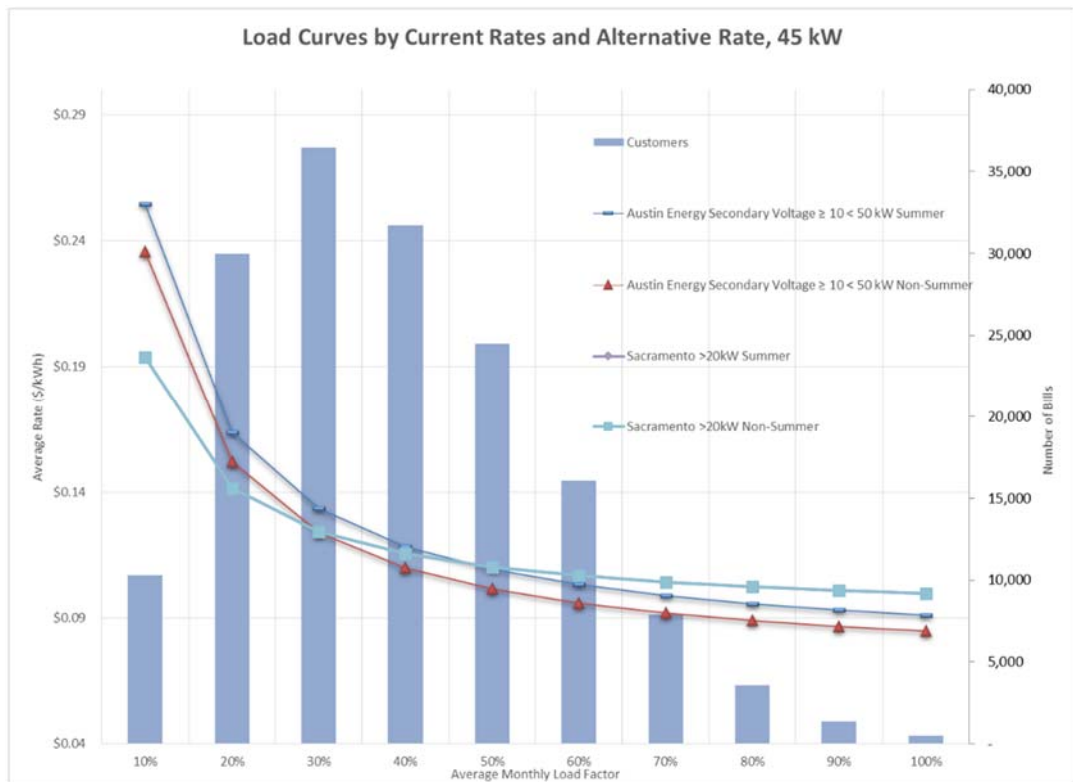


Figure 5-21. SMUD Load Curves by Current Rates and Alternative Rates, 45 kW

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In the 15kW example shown above, SMUD's rate structure is flat over a range of monthly load factors, which is similar to the BEC, PEC, and Reliant rates discussed earlier. Essentially, under the SMUD rate structure all customers pay a similar average rate despite large differences in electricity usage and efficiency. As a result, if AE were to adopt the SMUD rate structure, high load factor customer monthly bills would increase and low load factor customer bills would decrease. This result is demonstrated in the following table.

Table 5-19
Adjusted SMUD Rate Structure Compared to AE's S2 Rate Structure, 15 kW

| Billed Demand (kW) | Monthly Load Factor | Billed Energy (kWh) | Number of Bills for Demand | Number of Bills (% of Total) | SMUD Rate Structure | AE Rate Structure | Difference (\$) | Difference (%) |
|--------------------|---------------------|---------------------|----------------------------|------------------------------|---------------------|-------------------|-----------------|----------------|
| 15 | 10% | 1,095 | 7,523 | 8.4% | \$136.74 | \$281.78 | (\$145.04) | -51.5% |
| 15 | 20% | 2,190 | 21,878 | 33.0% | \$257.54 | \$357.91 | (\$100.38) | -28.0% |
| 15 | 30% | 3,285 | 22,457 | 58.2% | \$378.33 | \$434.05 | (\$55.71) | -12.8% |
| 15 | 40% | 4,380 | 15,811 | 75.9% | \$499.13 | \$510.18 | (\$11.05) | -2.2% |
| 15 | 50% | 5,475 | 10,229 | 87.4% | \$619.93 | \$586.31 | \$33.62 | 5.7% |
| 15 | 60% | 6,570 | 5,841 | 94.0% | \$740.72 | \$662.44 | \$78.28 | 11.8% |
| 15 | 70% | 7,665 | 2,622 | 96.9% | \$861.52 | \$738.57 | \$122.95 | 16.6% |
| 15 | 80% | 8,760 | 1,702 | 98.8% | \$982.31 | \$814.70 | \$167.61 | 20.6% |
| 15 | 90% | 9,855 | 786 | 99.7% | \$1,103.11 | \$890.84 | \$212.27 | 23.8% |
| 15 | 100% | 10,950 | 283 | 100.0% | \$1,223.91 | \$966.97 | \$256.94 | 26.6% |

Approximately 75 percent of S2 customers with demand of less than 20 kW would experience a rate decrease under the SMUD rate structure and 15 percent would experience a rate increase. The absence of a demand charge in the rate structure recovers costs associated with serving low load factor customers from high load factor customers, deviating from cost of service principles.

SMUD's rate structure for customers with a monthly demand of greater than 20 kW includes a customer, demand, and seasonal energy charge. The differential in the seasonal energy charge is significantly greater than the S2 seasonal pricing differential. The demand charge is associated with the production and distribution functions. As a result, when comparing SMUD's bills with AE's S2 rate, there is less of a bill differential. However, bill differentials do exist as the shape of the SMUD rate curve is slightly flatter and the seasonal differentials are greater than that of AE. This flattening of the rate curves shifts costs from low load factor customers to high load factor customers. This result is demonstrated in the following table.

Table 5-20
Adjusted SMUD Rate Structure Compared to AE's S2 Rate Structure, 45 kW

| Billed Demand (kW) | Monthly Load Factor | Billed Energy (kWh) | Number of Bills for Demand | Number of Bills (% of Total) | SMUD Rate Structure | AE Rate Structure | Difference (\$) | Difference (%) |
|--------------------|---------------------|---------------------|----------------------------|------------------------------|---------------------|-------------------|-----------------|----------------|
| 45 | 10% | 3,285 | 2,424 | 3.3% | \$636.96 | \$795.35 | (\$158.38) | -19.9% |
| 45 | 20% | 6,570 | 8,100 | 14.5% | \$930.01 | \$1,023.74 | (\$93.73) | -9.2% |
| 45 | 30% | 9,855 | 14,013 | 33.7% | \$1,223.22 | \$1,252.14 | (\$28.91) | -2.3% |
| 45 | 40% | 13,140 | 15,937 | 55.6% | \$1,516.44 | \$1,480.53 | \$35.91 | 2.4% |
| 45 | 50% | 16,425 | 14,284 | 75.2% | \$1,809.65 | \$1,708.93 | \$100.73 | 5.9% |
| 45 | 60% | 19,710 | 10,219 | 89.2% | \$2,102.87 | \$1,937.32 | \$165.55 | 8.5% |
| 45 | 70% | 22,995 | 5,262 | 96.5% | \$2,396.09 | \$2,165.72 | \$230.37 | 10.6% |
| 45 | 80% | 26,280 | 1,843 | 99.0% | \$2,689.30 | \$2,394.11 | \$295.19 | 12.3% |
| 45 | 90% | 29,565 | 550 | 99.8% | \$2,982.52 | \$2,622.51 | \$360.01 | 13.7% |
| 45 | 100% | 32,850 | 178 | 100.0% | \$3,275.73 | \$2,850.90 | \$424.83 | 14.9% |

Approximately 34 percent of S2 customers with demand greater than 20 kW would experience a rate decrease under the SMUD General Service Demand rate structure and 66 percent would experience a rate increase.

TXU/Oncor

TXU/Oncor is an REP operating in the ERCOT competitive retail market. Oncor is a Transmission and Distribution provider or TDU. In this example, TXU and Oncor are paired such that TXU provides the power supply, which is delivered over the Oncor transmission and distribution system. While the bundled charges from the TXU component are set competitively, the charges must consider the applicable TXU rates as set in a rate making process at the PUCT. TXU/Oncor offers several packages to commercial customers that appear to have similar rate structures with slightly different pricing depending on the term of the customer's commitment or contract with the REP. For the purposes of this analysis, we have selected the TXU Energy Business Monthly Saver 36 plan, which requires a 36-month commitment from the customer. The pricing structure of the plan includes a Base Charge, Energy Charge, and Delivery Charge. The Delivery Charge is related to Oncor's TDU costs as reviewed and approved by the PUCT. Pricing information associated with the TXU Energy Business Monthly Saver 36 plan, indicates the following.

"Transmission and Distribution Utility (TDU) Charges for delivering electricity will be passed through to customer with no increase or markup. For updated TDU delivery charges factors go to txu.com/tduchargesbiz."

Oncor Delivery Charges as approved by the PUCT include customer, demand and energy efficiency charges depending on whether the customer has demand of 10 kW or greater. The following tables summarized the Oncor TDU rate structure.

**Table 5-21
Oncor Deliver Charges**

| | <10kW Oncor | >10kW Oncor |
|---|---------------------------|---------------------------|
| Customer Charge | \$1.71 | \$6.80 |
| Metering Charge | 5.19 | 22.14 |
| Energy Efficiency Cost Recovery Factor | - | - |
| Energy Efficiency Cost Recovery Factor – Remand Surcharge | - | - |
| Advanced Metering Cost Recovery Factor | 2.39 | 3.98 |
| Total Per Month Charges | \$9.29 | \$32.92 |
| Transmission System Charge | \$- | \$- |
| Distribution System Charge | 0.020109 | - |
| Nuclear Decommissioning Fee | 0.000146 | - |
| Transmission Recovery Factor | 0.006736 | - |
| Transition Charge (TC1) | 0.000480 | - |
| Transition Charge (TC2) | 0.000798 | - |
| Transition Charge (TC3) | - | - |
| Transition Charge (TC5) | - | - |
| Rate Case Surcharge (RCE-R) | 0.000067 | - |
| Storm Recovery Charge | - | - |
| Storm Recovery Tax Credit | - | - |
| Energy Efficiency Cost Recovery Factor | 0.000437 | 0.000525 |
| Total per kWh Charges | \$0.028773 | \$0.000525 |
| Transmission System Charge | | \$- |
| Distribution System Charge | | 4.380000 |
| Nuclear Decommissioning Fee | | 0.044000 |
| Transmission Recovery Factor | | 3.481646 |
| Transition Charge (TC1) | | 0.172000 |
| Transition Charge (TC2) | | 0.267000 |
| Transition Charge (TC3) | | - |
| Transition Charge (TC5) | | - |
| Rate Case Surcharge (RCE-R) | | 0.011400 |
| Storm Recovery Charge | | - |
| Storm Recovery Tax Credit | | - |
| Energy Efficiency Cost Recovery Factor | | - |
| Total per kW Charges | | \$8.356046 |

Based on the information we have been able to gather, it appears that TXU does pass through the Oncor rate structure directly to customers without modification, which is a very different pricing approach than the example from the Reliant REP presented earlier. Similar to our verification of the Reliant/Oncor rate structure, we verified an example bill calculation provided on the TXU Energy Business Monthly Saver 36 plan Electricity Facts Label, a label disclosing plan terms and conditions required by the PUCT. This analysis confirmed that the Oncor TDU rate is passed through to customers without modification to its rate structure.

With this understanding, the TXU Energy Business Monthly Saver 36 plan rate structure is compared to the AE S2 rate in the following table.

**Table 5-22
AE and TXU/Oncor Rate Comparison**

| Rate Structure Comparison | AE's Secondary Voltage 10kW to 50kW (S2) | TXU/Oncor's Energy Business Monthly Saver 36 <50kW | TXU/Oncor's Energy Business Monthly Saver 36 <50kW (Adjusted) |
|---|---|--|---|
| Customer Charge (\$/month) | 25.00 | N/A | N/A |
| Base Charge | N/A | 9.95 | 9.10 |
| Oncor Base Charge | N/A | 32.92 | 30.11 |
| Electric Delivery (\$/kW billed) | 4.00 | N/A | N/A |
| Demand Charge (\$/kW billed) | | | |
| Summer | 6.15 | 8.36 | 7.64 |
| Non-Summer | 5.15 | 8.36 | 7.64 |
| Energy Charge (¢/kWh) | | | |
| Summer | 2.914 | N/A | N/A |
| Non-Summer | 2.414 | N/A | N/A |
| TXU Energy Charge | N/A | 9.20 | 8.41 |
| Oncor Energy Charge | N/A | 0.05 | 0.05 |
| Pass-Throughs (¢/kWh) | | | |
| Power Supply Adjustment | 3.709 | N/A | N/A |
| Customer Assistance Program | 0.065 | N/A | N/A |
| Service Area Street Lighting | 0.076 | N/A | N/A |
| Energy Efficiency Services | 0.522 | N/A | N/A |
| Regulatory Charge | | | |
| (¢/kWh) | N/A | N/A | N/A |
| (\$/kW billed) | 2.56 | N/A | N/A |

TXU's Energy Business Monthly Saver 36 rate, in the Oncor service area, for commercial customers between 10 kW and 50 kW of monthly demand consists of a customer, demand, and energy charge.

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The adjusted TXU rate as shown in the table above reflects a prorata adjustment of the rate so that the TXU rate applied to AE customers served under the AE S2 rate would generate an equal amount of revenue. In other words, AE would be financially indifferent to either rate as both rates generated the same amount of revenue (although the TXU rate would not necessarily support the City of Austin's goals and objectives). The analysis supporting this revenue neutral calculation is shown in Exhibit 8 of this Report.

Graphical comparisons of TXU's Energy Business Monthly Saver 36 rate compared to AE's S2 rate for customers with monthly maximum demands of 15kW, 25kW and 45kW are shown in the following graphs.

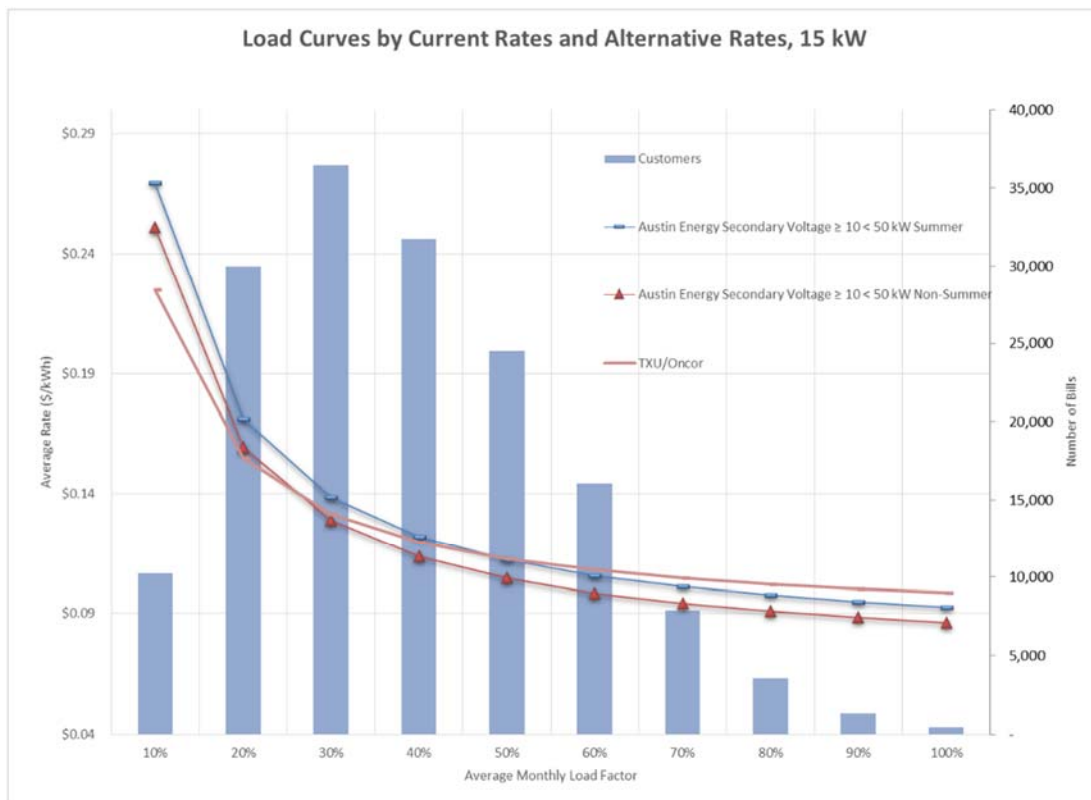


Figure 5-22. TXU/Oncor Load Curves by Current Rates and Alternative Rates, 15 kW

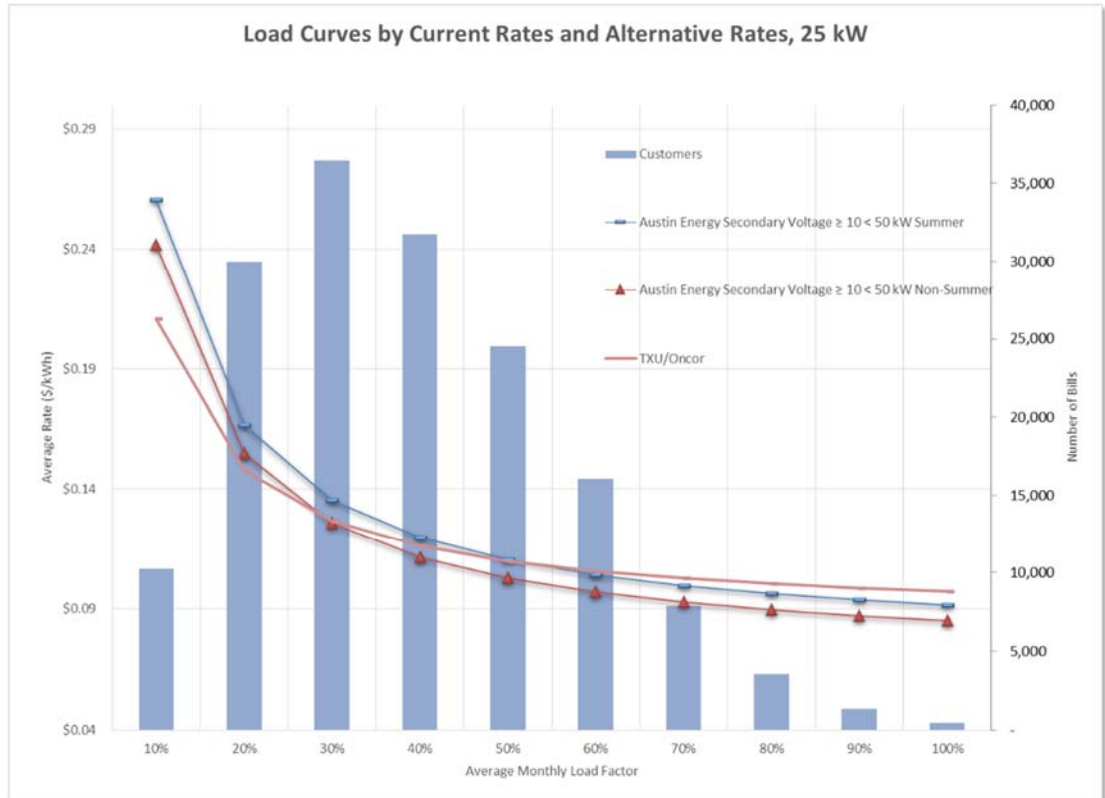


Figure 5-23. TXU/Oncor Load Curves by Current Rates and Alternative Rates, 25 kW

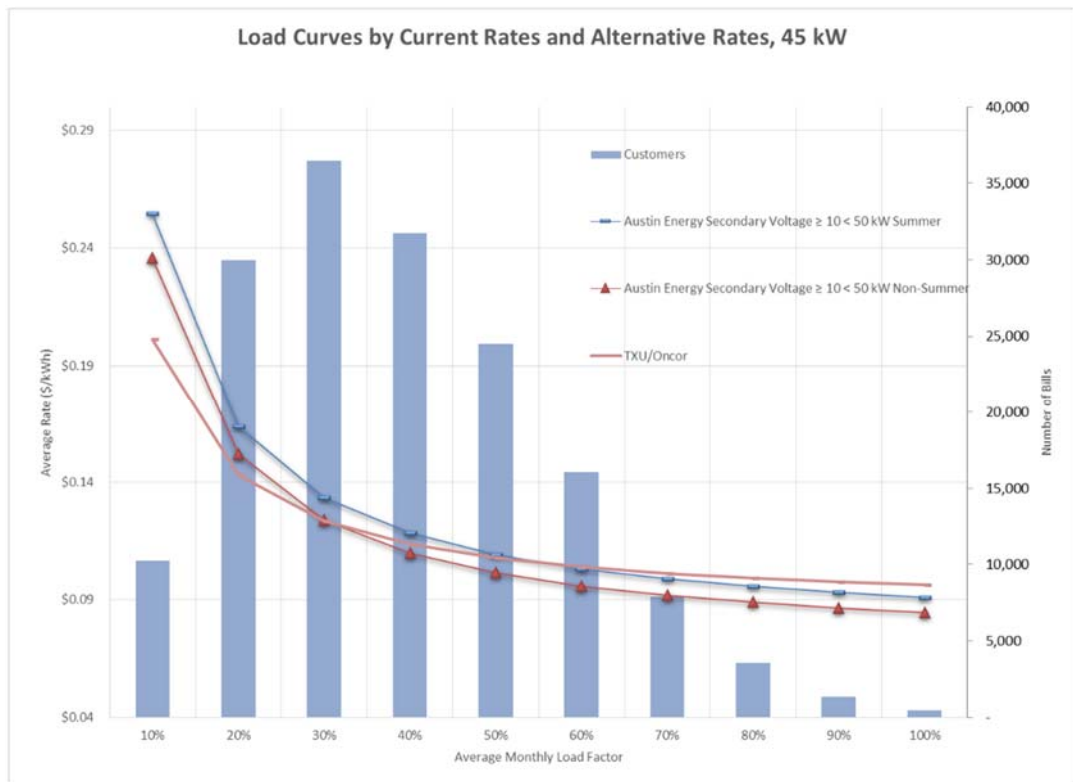


Figure 5-24. TXU/Oncor Load Curves by Current Rates and Alternative Rates, 45 kW

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In all cases, TXU's rate structure is similar to AE's S2 rate structure. However, bill differentials do exist as the shape of the TXU/Oncor rate curve is slightly flatter than that of AE. This flattening of the rate curves shifts costs from low load factor customers to high load factor customers. This result is demonstrated in the following table.

Table 5-23
Adjusted Oncor Rate Structure Compared to AE's S2 Rate Structure, 15 kW

| Billed Demand (kW) | Monthly Load Factor | Billed Energy (kWh) | Number of Bills for Demand | Number of Bills (% of Total) | TXU Rate Structure | AE Rate Structure | Difference (\$) | Difference (%) |
|--------------------|---------------------|---------------------|----------------------------|------------------------------|--------------------|-------------------|-----------------|----------------|
| 15 | 10% | 1,095 | 7,523 | 8.4% | \$246.48 | \$281.78 | (\$35.30) | -12.5% |
| 15 | 20% | 2,190 | 21,878 | 33.0% | \$339.13 | \$357.91 | (\$18.78) | -5.2% |
| 15 | 30% | 3,285 | 22,457 | 58.2% | \$431.78 | \$434.05 | (\$2.26) | -0.5% |
| 15 | 40% | 4,380 | 15,811 | 75.9% | \$524.44 | \$510.18 | \$14.26 | 2.8% |
| 15 | 50% | 5,475 | 10,229 | 87.4% | \$617.09 | \$586.31 | \$30.78 | 5.2% |
| 15 | 60% | 6,570 | 5,841 | 94.0% | \$709.74 | \$662.44 | \$47.30 | 7.1% |
| 15 | 70% | 7,665 | 2,622 | 96.9% | \$802.39 | \$738.57 | \$63.82 | 8.6% |
| 15 | 80% | 8,760 | 1,702 | 98.8% | \$895.04 | \$814.70 | \$80.34 | 9.9% |
| 15 | 90% | 9,855 | 786 | 99.7% | \$987.70 | \$890.84 | \$96.86 | 10.9% |
| 15 | 100% | 10,950 | 283 | 100.0% | \$1,080.35 | \$966.97 | \$113.38 | 11.7% |

Approximately 58 percent of S2 customers would experience a rate decrease under the TXU rate structure and 42 percent would experience a rate increase. However, since the rate structures are somewhat similar, the magnitude of the differences is relatively small. The TXU rate structure mitigates the cost recovery of capacity based costs from poor load factor customers. The TXU/Oncor rate structure for customers with a demand greater than 10 kW is similar to AE's current S2 rate.

The TXU's Energy Business Monthly Saver 36 rate, for the Oncor service area, includes a demand and energy charge, directly passing through the Oncor rate for delivery service. The TXU/Oncor demand and energy rate structure differs from Reliant's Rockets Secure Advantage 12 Plan rate, for the CenterPoint area, which does not include a demand charge, though the underlying charges from CenterPoint approved by the PUCT do include demand charges. It is the REP's choice, as a competitive REP, to restructure its retail rates to include or exclude demand charges from its rate structure, as long as REP fully compensates the delivery providers (CenterPoint and Oncor in the examples provided) for its services.

Conclusions

Based on our benchmarking analyses, we conclude the following:

- For small commercial customers, there is no standard approach in determining commercial class size. Commercial class sizes range significantly between utilities.

- AE's S1 and S2 customer class boundary is the same as TDU's in ERCOT and consistent with TDU rates set by the PUCT. This result is intentional based on one of the justifications for the current class boundaries given in the 2011 Rate Study.
- When comparing rate design for commercial customers in AE's S1, S2 and S3 customer classes with other utilities, there is no standard rate design approach.
 - Customer class sizes range significantly between utilities. Most utilities, but not all, have small commercial classes that do not have a demand charge and larger commercial classes with a demand charge. For customers with maximum monthly demands between 0 kW to 50 kW, utilities with small commercial classes without a demand charge include in our benchmarking review are as follows:
 - BEC – Basic <50 kW
 - FCU – General Service <25 kW
 - PEC – Small Power < 75 kW
 - Reliant/CenterPoint
 - SMUD – General Service Non-Demand <20 kW
 - TXU/Oncor < 10kW
 - Two utilities, CPS and LADWP have demand charges, or similar charges, applicable to all commercial customers regardless of size.
 - Three utilities, BEC, PEC, and Reliant/CenterPoint do not apply demand charges to any small commercial customers with maximum demands between 0 kW to 50 kW.
- For S2 customers, with demands ranging from 10 kW to 50 kW, benchmarking results indicate that there is no uniform approach to rate design. Of the eight utilities included in the benchmarking study:
 - Three utilities do not have a demand, or similar, charge for customers with maximum monthly demands between 10 kW and 50 kW.
 - Three utilities do have a demand, or similar, charge for customers with maximum monthly demands between 10 kW and 50 kW.
 - Two utilities have rate boundaries within this range where customers below the boundary do not have a demand, or similar, charge and customer above the boundary have a demand, or similar, charge.
- For S2 customers, with demand ranging from 10 kW to 20 kW, benchmarking results indicate that there is no uniform approach to rate design. Of the eight utilities included in the benchmarking study:
 - Five utilities do not have a demand, or similar, charge for customers with maximum monthly demands between 10 kW and 20 kW.
 - Three utilities do have a demand, or similar, charge for customers with maximum monthly demands between 10 kW and 20 kW.

- All things considered, AE's current S2 rate structure impacts all customers in the class (10 kW - 50 kW) in a similar manner as that of CPS Energy, LADWP, and TXU/Oncor (as well as SMUD for some S2 customers). It is worth noting that CPS Energy has a rate mechanism in place to shield low load factor customers from significant bill impacts, which is something that does not currently exist in the S2 rate structure.
- If AE were to adopt a rate structure similar to most utilities included in this benchmarking analysis, the most likely result would be a shift of costs from low load factor customers to high load factor customers. This shift does not align with the intent of rates objectives adopted by the Austin City Council in 2012.

Section 6

RATE STRUCTURE SENSITIVITY

As described in Section 5 – Rate Benchmarking of this Report, if AE were to adopt another utility’s rate structure, costs would shift between customers. In fact, any deviation from the existing rate structure will shift costs from one group of customers to another. To help AE understand the magnitude of cost shifting on customers within the class under various rate change scenarios, NewGen has made generic modifications to the S2 rate in order to evaluate the impact of these rate design changes on customers within the class. The rates presented within this Section are for illustrative purposes only and NewGen does not recommend these modifications to the existing S2 rate design.

Sensitivity Analysis of S2 Rate Structure

For comparison purposes, we have developed two rate sensitivity analyses as examples of expected cost shifting and corresponding customer impacts within the S2 customer class. In both sensitivity cases, rate structure adjustments generate the same amount of revenue as the current S2 rate, making the scenarios presented revenue neutral. The scenarios developed for this sensitivity analysis are not intended to serve as alternative rates, but to simply analyze the effect of rate structure changes on the S2 class. The rate structure changes implemented in this sensitivity analysis are:

1. Sensitivity Analysis 1 – Remove the Demand Charge. Therefore, the rate structure is comprised of a Customer and an Energy Charge, including pass-through charges.
2. Sensitivity Analysis 2 – Reduced Demand Charge by one-half, from the current S2 Demand Charge. Therefore, the rate structure is comprised of a Customer, lower Demand Charge and higher Energy Charge, including pass-through charges.

Sensitivity Analysis 1, with no demand charge, results in a flat rate curve compared to the current S2 rate. The rate design yields an average rate of about \$0.14 per kWh for all customers in the class. Table 6-1 details the effect that transitioning the current S2 rate structure to a rate structure with no demand charge would have on a S2 customer’s monthly bill. As shown in the table below, the modeled monthly bills are representative of an S2 customer with a 15 kW monthly demand.

Table 6-1
Sensitivity Analysis 1 (SA1) of AE's S2 Rate Structure, 15 kW

| Billed Demand (kW) | Monthly Load Factor | Billed Energy (kWh) | Number of Bills for Demand | Number of Bills (% of Total) | SA1 Rate Structure | AE Rate Structure | Difference (\$) | Difference (%) |
|--------------------|---------------------|---------------------|----------------------------|------------------------------|--------------------|-------------------|-----------------|----------------|
| 15 | 10% | 1,095 | 7,523 | 8.4% | \$152.80 | \$281.78 | (\$128.98) | -45.8% |
| 15 | 20% | 2,190 | 21,878 | 33.0% | \$280.61 | \$357.91 | (\$77.30) | -21.6% |
| 15 | 30% | 3,285 | 22,457 | 58.2% | \$408.41 | \$434.05 | (\$25.63) | -5.9% |
| 15 | 40% | 4,380 | 15,811 | 75.9% | \$536.22 | \$510.18 | \$26.04 | 5.1% |
| 15 | 50% | 5,475 | 10,229 | 87.4% | \$664.02 | \$586.31 | \$77.72 | 13.3% |
| 15 | 60% | 6,570 | 5,841 | 94.0% | \$791.83 | \$662.44 | \$129.39 | 19.5% |
| 15 | 70% | 7,665 | 2,622 | 96.9% | \$919.63 | \$738.57 | \$181.06 | 24.5% |
| 15 | 80% | 8,760 | 1,702 | 98.8% | \$1,047.44 | \$814.70 | \$232.74 | 28.6% |
| 15 | 90% | 9,855 | 786 | 99.7% | \$1,175.24 | \$890.84 | \$284.41 | 31.9% |
| 15 | 100% | 10,950 | 283 | 100.0% | \$1,303.05 | \$966.97 | \$336.08 | 34.8% |

The graph provided in Figure 6-1, illustrates the current S2 rate structure, the SA1 rate structure, and S1 (Secondary Voltage less than 10 kW) rate structure. The S1 rate structure has been included for comparison purposes.

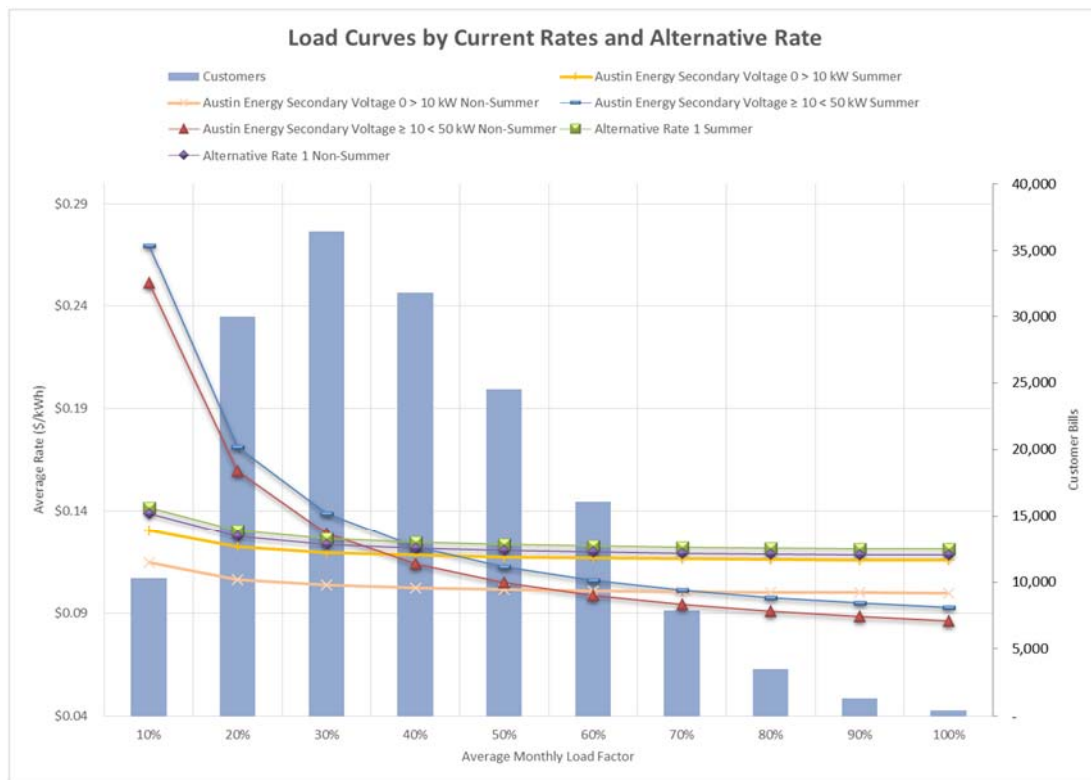


Figure 6-1. Load Curves by Current Rates and Sensitivity Analysis 1

This rate structure significantly shifts costs from low load factor customers to high load factor customers. Although overall rate revenues align with the class cost of service results, this structure does a poor job of equitably recovering costs from customers within the class and does not align with the rate design goals and objectives stated in the 2011 Rate Study.

Sensitivity Analysis 2, with a lower demand charge, retains a similar rate curve as the S2 rate but with a more gradual and less severe impact on low load factor customers. Placing a greater importance on the volume of energy used by the customer and reducing the cost associated with demand results in a cost shift from low load factor customers to high load factor customers, but to a lesser degree than Sensitivity Analysis 1. The variance in cost per kWh across S2 customer load factors range from \$0.19 per kWh to \$0.11 per kWh. Such an approach retains some, but not all of, the price signal related to demand and power factor.

Table 6-2 details the effect that transitioning the current S2 rate structure to a rate structure with a lower demand charge would have on a S2 customer's monthly bill. As shown in the table below, the modeled monthly bills are representative of an S2 customer with a 15 kW monthly demand.

Table 6-2
Sensitivity Analysis 2 (SA2) of AE's S2 Rate Structure, 15 kW

| Billed Demand (kW) | Monthly Load Factor | Billed Energy (kWh) | Number of Bills for Demand | Number of Bills (% of Total) | SA2 Rate Structure | AE Rate Structure | Difference (\$) | Difference (%) |
|---------------------------|----------------------------|----------------------------|-----------------------------------|-------------------------------------|---------------------------|--------------------------|------------------------|-----------------------|
| 15 | 10% | 1,095 | 7,523 | 8.4% | \$217.29 | \$281.78 | (\$64.49) | -22.9% |
| 15 | 20% | 2,190 | 21,878 | 33.0% | \$319.26 | \$357.91 | (\$38.65) | -10.8% |
| 15 | 30% | 3,285 | 22,457 | 58.2% | \$421.23 | \$434.05 | (\$12.82) | -3.0% |
| 15 | 40% | 4,380 | 15,811 | 75.9% | \$523.20 | \$510.18 | \$13.02 | 2.6% |
| 15 | 50% | 5,475 | 10,229 | 87.4% | \$625.17 | \$586.31 | \$38.86 | 6.6% |
| 15 | 60% | 6,570 | 5,841 | 94.0% | \$727.13 | \$662.44 | \$64.69 | 9.8% |
| 15 | 70% | 7,665 | 2,622 | 96.9% | \$829.10 | \$738.57 | \$90.53 | 12.3% |
| 15 | 80% | 8,760 | 1,702 | 98.8% | \$931.07 | \$814.70 | \$116.37 | 14.3% |
| 15 | 90% | 9,855 | 786 | 99.7% | \$1,033.04 | \$890.84 | \$142.20 | 16.0% |
| 15 | 100% | 10,950 | 283 | 100.0% | \$1,135.01 | \$966.97 | \$168.04 | 17.4% |

The graph provided in Figure 6-2, illustrates the current S2 rate structure, the SA2 rate structure, and S1 rate structure. The S1 rate structure has been included for comparison purposes.

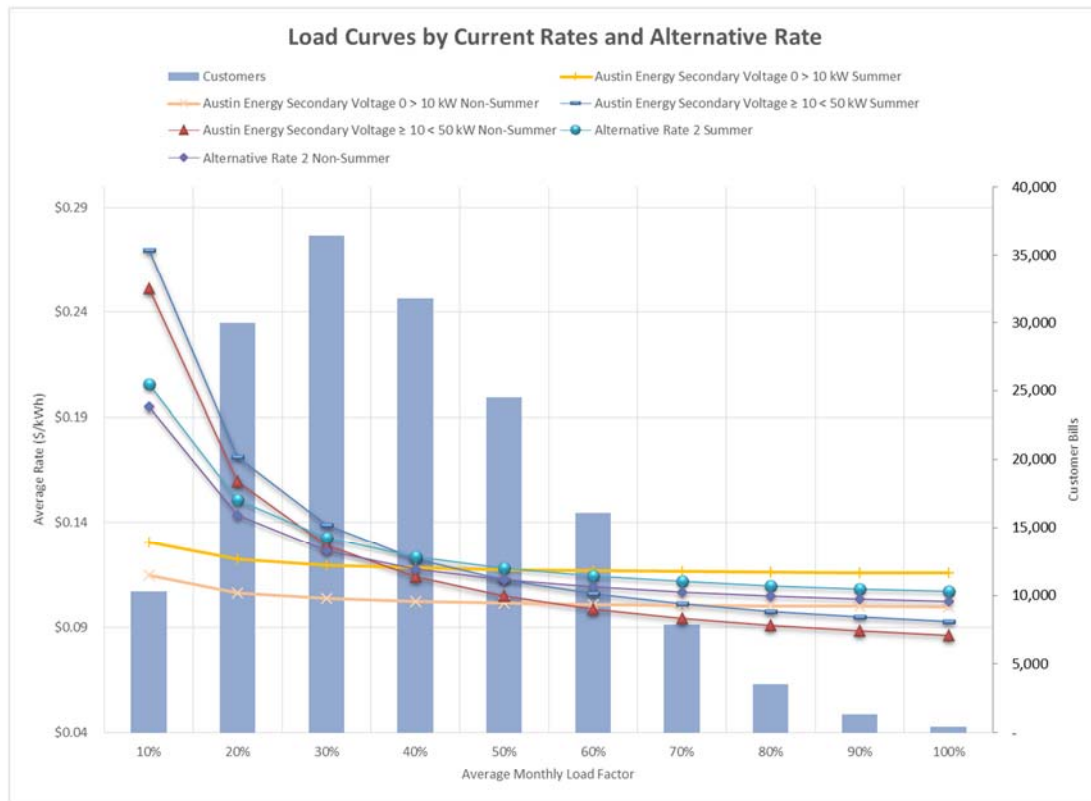


Figure 6-2. Load Curves by Current Rates and Sensitivity Analysis 2

Based on these sensitivity analyses, NewGen has demonstrated that by removing or reducing the demand charge in the S2 rate, the variation in the rate per kWh will be reduced for S2 customers regardless of customer's energy usage or efficiency; however, with this reduction in price per kWh differential the correlation of cost to serve customers will be reduced as well. It is NewGen's understanding that AE's goal is to encourage customers to utilize the system efficiently, and recover costs from customers in alignment with cost causation. By removing or reducing the demand component of the current rate structure, low load factor S2 customers will experience rate relief and cost will be shifted to high load factor customers. Under this type of rate structure the alignment of the rates with cost of service results will be minimized or lost.

Change to Customer Class

Currently the S2 rate is applied to customers with a demand between 10 kW and 50 kW. NewGen evaluated the cost of AE transitioning S2 customers with a demand between 10 kW and 20 kW to the current S1 rate. Based on NewGen's analyses, transitioning customers with a demand between 10 kW and 20 kW to the S1 rate is projected to reduce AE's revenues by approximately \$6.5 million per year, or a reduction of approximately 18 percent of revenue from these customers. If AE desires to remain revenue neutral as a result of such a change, S1 class rates would need to be adjusted to recover this lost revenue.

As mentioned earlier in this Report, load factor, not customer size (within the bandwidth of 10 kW to 50 kW), is a primary driver of average cost. Also, it is important to recognize that “small, local” businesses are not confined to a narrow range of demands (e.g., 10 kW to 20 kW). In fact, some of these businesses exhibit much larger demands in their operations. Thus, if the objective is to support the small, local business community in Austin, altering the rate for customers in a narrow range of demands will be an imprecise means to achieve this policy goal and many of the intended beneficiaries of such a policy would not be assisted by this change. Other support, such as energy audits or efficiency investment subsidies, could be more targeted to the intended recipients and, thus, would likely achieve a much better outcome.

Conclusion

Based on our review of hypothetical rate changes to the S2 customer class, we conclude the following.

- Any rate change that reduces or eliminates the current S2 demand charge will shift costs from low load factor customers to high load factor customers.
- Shifting costs from low load factor customers to high load factor customers does not agree with the cost of service results of the 2011 Rate Study.
- Shifting costs from low load factor customers to high load factor customers does not align with the rate design objectives of the 2011 Rate Study.

Section 7

RECOMMENDATIONS

Based on our analyses as described herein, we recommend the following:

- AE should update detailed customer usage information for the S2 class, gathered and analyzed in this study, which should be incorporated into AE's next cost of service study.
- AE should perform a detailed multi-year weather normalization study for the S2 class to clearly understand the influence of the current rate structure on customer electricity consumption patterns.
- To the extent possible, AE should maintain current pricing signals as they reflect cost of service results and customer reactions to these signals generally appear to be meeting the utility's rate design objectives.
- AE should consider options to minimize "rate shock" for low load factor and poor power factor customers.
- In the short term, for S2 customers, AE may consider temporarily rolling back the power factor penalty charge from 90 percent to 85 percent until the next comprehensive rate review. This adjustment would reduce power factor penalty revenues for customers in the S2 class by approximately 54 percent. The reduction in revenue, of approximately \$400,000 per year, would be absorbed by AE and not recovered elsewhere. It is important to note that this would not be a change supported by cost of service principles but, rather, it would serve as a policy decision to mitigate bill impacts for certain poor power factor customers. This strategy would provide rate relief to less than 200 customers with poor power factors. These customers currently experience an increase in their demand charges of 29 percent or greater over their pre-2012 bills.
- In the long term, AE could consider modifications to the existing rate structure that would limit the amount a low load factor and/or poor power factor customer would pay (on an average rate basis). A limit can be applied to the rate structure without undermining important demand pricing signals embedded in the current rate structure and deviating from cost of service results. Such a limit may result in a subsidy that must be borne by other customers in the class; therefore, the size and breadth of the cap must meet AE policy objectives. This strategy would minimize the amount of subsidy and target the subsidy more directly to low load factor and poor power factor customers. Once such modifications are made, we recommend that the power factor penalty charge for this class of customers be reinstated to the same level as for other AE customer classes (if it was reduced as a short term mitigation measure).
- A comprehensive cost of service analysis should be conducted in advance of a long term strategy so that rate structure modifications properly consider the true cost of serving the lowest load factor customers in the S2 customer class.

EXHIBIT 1

Rate Benchmarking Analysis - BEC

Austin Energy
Rate Benchmarking Analysis
Exhibit 1 - BEC

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) |
|--|---|----------------|-------------------|--|---------------|-------------------|----------------------|--|
| Proof of Revenue | | | | | | | | |
| Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL) | | | | Austin Energy Secondary Voltage ≥ 10 < 50 kW (OCL) | | | | Total Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| Line No. | Item | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 1 | | | | | | | | |
| 2 | Austin Energy Rate Schedule | | | | | | | |
| 3 | | | | | | | | |
| 4 | Customer Charge (months) | 138,187 | \$ 25.00 | \$ 3,454,675 | 24,077 | \$ 25.00 | \$ 601,925 | \$ 4,056,600 |
| 5 | | | | | | | | |
| 6 | Demand Charges | | | | | | | |
| 7 | Winter (\$/kW-billed) | 1,877,111 | \$ 5.15 | 9,667,124 | 339,867 | \$ 5.12 | 1,740,119 | 11,407,243 |
| 8 | Summer (\$/kW-billed) | 1,012,365 | \$ 6.15 | 6,226,042 | 164,792 | \$ 6.11 | 1,006,881 | 7,232,923 |
| 9 | Subtotal Demand Charges | | \$ 5.48 | \$ 15,893,166 | | \$ 5.45 | \$ 2,747,000 | \$ 18,640,166 |
| 10 | | | | | | | | |
| 11 | Electric Delivery (\$/kW-billed) | 2,889,476 | \$ 4.00 | 11,557,904 | 504,659 | \$ 3.98 | 2,008,544 | 13,566,448 |
| 12 | Regulatory Charge (\$/kW) | 2,889,476 | \$ 2.56 | 7,397,059 | 504,659 | \$ 2.56 | 1,291,928 | 8,688,986 |
| 13 | Temporary Supplemental Charge (OCL) | 2,889,476 | \$ - | - | 504,659 | \$ 0.13 | 65,606 | 65,606 |
| 14 | Subtotal Demand Charges and Adjustment Charges | | \$ 6.56 | \$ 34,848,129 | | \$ 12.12 | \$ 6,113,077 | \$ 40,961,206 |
| 15 | | | | | | | | |
| 16 | Energy Charge (kWh) | | | | | | | |
| 17 | Winter Energy (kWh) | 433,209,672 | \$ 0.02414 | 10,457,681 | 70,674,283 | \$ 0.02399 | 1,695,476 | 12,153,158 |
| 18 | Summer Energy (kWh) | 307,959,288 | \$ 0.02914 | 8,973,934 | 46,783,352 | \$ 0.02896 | 1,354,846 | 10,328,780 |
| 19 | Subtotal Energy Charge | | \$ 0.02581 | \$ 19,431,615 | | \$ 0.02565 | \$ 3,050,322 | \$ 22,481,937 |
| 20 | | | | | | | | |
| 21 | FAC or PSA (kWh) | 741,168,960 | \$ 0.03709 | 27,489,957 | 117,457,635 | \$ 0.03709 | 4,356,504 | 31,846,460 |
| 22 | Customer Assistance Program (\$/kWh) | 741,168,960 | \$ 0.00065 | 481,760 | 117,457,635 | \$ 0.00065 | 76,347 | 558,107 |
| 23 | Service Area Street Lighting (\$/kWh) | 741,168,960 | \$ 0.00076 | 563,288 | 117,457,635 | \$ - | - | 563,288 |
| 24 | Energy Efficiency Services (\$/kWh) | 741,168,960 | \$ 0.00522 | 3,868,902 | 117,457,635 | \$ 0.00522 | 613,129 | 4,482,031 |
| 25 | Transmission Service Adjustment | 741,168,960 | \$ - | - | 117,457,635 | \$ - | - | - |
| 26 | Subtotal Energy Charge and Adjustment Charges | | \$ 0.06953 | \$ 51,835,522 | | \$ 0.06861 | \$ 8,096,302 | \$ 59,931,824 |
| 27 | | | | | | | | |
| 28 | TOTAL Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 29 | <i>Check</i> | | | | | | | |
| 30 | Summary of Revenue | | | | | | | |
| 31 | Customer Charge | | \$ | 3,454,675 | | \$ | 601,925 | \$ 4,056,600 |
| 32 | Demand Charge | | | 34,848,129 | | | 6,113,077 | 40,961,206 |
| 33 | Energy Charge | | | 51,835,522 | | | 8,096,302 | 59,931,824 |
| 34 | Total Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 35 | <i>Check</i> | | | | | | | |
| 36 | | | | | | | | |
| 37 | | | | | | | | |

Austin Energy
Rate Benchmarking Analysis
Exhibit 1 - BEC

| (A) | (B) | (J) | (K) | (L) | (M) | (N) | (O) | (P) |
|---|---|---------------|------------|---|---------------|------------|----------------------|---|
| BEC Structure w AE Revenue Requirement | | | | | | | | |
| Commercial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | | Commercial Secondary Voltage ≥ 10 < 50 kW (OCL) | | | | Total Bluebonnet Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| Line No. | Item | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 38 | BEC Rate Schedule | | | | | | | |
| 39 | | | | | | | | |
| 40 | Customer Charge (months) | 138,187 | \$ 54.64 | \$ 7,549,858 | 24,077 | \$ 54.64 | \$ 1,315,449 | \$ 8,865,307 |
| 41 | | | | | | | | |
| 42 | Demand Charge (kW) | 2,889,476 | \$ - | \$ - | 504,659 | \$ - | \$ - | \$ - |
| 43 | | | | | | | | |
| 44 | | | | | | | | |
| 45 | Energy Charge (kWh) | | | | | | | |
| 46 | Energy Charge (kWh) | 741,168,960 | \$ 0.07056 | \$ 52,294,538 | 117,457,635 | \$ 0.07056 | \$ 8,287,439 | \$ 60,581,977 |
| 47 | Subtotal Energy Charges | | | \$ 52,294,538 | | | \$ 8,287,439 | \$ 60,581,977 |
| 48 | | | | | | | | |
| 49 | Power Cost Recovery Factor (PCRF) | 741,168,960 | \$ 0.00109 | \$ 809,877 | 117,457,635 | \$ 0.00109 | 128,346 | \$ 938,223 |
| 50 | Distribution Charge - three phase (kWh) | 741,168,960 | \$ 0.04026 | \$ 29,835,851 | 117,457,635 | \$ 0.04026 | 4,728,272 | \$ 34,564,124 |
| 51 | Subtotal Energy Charges and Adjustment C | | | \$ 82,940,266 | | | \$ 13,144,058 | \$ 96,084,323 |
| 52 | | | | | | | | |
| 53 | TOTAL Revenue | | | \$ 90,490,124 | | | \$ 14,459,506 | \$ 104,949,630 |
| 54 | | | | | | | | |
| 55 | Summary of Revenue | | | | | | | |
| 56 | Customer Charge | | | \$ 7,549,858 | | | \$ 1,315,449 | \$ 8,865,307 |
| 57 | Demand Charge | | | - | | | - | - |
| 58 | Energy Charge | | | 82,940,266 | | | 13,144,058 | 96,084,323 |
| 59 | Total Revenue | | | \$ 90,490,124 | | | \$ 14,459,506 | \$ 104,949,630 |
| 60 | <i>Check</i> | | | | | | | |

Austin Energy
Rate Benchmarking Analysis
Exhibit 1 - BEC

| (A) | (B) | (Q) | (R) | (S) | (T) | (U) | (V) | (W) |
|--|---|---------------|------------|--|---------------|------------|---------------|---|
| BEC Structure w BEC Revenue Requirement | | | | | | | | |
| Commecial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | | Commecial Secondary Voltage ≥ 10 < 50 kW (OCL) | | | | Total Bluebonnet Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| Line No. | Item | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 38 | BEC Rate Schedule | | | | | | | |
| 39 | | | | | | | | |
| 40 | Customer Charge (months) | 138,187 | \$ 50.00 | \$ 6,909,350 | 24,077 | \$ 50.00 | \$ 1,203,850 | \$ 8,113,200 |
| 41 | | | | | | | | |
| 42 | Demand Charge (kW) | 2,889,476 | \$ - | \$ - | 504,659 | \$ - | \$ - | \$ - |
| 43 | | | | | | | | |
| 44 | | | | | | | | |
| 45 | Energy Charge (kWh) | | | | | | | |
| 46 | Energy Charge (kWh) | 741,168,960 | \$ 0.06457 | \$ 47,858,021 | 117,457,635 | \$ 0.06457 | \$ 7,584,357 | \$ 55,442,378 |
| 47 | Subtotal Energy Charges | | | \$ 47,858,021 | | | \$ 7,584,357 | \$ 55,442,378 |
| 48 | | | | | | | | |
| 49 | Power Cost Recovery Factor (PCRF) | 741,168,960 | \$ 0.00100 | \$ 741,169 | 117,457,635 | \$ 0.00100 | \$ 117,458 | \$ 858,627 |
| 50 | Distribution Charge - three phase (kWh) | 741,168,960 | \$ 0.03684 | \$ 27,304,664 | 117,457,635 | \$ 0.03684 | \$ 4,327,139 | \$ 31,631,804 |
| 51 | Subtotal Energy Charges and Adjustment C | | | \$ 75,903,854 | | | \$ 12,028,954 | \$ 87,932,808 |
| 52 | | | | | | | | |
| 53 | TOTAL Revenue | | | \$ 82,813,204 | | | \$ 13,232,804 | \$ 96,046,008 |
| 54 | | | | | | | | |
| 55 | Summary of Revenue | | | | | | | |
| 56 | Customer Charge | | | \$ 6,909,350 | | | \$ 1,203,850 | \$ 8,113,200 |
| 57 | Demand Charge | | | - | | | - | - |
| 58 | Energy Charge | | | 75,903,854 | | | 12,028,954 | 87,932,808 |
| 59 | Total Revenue | | | \$ 82,813,204 | | | \$ 13,232,804 | \$ 96,046,008 |
| 60 | Check | | | | | | | |

EXHIBIT 2

Rate Benchmarking Analysis - CPS

Austin Energy
Rate Benchmarking Analysis
Exhibit 2 - CPS

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) |
|----------|--|--|------------|---------------|--|------------|---------------|---|
| | | Proof of Revenue | | | | | | |
| | | Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Austin Energy Secondary Voltage ≥ 10 < 50 kW (OCL) | | | Total Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| Line No. | Item | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 1 | | | | | | | | |
| 2 | Austin Energy Rate Schedule | | | | | | | |
| 3 | | | | | | | | |
| 4 | Customer Charge (months) | 138,187 | \$ 25.00 | \$ 3,454,675 | 24,077 | \$ 25.00 | \$ 601,925 | \$ 4,056,600 |
| 5 | | | | | | | | |
| 6 | Demand Charges | | | | | | | |
| 7 | Winter (\$/kW-billed) | 1,877,111 | \$ 5.15 | 9,667,124 | 339,867 | \$ 5.12 | 1,740,119 | 11,407,243 |
| 8 | Summer (\$/kW-billed) | 1,012,365 | \$ 6.15 | 6,226,042 | 164,792 | \$ 6.11 | 1,006,881 | 7,232,923 |
| 9 | Subtotal Demand Charges | | \$ 5.48 | \$ 15,893,166 | | \$ 5.45 | \$ 2,747,000 | \$ 18,640,166 |
| 10 | | | | | | | | |
| 11 | Electric Delivery (\$/kW-billed) | 2,889,476 | \$ 4.00 | 11,557,904 | 504,659 | \$ 3.98 | 2,008,544 | 13,566,448 |
| 12 | Regulatory Charge (\$/kW) | 2,889,476 | \$ 2.56 | 7,397,059 | 504,659 | \$ 2.56 | 1,291,928 | 8,688,986 |
| 13 | Temporary Supplemental Charge (OCL) | 2,889,476 | \$ - | - | 504,659 | \$ 0.13 | 65,606 | 65,606 |
| 14 | Subtotal Demand Charges and Adjustment Charges | | \$ 6.56 | \$ 34,848,129 | | \$ 12.12 | \$ 6,113,077 | \$ 40,961,206 |
| 15 | | | | | | | | |
| 16 | Energy Charge (kWh) | | | | | | | |
| 17 | Winter Energy (kWh) | 433,209,672 | \$ 0.02414 | 10,457,681 | 70,674,283 | \$ 0.02399 | 1,695,476 | 12,153,158 |
| 18 | Summer Energy (kWh) | 307,959,288 | \$ 0.02914 | 8,973,934 | 46,783,352 | \$ 0.02896 | 1,354,846 | 10,328,780 |
| 19 | Subtotal Energy Charge | | \$ 0.02581 | \$ 19,431,615 | | \$ 0.02565 | \$ 3,050,322 | \$ 22,481,937 |
| 20 | | | | | | | | |
| 21 | FAC or PSA (kWh) | 741,168,960 | \$ 0.03709 | 27,489,957 | 117,457,635 | \$ 0.03709 | 4,356,504 | 31,846,460 |
| 22 | Customer Assistance Program (\$/kWh) | 741,168,960 | \$ 0.00065 | 481,760 | 117,457,635 | \$ 0.00065 | 76,347 | 558,107 |
| 23 | Service Area Street Lighting (\$/kWh) | 741,168,960 | \$ 0.00076 | 563,288 | 117,457,635 | \$ - | - | 563,288 |
| 24 | Energy Efficiency Services (\$/kWh) | 741,168,960 | \$ 0.00522 | 3,868,902 | 117,457,635 | \$ 0.00522 | 613,129 | 4,482,031 |
| 25 | Transmission Service Adjustment | 741,168,960 | \$ - | - | 117,457,635 | \$ - | - | - |
| 26 | Subtotal Energy Charge and Adjustment Charges | | \$ 0.06953 | \$ 51,835,522 | | \$ 0.06861 | \$ 8,096,302 | \$ 59,931,824 |
| 27 | | | | | | | | |
| 28 | TOTAL Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 29 | Check | | | | | | | |
| 30 | Summary of Revenue | | | | | | | |
| 31 | Customer Charge | | | \$ 3,454,675 | | | \$ 601,925 | \$ 4,056,600 |
| 32 | Demand Charge | | | 34,848,129 | | | 6,113,077 | 40,961,206 |
| 33 | Energy Charge | | | 51,835,522 | | | 8,096,302 | 59,931,824 |
| 34 | Total Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 35 | Check | | | | | | | |
| 36 | | | | | | | | |
| 37 | | | | | | | | |

Austin Energy
Rate Benchmarking Analysis
Exhibit 2 - CPS

| (A) | (B) | (J) | (K) | (L) | (M) | (N) | (O) | (P) |
|--|--|--|------------|---------------|--|------------|---------------|--|
| CPS Energy Structure w Austin Energy Revenue Requirement | | | | | | | | |
| | | Commecial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Commecial Secondary Voltage ≥ 10 < 50 kW (OCL) | | | Total CPS Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| Line No. | Item | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 38 | CPS Rate Schedule | | | | | | | |
| 39 | | | | | | | | |
| 40 | Customer Charge (months) | 138,187 | \$ 14.07 | \$ 1,943,634 | 24,077 | \$ 14.07 | \$ 338,649 | \$ 2,282,283 |
| 41 | | | | | | | | |
| 42 | Demand Charge (kW) | 3,394,135 | \$ - | \$ - | 19,144,825 | \$ - | \$ - | \$ - |
| 43 | | | | | | | | |
| 44 | | | | | | | | |
| 45 | Energy Charge (kWh) | | | | | | | |
| 46 | Energy Charge (First 1,600 kWh) | 544,974,711 | \$ 0.11558 | \$ 62,986,064 | 90,329,812 | \$ 0.11558 | \$ 10,439,969 | \$ 73,426,033 |
| 47 | Energy Charge (additional kWh) | 196,194,249 | \$ 0.05337 | 10,470,408 | 27,127,823 | \$ 0.05337 | 1,447,746 | 11,918,153 |
| 48 | Subtotal Energy Charges | | | \$ 73,456,472 | | | \$ 11,887,715 | \$ 85,344,187 |
| 49 | | | | | | | | |
| 50 | Peak Capacity Charge - June- Sept (kwh> 600) | 279,399,696 | \$ 0.03183 | \$ 8,892,633 | 41,833,412 | \$ 0.03183 | \$ 1,331,459 | \$ 10,224,091 |
| 51 | Peak Capacity Charge - Oct - May (kWh>600) | 380,244,702 | \$ 0.01607 | 6,112,268 | 61,388,971 | \$ 0.01607 | 986,801 | 7,099,069 |
| 52 | Subtotal Peak Capacity Charge | | \$ 0.02133 | \$ 15,004,901 | | \$ 0.02133 | \$ 2,318,260 | \$ 17,323,161 |
| 53 | | | | | | | | |
| 54 | | | | | | | | |
| 55 | Subtotal Energy Charges and Peak Capacity | | | \$ 88,461,372 | | | \$ 14,205,975 | \$ 102,667,347 |
| 56 | | | | | | | | |
| 57 | TOTAL Revenue | | | \$ 90,405,006 | | | \$ 14,544,624 | \$ 104,949,630 |
| 58 | | | | | | | | |
| 59 | Summary of Revenue | | | | | | | |
| 60 | Customer Charge | | | \$ 1,943,634 | | | \$ 338,649 | \$ 2,282,283 |
| 61 | Demand Charge | | | - | | | - | - |
| 62 | Energy Charge | | | 88,461,372 | | | 14,205,975 | 102,667,347 |
| 63 | Total Revenue | | | \$ 90,405,006 | | | \$ 14,544,624 | \$ 104,949,630 |
| 64 | Check | | | | | | | |
| 65 | | | | | | | | |

Austin Energy
Rate Benchmarking Analysis
Exhibit 2 - CPS

| (A) | (B) | (Q) | (R) | (S) | (T) | (U) | (V) | (W) |
|--|--|--|------------|---------------|--|------------|--------------|--|
| CPS Energy Structure w CPS Revenue Requirement | | | | | | | | |
| | | Commecial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Commecial Secondary Voltage ≥ 10 < 50 kW (OCL) | | | Total CPS Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| Line No. | Item | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 38 | CPS Rate Schedule | | | | | | | |
| 39 | | | | | | | | |
| 40 | Customer Charge (months) | 138,187 | \$ 8.75 | \$ 1,209,136 | 24,077 | \$ 8.75 | \$ 210,674 | \$ 1,419,810 |
| 41 | | | | | | | | |
| 42 | Demand Charge (kW) | 3,394,135 | \$ - | \$ - | 19,144,825 | \$ - | \$ - | \$ - |
| 43 | | | | | | | | |
| 44 | | | | | | | | |
| 45 | Energy Charge (kWh) | | | | | | | |
| 46 | Energy Charge (First 1,600 kWh) | 544,974,711 | \$ 0.07190 | \$ 39,183,682 | 90,329,812 | \$ 0.07190 | \$ 6,494,713 | \$ 45,678,395 |
| 47 | Energy Charge (additional kWh) | 196,194,249 | \$ 0.03320 | 6,513,649 | 27,127,823 | \$ 0.03320 | 900,644 | 7,414,293 |
| 48 | Subtotal Energy Charges | | | \$ 45,697,331 | | | \$ 7,395,357 | \$ 53,092,688 |
| 49 | | | | | | | | |
| 50 | Peak Capacity Charge - June- Sept (kwh> 600) | 279,399,696 | \$ 0.01980 | \$ 5,532,114 | 41,833,412 | \$ 0.01980 | \$ 828,302 | \$ 6,360,416 |
| 51 | Peak Capacity Charge - Oct - May (kWh>600) | 380,244,702 | \$ 0.01000 | 3,802,447 | 61,388,971 | \$ 0.01000 | 613,890 | 4,416,337 |
| 52 | Subtotal Peak Capacity Charge | | \$ 0.01327 | \$ 9,334,561 | | \$ 0.01327 | \$ 1,442,191 | \$ 10,776,752 |
| 53 | | | | | | | | |
| 54 | | | | | | | | |
| 55 | Subtotal Energy Charges and Peak Capacity | | | \$ 55,031,892 | | | \$ 8,837,548 | \$ 63,869,440 |
| 56 | | | | | | | | |
| 57 | TOTAL Revenue | | | \$ 56,241,028 | | | \$ 9,048,222 | \$ 65,289,250 |
| 58 | | | | | | | | |
| 59 | Summary of Revenue | | | | | | | |
| 60 | Customer Charge | | | \$ 1,209,136 | | | \$ 210,674 | \$ 1,419,810 |
| 61 | Demand Charge | | | - | | | - | - |
| 62 | Energy Charge | | | 55,031,892 | | | 8,837,548 | 63,869,440 |
| 63 | Total Revenue | | | \$ 56,241,028 | | | \$ 9,048,222 | \$ 65,289,250 |
| 64 | Check | | | | | | | |
| 65 | | | | | | | | |

EXHIBIT 3

Rate Benchmarking Analysis - FCU

Austin Energy
Rate Benchmarking Analysis
Exhibit 3 - FCU

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) |
|----------|--|--|------------|---------------|--|------------|---------------|--|
| Line No. | Item | Proof of Revenue | | | | | | |
| | | Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Austin Energy Secondary Voltage ≥ 10 < 50 kW (OCL) | | | Total Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| | | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| | | | | | | | | |
| 1 | | | | | | | | |
| 2 | Austin Energy Rate Schedule | | | | | | | |
| 3 | | | | | | | | |
| 4 | Customer Charge (months) | 138,187 | \$ 25.00 | \$ 3,454,675 | 24,077 | \$ 25.00 | \$ 601,925 | \$ 4,056,600 |
| 5 | | | | | | | | |
| 6 | Demand Charges | | | | | | | |
| 7 | Winter (\$/kW-billed) | 1,877,111 | \$ 5.15 | 9,667,124 | 339,867 | \$ 5.12 | 1,740,119 | 11,407,243 |
| 8 | Summer (\$/kW-billed) | 1,012,365 | \$ 6.15 | 6,226,042 | 164,792 | \$ 6.11 | 1,006,881 | 7,232,923 |
| 9 | Subtotal Demand Charges | | \$ 5.48 | \$ 15,893,166 | | \$ 5.45 | \$ 2,747,000 | \$ 18,640,166 |
| 10 | | | | | | | | |
| 11 | Electric Delivery (\$/kW-billed) | 2,889,476 | \$ 4.00 | 11,557,904 | 504,659 | \$ 3.98 | 2,008,544 | 13,566,448 |
| 12 | Regulatory Charge (\$/kW) | 2,889,476 | \$ 2.56 | 7,397,059 | 504,659 | \$ 2.56 | 1,291,928 | 8,688,986 |
| 13 | Temporary Supplemental Charge (OCL) | 2,889,476 | \$ - | - | 504,659 | \$ 0.13 | 65,606 | 65,606 |
| 14 | Subtotal Demand Charges and Adjustment Charges | | \$ 6.56 | \$ 34,848,129 | | \$ 12.12 | \$ 6,113,077 | \$ 40,961,206 |
| 15 | | | | | | | | |
| 16 | Energy Charge (kWh) | | | | | | | |
| 17 | Winter Energy (kWh) | 433,209,672 | \$ 0.02414 | 10,457,681 | 70,674,283 | \$ 0.02399 | 1,695,476 | 12,153,158 |
| 18 | Summer Energy (kWh) | 307,959,288 | \$ 0.02914 | 8,973,934 | 46,783,352 | \$ 0.02896 | 1,354,846 | 10,328,780 |
| 19 | Subtotal Energy Charge | | \$ 0.02581 | \$ 19,431,615 | | \$ 0.02565 | \$ 3,050,322 | \$ 22,481,937 |
| 20 | | | | | | | | |
| 21 | FAC or PSA (kWh) | 741,168,960 | \$ 0.03709 | 27,489,957 | 117,457,635 | \$ 0.03709 | 4,356,504 | 31,846,460 |
| 22 | Customer Assistance Program (\$/kWh) | 741,168,960 | \$ 0.00065 | 481,760 | 117,457,635 | \$ 0.00065 | 76,347 | 558,107 |
| 23 | Service Area Street Lighting (\$/kWh) | 741,168,960 | \$ 0.00076 | 563,288 | 117,457,635 | \$ - | - | 563,288 |
| 24 | Energy Efficiency Services (\$/kWh) | 741,168,960 | \$ 0.00522 | 3,868,902 | 117,457,635 | \$ 0.00522 | 613,129 | 4,482,031 |
| 25 | Transmission Service Adjustment | 741,168,960 | \$ - | - | 117,457,635 | \$ - | - | - |
| 26 | Subtotal Energy Charge and Adjustment Charges | | \$ 0.06953 | \$ 51,835,522 | | \$ 0.06861 | \$ 8,096,302 | \$ 59,931,824 |
| 27 | | | | | | | | |
| 28 | TOTAL Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 29 | Check | | | | | | | |
| 30 | Summary of Revenue | | | | | | | |
| 31 | Customer Charge | | | \$ 3,454,675 | | | \$ 601,925 | \$ 4,056,600 |
| 32 | Demand Charge | | | 34,848,129 | | | 6,113,077 | 40,961,206 |
| 33 | Energy Charge | | | 51,835,522 | | | 8,096,302 | 59,931,824 |
| 34 | Total Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 35 | Check | | | | | | | |
| 36 | | | | | | | | |
| 37 | | | | | | | | |

Austin Energy
Rate Benchmarking Analysis
Exhibit 3 - FCU

| (A) | (B) | (J) | (K) | (L) | (M) | (N) | (O) | (P) |
|----------|--|--|------------------|----------------------|--|------------------|----------------------|---|
| Line No. | Item | FCU w AE Revenue Requirement | | | | | | |
| | | Commecial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Commecial Secondary Voltage ≥ 10 < 50 kW (OCL) | | | Total Fort Collins Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| | | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 38 | FCU Rate Schedule | | | | | | | |
| 39 | General Service (<25kW) | | | | | | | |
| 40 | Customer Charge | | | | | | | |
| 41 | Fixed Charge - three phase above 200 amp | 97,763 | \$ 16.63 | \$ 1,625,469 | 17,198 | \$ 16.63 | \$ 285,945 | \$ 1,911,414 |
| 42 | Customer Charge | | \$ 16.63 | \$ 1,625,469 | | \$ 16.63 | \$ 285,945 | \$ 1,911,414 |
| 43 | | | | | | | | |
| 44 | Demand Charge (kWh) | | | | | | | |
| 45 | Summer (June, July, Aug) | 103,302,438 | \$ 0.03923 | \$ 4,052,532 | 17,310,188 | \$ 0.03923 | \$ 679,075 | \$ 4,731,606 |
| 46 | Non-Summer (Jan - May, Sept - Dec) | 240,187,668 | \$ 0.02110 | \$ 5,068,425 | 39,156,284 | \$ 0.02147 | \$ 840,497 | \$ 5,908,922 |
| 47 | Subtotal Demand Charges | 343,490,106 | \$ 0.0256 | \$ 9,120,957 | 56,466,472 | \$ 0.0259 | \$ 1,519,572 | \$ 10,640,528 |
| 48 | | | | | | | | |
| 49 | | | | | | | | |
| 50 | Energy Charge (kWh) | | | | | | | |
| 51 | Summer (June, July, Aug) | 103,302,438 | \$ 0.05892 | \$ 6,086,112 | 17,310,188 | \$ 0.05892 | \$ 1,019,838 | \$ 7,105,950 |
| 52 | Non-Summer (Jan - May, Sept - Dec) | 240,187,668 | \$ 0.05665 | \$ 13,606,510 | 39,156,284 | \$ 0.05665 | \$ 2,218,184 | \$ 15,824,694 |
| 53 | Subtotal Energy Charge | 343,490,106 | \$ 0.0572 | \$ 19,692,623 | 56,466,472 | \$ 0.0572 | \$ 3,238,022 | \$ 22,930,645 |
| 54 | | | | | | | | |
| 55 | Distribution Facilities Charge | 343,490,106 | \$ 0.03215 | \$ 11,042,722 | 56,466,472 | \$ 0.03215 | \$ 1,815,317 | \$ 12,858,040 |
| 56 | Subtotal Energy Charges and Adjustment Ch | | \$ 0.0894 | \$ 30,735,345 | | \$ 0.0894 | \$ 5,053,339 | \$ 35,788,684 |
| 57 | | | | | | | | |
| 58 | Taxes and Franchise | | 6.0% | \$ 2,488,906 | | 6.0% | \$ 411,531 | \$ 2,900,438 |
| 59 | | | | | | | | |
| 60 | Subtotal <25kW Customer Revenue | - | | \$ 43,970,677 | | | \$ 7,270,387 | \$ 51,241,064 |
| 61 | | | | | | | | |
| 62 | General Services GS25 (>25kW <50kW) | | | | | | | |
| 63 | Customer Charge | | | | | | | |
| 64 | Fixed Charge - three phase above 200 amp | 40,017 | \$ 16.63 | \$ 665,348 | 6,843 | \$ 16.63 | \$ 113,776 | \$ 779,124 |
| 65 | Customer Charge | | \$ 16.63 | \$ 665,348 | | \$ 16.63 | \$ 113,776 | \$ 779,124 |
| 66 | | | | | | | | |
| 67 | Demand Charge (kW) | | | | | | | |
| 68 | Summer (June, July, Aug) | 372,888 | \$ 10.65 | \$ 3,971,301 | 54,811 | \$ 10.65 | \$ 583,745 | \$ 4,555,046 |
| 69 | Non-Summer (Jan - May, Sept - Dec) | 1,043,283 | \$ 6.19 | \$ 6,456,833 | 191,927 | \$ 6.19 | \$ 1,187,828 | \$ 7,644,661 |
| 70 | Subtotal Demand Charges | 1,416,171 | \$ 7.3042 | \$ 10,428,134 | 246,738 | \$ 7.3042 | \$ 1,771,572 | \$ 12,199,707 |
| 71 | | | | | | | | |
| 72 | | | | | | | | |
| 73 | Energy Charge (kWh) | | | | | | | |
| 74 | Summer (June, July, Aug) | 124,334,915 | \$ 0.05892 | \$ 7,325,251 | 17,144,952 | \$ 0.05892 | \$ 1,010,103 | \$ 8,335,354 |
| 75 | Non-Summer (Jan - May, Sept - Dec) | 272,861,401 | \$ 0.05665 | \$ 15,457,461 | 43,751,423 | \$ 0.05665 | \$ 2,478,496 | \$ 17,935,957 |
| 76 | Subtotal Energy Charges | 397,196,316 | \$ 0.0572 | \$ 22,782,712 | 60,896,375 | \$ 0.0572 | \$ 3,488,599 | \$ 26,271,311 |
| 77 | | | | | | | | |
| 78 | Distribution Facilities Charge | 397,196,316 | \$ 0.02493 | \$ 9,900,427 | 60,896,375 | \$ 0.02493 | \$ 1,517,890 | \$ 11,418,317 |
| 79 | Subtotal Energy Charges and Adjustment Ch | | \$ 0.0821 | \$ 32,683,139 | | \$ 0.0821 | \$ 5,006,489 | \$ 37,689,628 |
| 80 | | | | | | | | |
| 81 | Taxes and Franchise | | 6.0% | \$ 2,626,597 | | 6.0% | \$ 413,510 | \$ 3,040,108 |
| 82 | | | | | | | | |
| 83 | Subtotal 25kW<50kW Customer Revenue | | | \$ 46,403,219 | | | \$ 7,305,347 | \$ 53,708,566 |
| 84 | | | | | | | | |
| 85 | | | | | | | | |
| 86 | TOTAL Revenue | | | \$ 90,373,896 | | | \$ 14,575,734 | \$ 104,949,630 |
| 87 | | | | | | | | |
| 88 | Summary of Revenue | | | | | | | |
| 89 | Customer Charge | | | \$ 2,290,817 | | | \$ 399,721 | \$ 2,690,537 |
| 90 | Demand Charge | | | 19,549,091 | | | 3,291,144 | 22,840,235 |
| 91 | Energy Charge | | | 63,418,484 | | | 10,059,828 | 73,478,312 |
| 92 | Taxes and Franchise | | | 5,115,504 | | | 825,042 | 5,940,545 |
| 93 | Total Revenue | | | \$ 90,373,896 | | | \$ 14,575,734 | \$ 104,949,630 |
| 94 | <i>Check</i> | | | | | | | |

Austin Energy
Rate Benchmarking Analysis
Exhibit 3 - FCU

| (A) | (B) | (Q) | (R) | (S) | (T) | (U) | (V) | (W) |
|----------|--|--|------------------|----------------------|--|------------------|----------------------|---|
| Line No. | Item | FCU w FCU Revenue Requirement | | | | | | |
| | | Commecial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Commecial Secondary Voltage ≥ 10 < 50 kW (OCL) | | | Total Fort Collins Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| | | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| | | | | | | | | |
| 38 | FCU Rate Schedule | | | | | | | |
| 39 | General Service (<25kW) | | | | | | | |
| 40 | Customer Charge | | | | | | | |
| 41 | Fixed Charge - three phase above 200 amp | 97,763 | \$ 11.74 | \$ 1,147,738 | 17,198 | \$ 11.74 | \$ 201,905 | \$ 1,349,642 |
| 42 | Customer Charge | \$ | 11.74 | \$ 1,147,738 | \$ | 11.74 | \$ 201,905 | \$ 1,349,642 |
| 43 | | | | | | | | |
| 44 | Demand Charge (kWh) | | | | | | | |
| 45 | Summer (June, July, Aug) | 103,302,438 | \$ 0.02770 | \$ 2,861,478 | 17,310,188 | \$ 0.02770 | \$ 479,492 | \$ 3,340,970 |
| 46 | Non-Summer (Jan - May, Sept - Dec) | 240,187,668 | \$ 0.01490 | \$ 3,578,796 | 39,156,284 | \$ 0.01490 | \$ 583,429 | \$ 4,162,225 |
| 47 | Subtotal Demand Charges | 343,490,106 | \$ 0.0181 | \$ 6,440,274 | 56,466,472 | \$ 0.0181 | \$ 1,062,921 | \$ 7,503,195 |
| 48 | | | | | | | | |
| 49 | | | | | | | | |
| 50 | Energy Charge (kWh) | | | | | | | |
| 51 | Summer (June, July, Aug) | 103,302,438 | \$ 0.04160 | \$ 4,297,381 | 17,310,188 | \$ 0.04160 | \$ 720,104 | \$ 5,017,485 |
| 52 | Non-Summer (Jan - May, Sept - Dec) | 240,187,668 | \$ 0.04000 | \$ 9,607,507 | 39,156,284 | \$ 0.04000 | \$ 1,566,251 | \$ 11,173,758 |
| 53 | Subtotal Energy Charge | 343,490,106 | \$ 0.0404 | \$ 13,904,888 | 56,466,472 | \$ 0.0404 | \$ 2,286,355 | \$ 16,191,243 |
| 54 | | | | | | | | |
| 55 | Distribution Facilities Charge | 343,490,106 | \$ 0.02270 | \$ 7,797,225 | 56,466,472 | \$ 0.02270 | \$ 1,281,789 | \$ 9,079,014 |
| 56 | Subtotal Energy Charges and Adjustment Ch | \$ | 0.0631 | \$ 21,702,114 | \$ | 0.0631 | \$ 3,568,144 | \$ 25,270,258 |
| 57 | | | | | | | | |
| 58 | Taxes and Franchise | | 6.0% | \$ 1,757,407 | | 6.0% | \$ 289,978 | \$ 2,047,386 |
| 59 | | | | | | | | |
| 60 | Subtotal <25kW Customer Revenue | - | | \$ 31,047,532 | | | \$ 5,122,948 | \$ 36,170,480 |
| 61 | | | | | | | | |
| 62 | General Services GS25 (>25kW <50kW) | | | | | | | |
| 63 | Customer Charge | | | | | | | |
| 64 | Fixed Charge - three phase above 200 amp | 40,017 | \$ 11.74 | \$ 469,800 | 6,843 | \$ 11.74 | \$ 80,337 | \$ 550,136 |
| 65 | Customer Charge | \$ | 11.74 | \$ 469,800 | \$ | 11.74 | \$ 80,337 | \$ 550,136 |
| 66 | | | | | | | | |
| 67 | Demand Charge (kW) | | | | | | | |
| 68 | Summer (June, July, Aug) | 372,888 | \$ 7.52 | \$ 2,804,121 | 54,811 | \$ 7.52 | \$ 412,180 | \$ 3,216,301 |
| 69 | Non-Summer (Jan - May, Sept - Dec) | 1,043,283 | \$ 4.37 | \$ 4,559,146 | 191,927 | \$ 4.37 | \$ 838,721 | \$ 5,397,867 |
| 70 | Subtotal Demand Charges | 1,416,171 | \$ 5.16 | \$ 7,363,267 | 246,738 | \$ 5.16 | \$ 1,250,901 | \$ 8,614,168 |
| 71 | | | | | | | | |
| 72 | | | | | | | | |
| 73 | Energy Charge (kWh) | | | | | | | |
| 74 | Summer (June, July, Aug) | 124,334,915 | \$ 0.0416 | \$ 5,172,332 | 17,144,952 | \$ 0.0416 | \$ 713,230 | \$ 5,885,562 |
| 75 | Non-Summer (Jan - May, Sept - Dec) | 272,861,401 | \$ 0.0400 | \$ 10,914,456 | 43,751,423 | \$ 0.0400 | \$ 1,750,057 | \$ 12,664,513 |
| 76 | Subtotal Energy Charges | 397,196,316 | \$ 0.0404 | \$ 16,086,788 | 60,896,375 | \$ 0.0404 | \$ 2,463,287 | \$ 18,550,075 |
| 77 | | | | | | | | |
| 78 | Distribution Facilities Charge | 397,196,316 | \$ 0.0176 | \$ 6,990,655 | 60,896,375 | \$ 0.0176 | \$ 1,071,776 | \$ 8,062,431 |
| 79 | Subtotal Energy Charges and Adjustment Ch | \$ | 0.0580 | \$ 23,077,444 | \$ | 0.0580 | \$ 3,535,063 | \$ 26,612,507 |
| 80 | | | | | | | | |
| 81 | Taxes and Franchise | | 6.0% | \$ 1,854,631 | | 6.0% | \$ 291,978 | \$ 2,146,609 |
| 82 | | | | | | | | |
| 83 | Subtotal 25kW<50kW Customer Revenue | | | \$ 32,765,141 | | | \$ 5,158,279 | \$ 37,923,420 |
| 84 | | | | | | | | |
| 85 | | | | | | | | |
| 86 | TOTAL Revenue | | | \$ 63,812,673 | | | \$ 10,281,226 | \$ 74,093,900 |
| 87 | | | | | | | | |
| 88 | Summary of Revenue | | | | | | | |
| 89 | Customer Charge | | | \$ 1,617,537 | | | \$ 282,241 | \$ 1,899,779 |
| 90 | Demand Charge | | | 13,803,541 | | | 2,313,822 | 16,117,362 |
| 91 | Energy Charge | | | 44,779,557 | | | 7,103,207 | 51,882,764 |
| 92 | Taxes and Franchise | | | 3,612,038 | | | 581,956 | 4,193,994 |
| 93 | Total Revenue | | | \$ 63,812,673 | | | \$ 10,281,226 | \$ 74,093,900 |
| 94 | <i>Check</i> | | | | | | | |

EXHIBIT 4

Rate Benchmarking Analysis - LADWP

Austin Energy
Rate Benchmarking Analysis
Exhibit 4 - LADWP

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) |
|----------|--|--|------------|---------------|--|------------|---------------|--|
| Line No. | Item | Proof of Revenue | | | | | | |
| | | Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Austin Energy Secondary Voltage ≥ 10 < 50 kW (OCL) | | | Total Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| | | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| | | | | | | | | |
| 1 | | | | | | | | |
| 2 | Austin Energy Rate Schedule | | | | | | | |
| 3 | | | | | | | | |
| 4 | Customer Charge (months) | 138,187 | \$ 25.00 | \$ 3,454,675 | 24,077 | \$ 25.00 | \$ 601,925 | \$ 4,056,600 |
| 5 | | | | | | | | |
| 6 | Demand Charges | | | | | | | |
| 7 | Winter (\$/kW-billed) | 1,877,111 | \$ 5.15 | 9,667,124 | 339,867 | \$ 5.12 | 1,740,119 | 11,407,243 |
| 8 | Summer (\$/kW-billed) | 1,012,365 | \$ 6.15 | 6,226,042 | 164,792 | \$ 6.11 | 1,006,881 | 7,232,923 |
| 9 | Subtotal Demand Charges | | \$ 5.48 | \$ 15,893,166 | | \$ 5.45 | \$ 2,747,000 | \$ 18,640,166 |
| 10 | | | | | | | | |
| 11 | Electric Delivery (\$/kW-billed) | 2,889,476 | \$ 4.00 | 11,557,904 | 504,659 | \$ 3.98 | 2,008,544 | 13,566,448 |
| 12 | Regulatory Charge (\$/kW) | 2,889,476 | \$ 2.56 | 7,397,059 | 504,659 | \$ 2.56 | 1,291,928 | 8,688,986 |
| 13 | Temporary Supplemental Charge (OCL) | 2,889,476 | \$ - | - | 504,659 | \$ 0.13 | 65,606 | 65,606 |
| 14 | Subtotal Demand Charges and Adjustment Charges | | \$ 6.56 | \$ 34,848,129 | | \$ 12.12 | \$ 6,113,077 | \$ 40,961,206 |
| 15 | | | | | | | | |
| 16 | Energy Charge (kWh) | | | | | | | |
| 17 | Winter Energy (kWh) | 433,209,672 | \$ 0.02414 | 10,457,681 | 70,674,283 | \$ 0.02399 | 1,695,476 | 12,153,158 |
| 18 | Summer Energy (kWh) | 307,959,288 | \$ 0.02914 | 8,973,934 | 46,783,352 | \$ 0.02896 | 1,354,846 | 10,328,780 |
| 19 | Subtotal Energy Charge | | \$ 0.02581 | \$ 19,431,615 | | \$ 0.02565 | \$ 3,050,322 | \$ 22,481,937 |
| 20 | | | | | | | | |
| 21 | FAC or PSA (kWh) | 741,168,960 | \$ 0.03709 | 27,489,957 | 117,457,635 | \$ 0.03709 | 4,356,504 | 31,846,460 |
| 22 | Customer Assistance Program (\$/kWh) | 741,168,960 | \$ 0.00065 | 481,760 | 117,457,635 | \$ 0.00065 | 76,347 | 558,107 |
| 23 | Service Area Street Lighting (\$/kWh) | 741,168,960 | \$ 0.00076 | 563,288 | 117,457,635 | \$ - | - | 563,288 |
| 24 | Energy Efficiency Services (\$/kWh) | 741,168,960 | \$ 0.00522 | 3,868,902 | 117,457,635 | \$ 0.00522 | 613,129 | 4,482,031 |
| 25 | Transmission Service Adjustment | 741,168,960 | \$ - | - | 117,457,635 | \$ - | - | - |
| 26 | Subtotal Energy Charge and Adjustment Charges | | \$ 0.06953 | \$ 51,835,522 | | \$ 0.06861 | \$ 8,096,302 | \$ 59,931,824 |
| 27 | | | | | | | | |
| 28 | TOTAL Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 29 | Check | | | | | | | |
| 30 | Summary of Revenue | | | | | | | |
| 31 | Customer Charge | | | \$ 3,454,675 | | | \$ 601,925 | \$ 4,056,600 |
| 32 | Demand Charge | | | 34,848,129 | | | 6,113,077 | 40,961,206 |
| 33 | Energy Charge | | | 51,835,522 | | | 8,096,302 | 59,931,824 |
| 34 | Total Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 35 | Check | | | | | | | |
| 36 | | | | | | | | |
| 37 | | | | | | | | |

Austin Energy
Rate Benchmarking Analysis
Exhibit 4 - LADWP

| (A) | (B) | (J) | (K) | (L) | (M) | (N) | (O) | (P) |
|----------|--|--|------------|---------------|--|------------|---------------|--|
| Line No. | Item | LADWP Structure w AE Revenue Requirement | | | | | | |
| | | Commecial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Commecial Secondary Voltage ≥ 10 < 50 kW (OCL) | | | Total Los Angeles Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| | | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| | | | | | | | | |
| 38 | LADWP Rate Schedule | | | | | | | |
| 39 | <i>Small General Service (<30kW)</i> | | | | | | | |
| 40 | Customer Charge (months) | | | | | | | |
| 41 | Service Charge | 111,757 | \$ 5.91 | \$ 660,861 | 19,484 | \$ 5.91 | \$ 115,216 | \$ 776,078 |
| 42 | Customer Charge | | \$ 5.91 | \$ 660,861 | | \$ 5.91 | \$ 115,216 | \$ 776,078 |
| 43 | | | | | | | | |
| 44 | Demand Charge (kW) | | | | | | | |
| 45 | Facilities Charge | 1,851,685 | \$ 4.55 | \$ 8,422,856 | 320,072 | \$ 4.55 | \$ 1,455,929 | \$ 9,878,785 |
| 46 | Demand Charges | 1,851,685 | \$ 4.55 | \$ 8,422,856 | 320,072 | \$ 4.55 | \$ 1,455,929 | \$ 9,878,785 |
| 47 | | | | | | | | |
| 48 | Electric Subsidy Adjustment (ESA) | 1,851,685 | \$ 0.42 | \$ 774,903 | 320,072 | \$ 0.42 | \$ 133,945 | \$ 908,848 |
| 49 | Reliability Cost Adjustment (RCA) | 1,851,685 | \$ 0.87 | \$ 1,617,188 | 320,072 | \$ 0.87 | \$ 279,538 | \$ 1,896,727 |
| 50 | Subtotal Demand Charges and Adjustment C | | \$ 5.84 | \$ 10,814,948 | | \$ 5.84 | \$ 1,869,413 | \$ 12,684,360 |
| 51 | | | | | | | | |
| 52 | Energy Charge (kWh) | | | | | | | |
| 53 | High Season (June - Sept) | 134,563,188 | \$ 0.05966 | \$ 8,028,234 | 21,668,700 | \$ 0.05966 | \$ 1,292,786 | \$ 9,321,019 |
| 54 | Low Season (Oct - May) | 311,525,749 | \$ 0.03883 | \$ 12,095,969 | 49,912,000 | \$ 0.03883 | \$ 1,937,991 | \$ 14,033,960 |
| 55 | Subtotal Energy Charges | 446,088,938 | \$ 0.0440 | \$ 20,124,203 | 71,580,701 | \$ 0.0440 | \$ 3,230,777 | \$ 23,354,979 |
| 56 | | | | | | | | |
| 57 | Energy Cost Adjustment (ECA) | 446,088,938 | \$ 0.05176 | \$ 23,091,707 | 71,580,701 | \$ 0.05176 | \$ 3,705,361 | \$ 26,797,068 |
| 58 | Subtotal Energy Charges and Adjustment Ch | | \$ 0.0958 | \$ 43,215,910 | | \$ 0.0958 | \$ 6,936,138 | \$ 50,152,047 |
| 59 | | | | | | | | |
| 60 | Subtotal <30kW Customer Revenue | | | \$ 54,691,719 | | | \$ 8,920,766 | \$ 63,612,485 |
| 61 | | | | | | | | |
| 62 | <i>Primary Service (>30kW)</i> | | | | | | | |
| 63 | Customer Charge (months) | | | | | | | |
| 64 | Service Charge | 26,228 | \$ 5.91 | \$ 155,096 | 4,579 | \$ 5.91 | \$ 27,077 | \$ 182,173 |
| 65 | Customer Charge | | | | | | | |
| 66 | | | | | | | | |
| 67 | Demand Charge (kW) | | | | | | | |
| 68 | High Season (June - Sept) | 276,860 | \$ 8.19 | \$ 2,266,859 | 40,377 | \$ 8.19 | \$ 330,595 | \$ 2,597,453 |
| 69 | Low Season (Oct - May) | 760,932 | \$ 5.00 | \$ 3,807,418 | 144,210 | \$ 5.00 | \$ 721,575 | \$ 4,528,994 |
| 70 | Subtotal Demand Charges | | \$ 6.07 | \$ 6,074,277 | | \$ 6.07 | \$ 1,052,170 | \$ 7,126,447 |
| 71 | | | | | | | | |
| 72 | Facilities Charge | 1,037,791 | \$ 4.55 | \$ 4,720,655 | 184,587 | \$ 4.55 | \$ 839,641 | \$ 5,560,297 |
| 73 | Electric Subsidy Adjustment (ESA) | 1,037,791 | \$ 0.41849 | \$ 434,300 | 184,587 | \$ 0.41849 | \$ 77,247 | \$ 511,547 |
| 74 | Reliability Cost Adjustment (RCA) | 1,037,791 | \$ 0.87336 | \$ 906,366 | 184,587 | \$ 0.87336 | \$ 161,211 | \$ 1,067,577 |
| 75 | Subtotal Demand Charges and Adjustment C | | \$ 11.9056 | \$ 12,135,598 | | \$ 11.9056 | \$ 2,130,270 | \$ 14,265,868 |
| 76 | | | | | | | | |
| 77 | Energy Charge (kWh) | | | | | | | |
| 78 | High Season (June - Sept) | 93,261,546 | \$ 0.03316 | \$ 3,092,591 | 12,825,386 | \$ 0.03316 | \$ 425,295 | \$ 3,517,886 |
| 79 | Low Season (Oct - May) | 194,188,360 | \$ 0.02725 | \$ 5,291,056 | 32,102,403 | \$ 0.02725 | \$ 874,695 | \$ 6,165,751 |
| 80 | Subtotal Energy Charges | | \$ 0.0292 | \$ 8,383,647 | | \$ 0.0292 | \$ 1,299,990 | \$ 9,683,637 |
| 81 | | | | | | | | |
| 82 | Energy Cost Adjustment (ECA) | 287,449,905 | \$ 0.05176 | \$ 14,879,788 | 44,927,788 | \$ 0.05176 | \$ 2,325,678 | \$ 17,205,467 |
| 83 | Subtotal Energy Charges and Adjustment Ch | | \$ 0.0810 | \$ 23,263,435 | | \$ 0.0810 | \$ 3,625,668 | \$ 26,889,103 |
| 84 | | | | | | | | |
| 85 | Subtotal >30kW Customer Revenue | | | \$ 35,554,129 | | | \$ 5,783,016 | \$ 41,337,145 |
| 86 | | | | | | | | |
| 87 | TOTAL Revenue | | | \$ 90,245,848 | | | \$ 14,703,782 | \$ 104,949,630 |
| 88 | | | | | | | | |
| 89 | Summary of Revenue | | | | | | | |
| 90 | Customer Charge | | | \$ 815,958 | | | \$ 142,294 | \$ 958,251 |
| 91 | Demand Charge | | | 22,950,546 | | | 3,999,683 | 26,950,228 |
| 92 | Energy Charge | | | 66,479,345 | | | 10,561,806 | 77,041,150 |
| 93 | Total Revenue | | | \$ 90,245,848 | | | \$ 14,703,782 | \$ 104,949,630 |
| 94 | <i>Check</i> | | | | | | | |

Austin Energy
Rate Benchmarking Analysis
Exhibit 4 - LADWP

| (A) | (B) | (Q) | (R) | (S) | (T) | (U) | (V) | (W) |
|----------|---|--|------------|---------------|--|------------|---------------|--|
| Line No. | Item | LADWP Structure w LADWP Revenue Requirement | | | | | | |
| | | Commecial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Commecial Secondary Voltage ≥ 10 < 50 kW OCL | | | Total Los Angeles Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| | | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| | | | | | | | | |
| 38 | LADWP Rate Schedule | | | | | | | |
| 39 | Small General Service (<30kW) | | | | | | | |
| 40 | Customer Charge (months) | | | | | | | |
| 41 | Service Charge | 111,757 | \$ 6.50 | \$ 726,421 | 19,484 | \$ 6.50 | \$ 126,646 | \$ 853,067 |
| 42 | Customer Charge | | \$ 6.50 | \$ 726,421 | | \$ 37.50 | \$ 126,646 | \$ 853,067 |
| 43 | | | | | | | | |
| 44 | Demand Charge (kW) | | | | | | | |
| 45 | Facilities Charge | 1,851,685 | \$ 5.00 | \$ 9,258,424 | 320,072 | \$ 5.00 | \$ 1,600,360 | \$ 10,858,785 |
| 46 | Demand Charges | 1,851,685 | \$ 5.00 | \$ 9,258,424 | 320,072 | \$ 5.00 | \$ 1,600,360 | \$ 10,858,785 |
| 47 | | | | | | | | |
| 48 | Electric Subsidy Adjustment (ESA) | 1,851,685 | \$ 0.46 | \$ 851,775 | 320,072 | \$ 0.46 | \$ 147,233 | \$ 999,008 |
| 49 | Reliability Cost Adjustment (RCA) | 1,851,685 | \$ 0.96 | \$ 1,777,617 | 320,072 | \$ 0.96 | \$ 307,269 | \$ 2,084,887 |
| 50 | Subtotal Demand Charges and Adjustment C | | | \$ 11,887,817 | | | \$ 2,054,863 | \$ 13,942,680 |
| 51 | | | | | | | | |
| 52 | Energy Charge (kWh) | | | | | | | |
| 53 | High Season (June - Sept) | 134,563,188 | \$ 0.06558 | \$ 8,824,654 | 21,668,700 | \$ 0.06558 | \$ 1,421,033 | \$ 10,245,687 |
| 54 | Low Season (Oct - May) | 311,525,749 | \$ 0.04268 | \$ 13,295,919 | 49,912,000 | \$ 0.04268 | \$ 2,130,244 | \$ 15,426,163 |
| 55 | Subtotal Energy Charges | 446,088,938 | \$ 0.0484 | \$ 22,120,573 | 71,580,701 | \$ 0.0484 | \$ 3,551,278 | \$ 25,671,850 |
| 56 | | | | | | | | |
| 57 | Energy Cost Adjustment (ECA) | 446,088,938 | \$ 0.05690 | \$ 25,382,461 | 71,580,701 | \$ 0.05690 | \$ 4,072,942 | \$ 29,455,402 |
| 58 | Subtotal Energy Charges and Adjustment Ch | | \$ 0.1053 | \$ 47,503,033 | | \$ 0.1053 | \$ 7,624,219 | \$ 55,127,253 |
| 59 | | | | | | | | |
| 60 | Subtotal <30kW Customer Revenue | | | \$ 60,117,271 | | | \$ 9,805,728 | \$ 69,922,999 |
| 61 | | | | | | | | |
| 62 | Primary Service (>30kW) | | | | | | | |
| 63 | Customer Charge (months) | | | | | | | |
| 64 | Service Charge | 26,228 | \$ 6.50 | \$ 170,482 | 4,579 | \$ 6.50 | \$ 29,764 | \$ 200,246 |
| 65 | Customer Charge | | | | | | | |
| 66 | | | | | | | | |
| 67 | Demand Charge (kW) | | | | | | | |
| 68 | High Season (June - Sept) | 276,860 | \$ 9.00 | \$ 2,491,737 | 40,377 | \$ 9.00 | \$ 363,391 | \$ 2,855,127 |
| 69 | Low Season (Oct - May) | 760,932 | \$ 5.50 | \$ 4,185,124 | 144,210 | \$ 5.50 | \$ 793,157 | \$ 4,978,281 |
| 70 | Subtotal Demand Charges | | \$ 6.67 | \$ 6,676,860 | | \$ 6.67 | \$ 1,156,548 | \$ 7,833,408 |
| 71 | | | | | | | | |
| 72 | Facilities Charge | 1,037,791 | \$ 5.00 | \$ 5,188,956 | 184,587 | \$ 5.00 | \$ 922,936 | \$ 6,111,892 |
| 73 | Electric Subsidy Adjustment (ESA) | 1,037,791 | \$ 0.46000 | \$ 477,384 | 184,587 | \$ 0.46000 | \$ 84,910 | \$ 562,294 |
| 74 | Reliability Cost Adjustment (RCA) | 1,037,791 | \$ 0.96000 | \$ 996,280 | 184,587 | \$ 0.96000 | \$ 177,204 | \$ 1,173,483 |
| 75 | Subtotal Demand Charges and Adjustment C | | \$ 13.0867 | \$ 13,339,479 | | \$ 13.0867 | \$ 2,341,598 | \$ 15,681,077 |
| 76 | | | | | | | | |
| 77 | Energy Charge (kWh) | | | | | | | |
| 78 | High Season (June - Sept) | 93,261,546 | \$ 0.03645 | \$ 3,399,383 | 12,825,386 | \$ 0.03645 | \$ 467,485 | \$ 3,866,869 |
| 79 | Low Season (Oct - May) | 194,188,360 | \$ 0.02995 | \$ 5,815,941 | 32,102,403 | \$ 0.02995 | \$ 961,467 | \$ 6,777,408 |
| 80 | Subtotal Energy Charges | | \$ 0.0321 | \$ 9,215,325 | | \$ 0.0321 | \$ 1,428,952 | \$ 10,644,277 |
| 81 | | | | | | | | |
| 82 | Energy Cost Adjustment (ECA) | 287,449,905 | \$ 0.05690 | \$ 16,355,900 | 44,927,788 | \$ 0.05690 | \$ 2,556,391 | \$ 18,912,291 |
| 83 | Subtotal Energy Charges and Adjustment Ch | | \$ 0.0890 | \$ 25,571,224 | | \$ 0.0890 | \$ 3,985,343 | \$ 29,556,568 |
| 84 | | | | | | | | |
| 85 | Subtotal >30kW Customer Revenue | | | \$ 39,081,186 | | | \$ 6,356,705 | \$ 45,437,891 |
| 86 | | | | | | | | |
| 87 | TOTAL Revenue | | | \$ 99,198,456 | | | \$ 16,162,433 | \$ 115,360,889 |
| 88 | | | | | | | | |
| 89 | Summary of Revenue | | | | | | | |
| 90 | Customer Charge | | | \$ 896,903 | | | \$ 156,410 | \$ 1,053,312 |
| 91 | Demand Charge | | | 25,227,296 | | | 4,396,461 | 29,623,757 |
| 92 | Energy Charge | | | 73,074,258 | | | 11,609,563 | 84,683,821 |
| 93 | Total Revenue | | | \$ 99,198,456 | | | \$ 16,162,433 | \$ 115,360,889 |
| 94 | Check | | | | | | | |

EXHIBIT 5

Rate Benchmarking Analysis - PEC

Austin Energy
Rate Benchmarking Analysis
Exhibit 5 - PEC

PEC

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) |
|--|---|----------------|-------------------|--|---------------|-------------------|----------------------|--|
| Proof of Revenue | | | | | | | | |
| Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL) | | | | Austin Energy Secondary Voltage ≥ 10 < 50 kW (OCL) | | | | Total Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| Line No. | Item | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 1 | | | | | | | | |
| 2 | Austin Energy Rate Schedule | | | | | | | |
| 3 | | | | | | | | |
| 4 | Customer Charge (months) | 138,187 | \$ 25.00 | \$ 3,454,675 | 24,077 | \$ 25.00 | \$ 601,925 | \$ 4,056,600 |
| 5 | | | | | | | | |
| 6 | Demand Charges | | | | | | | |
| 7 | Winter (\$/kW-billed) | 1,877,111 | \$ 5.15 | 9,667,124 | 339,867 | \$ 5.12 | 1,740,119 | 11,407,243 |
| 8 | Summer (\$/kW-billed) | 1,012,365 | \$ 6.15 | 6,226,042 | 164,792 | \$ 6.11 | 1,006,881 | 7,232,923 |
| 9 | Subtotal Demand Charges | | \$ 5.48 | \$ 15,893,166 | | \$ 5.45 | \$ 2,747,000 | \$ 18,640,166 |
| 10 | | | | | | | | |
| 11 | Electric Delivery (\$/kW-billed) | 2,889,476 | \$ 4.00 | 11,557,904 | 504,659 | \$ 3.98 | 2,008,544 | 13,566,448 |
| 12 | Regulatory Charge (\$/kW) | 2,889,476 | \$ 2.56 | 7,397,059 | 504,659 | \$ 2.56 | 1,291,928 | 8,688,986 |
| 13 | Temporary Supplemental Charge (OCL) | 2,889,476 | \$ - | - | 504,659 | \$ 0.13 | 65,606 | 65,606 |
| 14 | Subtotal Demand Charges and Adjustment Charges | | \$ 6.56 | \$ 34,848,129 | | \$ 12.12 | \$ 6,113,077 | \$ 40,961,206 |
| 15 | | | | | | | | |
| 16 | Energy Charge (kWh) | | | | | | | |
| 17 | Winter Energy (kWh) | 433,209,672 | \$ 0.02414 | 10,457,681 | 70,674,283 | \$ 0.02399 | 1,695,476 | 12,153,158 |
| 18 | Summer Energy (kWh) | 307,959,288 | \$ 0.02914 | 8,973,934 | 46,783,352 | \$ 0.02896 | 1,354,846 | 10,328,780 |
| 19 | Subtotal Energy Charge | | \$ 0.02581 | \$ 19,431,615 | | \$ 0.02565 | \$ 3,050,322 | \$ 22,481,937 |
| 20 | | | | | | | | |
| 21 | FAC or PSA (kWh) | 741,168,960 | \$ 0.03709 | 27,489,957 | 117,457,635 | \$ 0.03709 | 4,356,504 | 31,846,460 |
| 22 | Customer Assistance Program (\$/kWh) | 741,168,960 | \$ 0.00065 | 481,760 | 117,457,635 | \$ 0.00065 | 76,347 | 558,107 |
| 23 | Service Area Street Lighting (\$/kWh) | 741,168,960 | \$ 0.00076 | 563,288 | 117,457,635 | \$ - | - | 563,288 |
| 24 | Energy Efficiency Services (\$/kWh) | 741,168,960 | \$ 0.00522 | 3,868,902 | 117,457,635 | \$ 0.00522 | 613,129 | 4,482,031 |
| 25 | Transmission Service Adjustment | 741,168,960 | \$ - | - | 117,457,635 | \$ - | - | - |
| 26 | Subtotal Energy Charges and Adjustment Charges | | \$ 0.06953 | \$ 51,835,522 | | \$ 0.06861 | \$ 8,096,302 | \$ 59,931,824 |
| 27 | | | | | | | | |
| 28 | TOTAL Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 29 | <i>Check</i> | | | | | | | |
| 30 | Summary of Revenue | | | | | | | |
| 31 | Customer Charge | | \$ | 3,454,675 | | \$ | 601,925 | \$ 4,056,600 |
| 32 | Demand Charge | | | 34,848,129 | | | 6,113,077 | 40,961,206 |
| 33 | Energy Charge | | | 51,835,522 | | | 8,096,302 | 59,931,824 |
| 34 | Total Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 35 | <i>Check</i> | | | | | | | |
| 36 | | | | | | | | |
| 37 | | | | | | | | |

Austin Energy
Rate Benchmarking Analysis
Exhibit 5 - PEC

PEC

| (A) | (B) | (J) | (K) | (L) | (M) | (N) | (O) | (P) |
|---|---|---------------|------------|---|---------------|------------|---------------|--|
| PEC Structure w AE Revenue Requirement | | | | | | | | |
| Commercial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | | Commercial Secondary Voltage ≥ 10 < 50 kW (OCL) | | | | Total Perdernales Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| Line No. | Item | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 38 | PEC Rate Schedule | | | | | | | |
| 39 | | | | | | | | |
| 40 | Customer Charge (month) | 138,187 | \$ 45.30 | \$ 6,260,286 | 24,077 | \$ 45.30 | \$ 1,090,760 | \$ 7,351,046 |
| 41 | | | | | | | | |
| 42 | Demand Charge (kW) | 2,889,476 | \$ - | \$ - | 504,659 | \$ - | \$ - | \$ - |
| 43 | | | | | | | | |
| 44 | | | | | | | | |
| 45 | Energy Charge (kWh) | | | | | | | |
| 46 | Energy Charge (kWh) | 741,168,960 | \$ 0.08708 | \$ 64,539,814 | 117,457,635 | \$ 0.08708 | \$ 10,228,024 | \$ 74,767,838 |
| 47 | Subtotal Energy Charge | | | \$ 64,539,814 | | | \$ 10,228,024 | \$ 74,767,838 |
| 48 | | | | | | | | |
| 49 | Power Cost Recovery Factor (PCRF) | 741,168,960 | \$ 0.00121 | \$ 895,391 | 117,457,635 | \$ 0.00121 | 141,898 | \$ 1,037,290 |
| 50 | Delivery Charge (kWh) | 741,168,960 | \$ 0.02538 | \$ 18,812,174 | 117,457,635 | \$ 0.02538 | 2,981,282 | \$ 21,793,456 |
| 51 | Subtotal Energy Charge and Adjustment Ch | | \$ 0.11367 | \$ 84,247,380 | | \$ 0.11367 | \$ 13,351,204 | \$ 97,598,584 |
| 52 | | | | | | | | |
| 53 | TOTAL Revenue | | | \$ 90,507,666 | | | \$ 14,441,964 | \$ 104,949,630 |
| 54 | | | | | | | | |
| 55 | Summary of Revenue | | | | | | | |
| 56 | Customer Charge | | | \$ 6,260,286 | | | \$ 1,090,760 | \$ 7,351,046 |
| 57 | Demand Charge | | | - | | | - | - |
| 58 | Energy Charge | | | 84,247,380 | | | 13,351,204 | 97,598,584 |
| 59 | Total Revenue | | | \$ 90,507,666 | | | \$ 14,441,964 | \$ 104,949,630 |
| 60 | <i>Check</i> | | | | | | | |

Austin Energy
Rate Benchmarking Analysis
Exhibit 5 - PEC

PEC

| (A) | (B) | (Q) | (R) | (S) | (T) | (U) | (V) | (W) |
|--|---|---------------|--|---------------|---------------|---|---------------|----------------|
| PEC Structure w PEC Revenue Requirement | | | | | | | | |
| Commecial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Commecial Secondary Voltage ≥ 10 < 50 kW (OCL) | | | Total Perdernaes Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) | | |
| Line No. | Item | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 38 | PEC Rate Schedule | | | | | | | |
| 39 | | | | | | | | |
| 40 | Customer Charge (month) | 138,187 | \$ 37.50 | \$ 5,182,013 | 24,077 | \$ 37.50 | \$ 902,888 | \$ 6,084,900 |
| 41 | | | | | | | | |
| 42 | Demand Charge (kW) | 2,889,476 | \$ - | \$ - | 504,659 | \$ - | \$ - | \$ - |
| 43 | | | | | | | | |
| 44 | | | | | | | | |
| 45 | Energy Charge (kWh) | | | | | | | |
| 46 | Energy Charge (kWh) | 741,168,960 | \$ 0.07208 | \$ 53,423,459 | 117,457,635 | \$ 0.07208 | \$ 8,466,346 | \$ 61,889,805 |
| 47 | Subtotal Energy Charge | | | \$ 53,423,459 | | | \$ 8,466,346 | \$ 61,889,805 |
| 48 | | | | | | | | |
| 49 | Power Cost Recovery Factor (PCRF) | 741,168,960 | \$ 0.00100 | \$ 741,169 | 117,457,635 | \$ 0.00100 | \$ 117,458 | \$ 858,627 |
| 50 | Delivery Charge (kWh) | 741,168,960 | \$ 0.02101 | \$ 15,571,960 | 117,457,635 | \$ 0.02101 | \$ 2,467,785 | \$ 18,039,745 |
| 51 | Subtotal Energy Charge and Adjustment Ch | | \$ 0.09409 | \$ 69,736,587 | | \$ 0.09 | \$ 11,051,589 | \$ 80,788,176 |
| 52 | | | | | | | | |
| 53 | TOTAL Revenue | | | \$ 74,918,600 | | | \$ 11,954,476 | \$ 86,873,076 |
| 54 | | | | | | | | |
| 55 | Summary of Revenue | | | | | | | |
| 56 | Customer Charge | | | \$ 5,182,013 | | | \$ 902,888 | \$ 6,084,900 |
| 57 | Demand Charge | | | - | | | - | - |
| 58 | Energy Charge | | | 69,736,587 | | | 11,051,589 | 80,788,176 |
| 59 | Total Revenue | | | \$ 74,918,600 | | | \$ 11,954,476 | \$ 86,873,076 |
| 60 | <i>Check</i> | | | | | | | |

EXHIBIT 6

Rate Benchmarking Analysis - Reliant

Austin Energy
Rate Benchmarking Analysis
Exhibit 6 - Reliant-CenterPoint

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) |
|--|---|----------------|-------------------|--|---------------|-------------------|----------------------|--|
| Proof of Revenue | | | | | | | | |
| Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL) | | | | Austin Energy Secondary Voltage ≥ 10 < 50 kW (OCL) | | | | Total Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| Line No. | Item | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 1 | | | | | | | | |
| 2 | Austin Energy Rate Schedule | | | | | | | |
| 3 | | | | | | | | |
| 4 | Customer Charge (months) | 138,187 | \$ 25.00 | \$ 3,454,675 | 24,077 | \$ 25.00 | \$ 601,925 | \$ 4,056,600 |
| 5 | | | | | | | | |
| 6 | Demand Charges | | | | | | | |
| 7 | Winter (\$/kW-billed) | 1,877,111 | \$ 5.15 | 9,667,124 | 339,867 | \$ 5.12 | 1,740,119 | 11,407,243 |
| 8 | Summer (\$/kW-billed) | 1,012,365 | \$ 6.15 | 6,226,042 | 164,792 | \$ 6.11 | 1,006,881 | 7,232,923 |
| 9 | Subtotal Demand Charges | | \$ 5.48 | \$ 15,893,166 | | \$ 5.45 | \$ 2,747,000 | \$ 18,640,166 |
| 10 | | | | | | | | |
| 11 | Electric Delivery (\$/kW-billed) | 2,889,476 | \$ 4.00 | 11,557,904 | 504,659 | \$ 3.98 | 2,008,544 | 13,566,448 |
| 12 | Regulatory Charge (\$/kW) | 2,889,476 | \$ 2.56 | 7,397,059 | 504,659 | \$ 2.56 | 1,291,928 | 8,688,986 |
| 13 | Temporary Supplemental Charge (OCL) | 2,889,476 | \$ - | - | 504,659 | \$ 0.13 | 65,606 | 65,606 |
| 14 | Subtotal Demand Charges and Adjustment Charges | | \$ 6.56 | \$ 34,848,129 | | \$ 12.12 | \$ 6,113,077 | \$ 40,961,206 |
| 15 | | | | | | | | |
| 16 | Energy Charge (kWh) | | | | | | | |
| 17 | Winter Energy (kWh) | 433,209,672 | \$ 0.02414 | 10,457,681 | 70,674,283 | \$ 0.02399 | 1,695,476 | 12,153,158 |
| 18 | Summer Energy (kWh) | 307,959,288 | \$ 0.02914 | 8,973,934 | 46,783,352 | \$ 0.02896 | 1,354,846 | 10,328,780 |
| 19 | Subtotal Energy Charge | | \$ 0.02581 | \$ 19,431,615 | | \$ 0.02565 | \$ 3,050,322 | \$ 22,481,937 |
| 20 | | | | | | | | |
| 21 | FAC or PSA (kWh) | 741,168,960 | \$ 0.03709 | 27,489,957 | 117,457,635 | \$ 0.03709 | 4,356,504 | 31,846,460 |
| 22 | Customer Assistance Program (\$/kWh) | 741,168,960 | \$ 0.00065 | 481,760 | 117,457,635 | \$ 0.00065 | 76,347 | 558,107 |
| 23 | Service Area Street Lighting (\$/kWh) | 741,168,960 | \$ 0.00076 | 563,288 | 117,457,635 | \$ - | - | 563,288 |
| 24 | Energy Efficiency Services (\$/kWh) | 741,168,960 | \$ 0.00522 | 3,868,902 | 117,457,635 | \$ 0.00522 | 613,129 | 4,482,031 |
| 25 | Transmission Service Adjustment | 741,168,960 | \$ - | - | 117,457,635 | \$ - | - | - |
| 26 | Subtotal Energy Charges and Adjustment Charges | | \$ 0.06953 | \$ 51,835,522 | | \$ 0.06861 | \$ 8,096,302 | \$ 59,931,824 |
| 27 | | | | | | | | |
| 28 | TOTAL Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 29 | <i>Check</i> | | | | | | | |
| 30 | Summary of Revenue | | | | | | | |
| 31 | Customer Charge | | \$ | 3,454,675 | | \$ | 601,925 | \$ 4,056,600 |
| 32 | Demand Charge | | | 34,848,129 | | | 6,113,077 | 40,961,206 |
| 33 | Energy Charge | | | 51,835,522 | | | 8,096,302 | 59,931,824 |
| 34 | Total Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 35 | <i>Check</i> | | | | | | | |
| 36 | | | | | | | | |
| 37 | | | | | | | | |

Austin Energy
Rate Benchmarking Analysis
Exhibit 6 - Reliant-CenterPoint

| (A) | (B) | (J) | (K) | (L) | (M) | (N) | (O) | (P) |
|---|--|---|------------|---------------|---|------------|---------------|---|
| Reliant/ CenterPoint Structure w AE Revenue Requirement | | | | | | | | |
| Line No. | Item | Commercial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Commercial Secondary Voltage ≥ 10 < 50 kW (OCL) | | | Total Reliant/CenterPoint Secondary Voltage ≥ 10 < 50 kW / ICL & |
| | | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 38 | Reliant/CenterPoint Rate Schedule | | | | | | | |
| 39 | | | | | | | | |
| 40 | Base Charge | | | | | | | |
| 41 | Reliant Usage Charge (months) | 138,187 | \$ 10.27 | \$ 1,418,577 | 24,077 | \$ 10.27 | \$ 247,166 | \$ 1,665,743 |
| 42 | CenterPoint Delivery Charge (months) | 138,187 | \$ 8.79 | \$ 1,214,701 | 24,077 | \$ 8.79 | \$ 211,643 | \$ 1,426,345 |
| 43 | Base Charge | | \$ 19.06 | \$ 2,633,279 | | \$ 19.06 | \$ 458,809 | \$ 3,092,088 |
| 44 | | | | | | | | |
| 45 | Demand Charge (kW) | 2,889,476 | \$ - | \$ - | 504,659 | \$ - | \$ - | \$ - |
| 46 | | | | | | | | |
| 47 | | | | | | | | |
| 48 | Energy Charge (kWh) | | | | | | | |
| 49 | Reliant Energy Charge (kWh) | 741,168,960 | \$ 0.07635 | \$ 56,586,355 | 117,457,635 | \$ 0.07635 | \$ 8,967,590 | \$ 65,553,945 |
| 50 | CenterPoint Energy Charge (kWh) | 741,168,960 | \$ 0.04228 | \$ 31,337,370 | 117,457,635 | \$ 0.04228 | \$ 4,966,227 | \$ 36,303,597 |
| 51 | Subtotal Energy Charge | | \$ 0.11863 | \$ 87,923,725 | | \$ 0.11863 | \$ 13,933,817 | \$ 101,857,542 |
| 52 | | | | | | | | |
| 53 | Subtotal Energy Charge and Peak Capacity | | | | | | | |
| 54 | | | | | | | | |
| 55 | TOTAL Revenue | | | \$ 90,557,004 | | | \$ 14,392,626 | \$ 104,949,630 |
| 56 | | | | | | | | |
| 57 | Summary of Revenue | | | | | | | |
| 58 | Customer Charge | | | \$ 2,633,279 | | | \$ 458,809 | \$ 3,092,088 |
| 59 | Demand Charge | | | - | | | - | - |
| 60 | Energy Charge | | | 87,923,725 | | | 13,933,817 | 101,857,542 |
| 61 | Total Revenue | | | \$ 90,557,004 | | | \$ 14,392,626 | \$ 104,949,630 |
| 62 | Check | | | | | | | |

Austin Energy
Rate Benchmarking Analysis
Exhibit 6 - Reliant-CenterPoint

| (A) | (B) | (Q) | (R) | (S) | (T) | (U) | (V) | (W) |
|---|---|------------------|-------------------|--|----------------|-------------------|----------------------|--|
| Relaint/CenterPoint Structure w Reliant/CenterPoint Revenue Requirement | | | | | | | | |
| Commecial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | | Commecial Secondary Voltage ≥ 10 < 50 kW (OCL) | | | | Total Reliant/CenterPoint Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| Line No. | Item | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 38 | Reliant/CenterPoint Rate Schedule | | | | | | | |
| 39 | | | | | | | | |
| 40 | Base Charge | | | | | | | |
| 41 | Reliant Usage Charge (months) | 138,187 | \$ 9.95 | \$ 1,374,961 | 24,077 | \$ 9.95 | \$ 239,566 | \$ 1,614,527 |
| 42 | CenterPoint Delivery Charge (months) | 138,187 | \$ 8.52 | 1,177,353 | 24,077 | \$ 8.52 | 205,136 | 1,382,489 |
| 43 | Base Charge | | \$ 18.47 | \$ 2,552,314 | | \$ 18.47 | \$ 444,702 | \$ 2,997,016 |
| 44 | | | | | | | | |
| 45 | Demand Charge (kW) | 2,889,476 | \$ - | \$ - | 504,659 | \$ - | \$ - | \$ - |
| 46 | | | | | | | | |
| 47 | | | | | | | | |
| 48 | Energy Charge (kWh) | | | | | | | |
| 49 | Reliant Energy Charge (kWh) | 741,168,960 | \$ 0.07400 | \$ 54,846,503 | 117,457,635 | \$ 0.07400 | \$ 8,691,865 | \$ 63,538,368 |
| 50 | CenterPoint Energy Charge (kWh) | 741,168,960 | \$ 0.04098 | \$ 30,373,845 | 117,457,635 | \$ 0.04098 | \$ 4,813,531 | \$ 35,187,376 |
| 51 | Subtotal Energy Charge | | \$ 0.11498 | \$ 85,220,348 | | \$ 0.11498 | \$ 13,505,396 | \$ 98,725,745 |
| 52 | | | | | | | | |
| 53 | Subtotal Energy Charge and Peak Capacity | | | | | | | |
| 54 | | | | | | | | |
| 55 | TOTAL Revenue | | | \$ 87,772,662 | | | \$ 13,950,099 | \$ 101,722,761 |
| 56 | | | | | | | | |
| 57 | Summary of Revenue | | | | | | | |
| 58 | Customer Charge | | | \$ 2,552,314 | | | \$ 444,702 | \$ 2,997,016 |
| 59 | Demand Charge | | | - | | | - | - |
| 60 | Energy Charge | | | 85,220,348 | | | 13,505,396 | 98,725,745 |
| 61 | Total Revenue | | | \$ 87,772,662 | | | \$ 13,950,099 | \$ 101,722,761 |
| 62 | <i>Check</i> | | | | | | | |

EXHIBIT 7

Rate Benchmarking Analysis - SMUD

Austin Energy
Rate Benchmarking Analysis
Exhibit 7 - SMUD

SMUD

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) |
|----------|--|--|------------|---------------|--|------------|---------------|--|
| Line No. | Item | Proof of Revenue | | | | | | |
| | | Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Austin Energy Secondary Voltage ≥ 10 < 50 kW (OCL) | | | Total Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| | | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| | | | | | | | | |
| 1 | | | | | | | | |
| 2 | Austin Energy Rate Schedule | | | | | | | |
| 3 | | | | | | | | |
| 4 | Customer Charge (months) | 138,187 | \$ 25.00 | \$ 3,454,675 | 24,077 | \$ 25.00 | \$ 601,925 | \$ 4,056,600 |
| 5 | | | | | | | | |
| 6 | Demand Charges | | | | | | | |
| 7 | Winter (\$/kW-billed) | 1,877,111 | \$ 5.15 | 9,667,124 | 339,867 | \$ 5.12 | 1,740,119 | 11,407,243 |
| 8 | Summer (\$/kW-billed) | 1,012,365 | \$ 6.15 | 6,226,042 | 164,792 | \$ 6.11 | 1,006,881 | 7,232,923 |
| 9 | Subtotal Demand Charges | | \$ 5.48 | \$ 15,893,166 | | \$ 5.45 | \$ 2,747,000 | \$ 18,640,166 |
| 10 | | | | | | | | |
| 11 | Electric Delivery (\$/kW-billed) | 2,889,476 | \$ 4.00 | 11,557,904 | 504,659 | \$ 3.98 | 2,008,544 | 13,566,448 |
| 12 | Regulatory Charge (\$/kW) | 2,889,476 | \$ 2.56 | 7,397,059 | 504,659 | \$ 2.56 | 1,291,928 | 8,688,986 |
| 13 | Temporary Supplemental Charge (OCL) | 2,889,476 | \$ - | - | 504,659 | \$ 0.13 | 65,606 | 65,606 |
| 14 | Subtotal Demand Charges and Adjustment Charges | | \$ 6.56 | \$ 34,848,129 | | \$ 12.12 | \$ 6,113,077 | \$ 40,961,206 |
| 15 | | | | | | | | |
| 16 | Energy Charge (kWh) | | | | | | | |
| 17 | Winter Energy (kWh) | 433,209,672 | \$ 0.02414 | 10,457,681 | 70,674,283 | \$ 0.02399 | 1,695,476 | 12,153,158 |
| 18 | Summer Energy (kWh) | 307,959,288 | \$ 0.02914 | 8,973,934 | 46,783,352 | \$ 0.02896 | 1,354,846 | 10,328,780 |
| 19 | Subtotal Energy Charge | | \$ 0.02581 | \$ 19,431,615 | | \$ 0.02565 | \$ 3,050,322 | \$ 22,481,937 |
| 20 | | | | | | | | |
| 21 | FAC or PSA (kWh) | 741,168,960 | \$ 0.03709 | 27,489,957 | 117,457,635 | \$ 0.03709 | 4,356,504 | 31,846,460 |
| 22 | Customer Assistance Program (\$/kWh) | 741,168,960 | \$ 0.00065 | 481,760 | 117,457,635 | \$ 0.00065 | 76,347 | 558,107 |
| 23 | Service Area Street Lighting (\$/kWh) | 741,168,960 | \$ 0.00076 | 563,288 | 117,457,635 | \$ - | - | 563,288 |
| 24 | Energy Efficiency Services (\$/kWh) | 741,168,960 | \$ 0.00522 | 3,868,902 | 117,457,635 | \$ 0.00522 | 613,129 | 4,482,031 |
| 25 | Transmission Service Adjustment | 741,168,960 | \$ - | - | 117,457,635 | \$ - | - | - |
| 26 | Subtotal Energy Charge and Adjustment Charges | | \$ 0.06953 | \$ 51,835,522 | | \$ 0.06861 | \$ 8,096,302 | \$ 59,931,824 |
| 27 | | | | | | | | |
| 28 | TOTAL Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 29 | Check | | | | | | | |
| 30 | Summary of Revenue | | | | | | | |
| 31 | Customer Charge | | | \$ 3,454,675 | | | \$ 601,925 | \$ 4,056,600 |
| 32 | Demand Charge | | | 34,848,129 | | | 6,113,077 | 40,961,206 |
| 33 | Energy Charge | | | 51,835,522 | | | 8,096,302 | 59,931,824 |
| 34 | Total Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 35 | Check | | | | | | | |
| 36 | | | | | | | | |
| 37 | | | | | | | | |

| (A) | (B) | (J) | (K) | (L) | (M) | (N) | (O) | (P) |
|----------|--|--|------------|---------------|--|------------|--------------|---|
| Line No. | Item | SMUD Structure w AE Revenue Requirement | | | | | | |
| | | Commecial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Commecial Secondary Voltage ≥ 10 < 50 kW (OCL) | | | Total Sacramento Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| | | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| | | | | | | | | |
| | | | | | | | | |
| 38 | SMUD Power Rate Schedule | | | | | | | |
| 39 | <i>Small Non-Demand Service <20kW</i> | | | | | | | |
| 40 | Customer Charge (months) | | | | | | | |
| 41 | Winter (Oct - May) | 50,846 | \$ 15.95 | \$ 810,779 | 8,673 | \$ 15.95 | \$ 138,298 | \$ 949,077 |
| 42 | Summer (June - Sept) | 27,950 | \$ 15.95 | \$ 445,685 | 5,254 | \$ 15.95 | \$ 83,779 | \$ 529,464 |
| 43 | Customer Charge | 78,796 | \$ 15.95 | \$ 1,256,464 | 13,927 | \$ 15.95 | \$ 222,077 | \$ 1,478,541 |
| 44 | | | | | | | | |
| 45 | Demand Charge (kW) | 2,889,476 | \$ - | \$ - | 183,865 | \$ - | \$ - | \$ - |
| 46 | | | | | | | | |
| 47 | Energy Charge (kWh) | | | | | | | |
| 48 | On-peak (Summer Weekdays 1500-1800) | 9,467,513 | \$ 0.28523 | \$ 2,700,421 | 1,656,476 | \$ 0.28523 | \$ 472,477 | \$ 3,172,898 |
| 49 | Off-peak (All Other Hours) | 226,743,147 | \$ 0.10714 | \$ 24,292,297 | 38,312,459 | \$ 0.10714 | \$ 4,104,634 | \$ 28,396,930 |
| 50 | Subtotal Energy Charges | 236,210,660 | \$ 0.1103 | \$ 26,992,718 | 39,968,935 | \$ 0.1103 | \$ 4,577,111 | \$ 31,569,829 |
| 51 | | | | | | | | |
| 52 | Subtotal Small Non-Demand Service <20kW | \$ 28,249,182 | | | \$ 4,799,188 | | | \$ 33,048,370 |
| 53 | | | | | | | | |
| 54 | <i>Small Demand Service 21kw - 299kW, min of 1500 hrs</i> | | | | | | | |
| 55 | Customer Charge (months) | | | | | | | |
| 56 | Winter (Oct - May) | 78,796 | \$ 23.02 | \$ 1,814,020 | 13,927 | \$ 23.02 | \$ 320,624 | \$ 2,134,644 |
| 57 | Summer (June - Sept) | 20,219 | \$ 23.02 | \$ 465,476 | 3,082 | \$ 23.02 | \$ 70,953 | \$ 536,429 |
| 58 | Customer Charge | 99,015 | \$ 23.02 | \$ 2,279,496 | 17,009 | \$ 23.02 | \$ 391,577 | \$ 2,671,073 |
| 59 | | | | | | | | |
| 60 | Demand Charge (kW) | | | | | | | |
| 61 | Site Infrastructure Charge | 1,842,420 | \$ 7.12 | \$ 13,110,304 | 319,874 | \$ 7.12 | \$ 2,276,161 | \$ 15,386,465 |
| 62 | Subtotal Demand Charge | \$ 7.1158 \$ 13,110,304 | | | \$ 7.1158 \$ 2,276,161 | | | \$ 15,386,465 |
| 63 | | | | | | | | |
| 64 | Energy Charge (kWh) | | | | | | | |
| 65 | On-peak (Summer Weekdays 1500-1800) | 20,082,640 | \$ 0.24467 | \$ 4,913,582 | 2,821,312 | \$ 0.24467 | \$ 690,285 | \$ 5,603,868 |
| 66 | Off-peak (All Other Hours) | 483,166,476 | \$ 0.08491 | \$ 41,026,298 | 74,481,562 | \$ 0.08491 | \$ 6,324,327 | \$ 47,350,625 |
| 67 | Subtotal Energy Charges | 503,249,117 | \$ 0.0878 | \$ 45,939,880 | 77,302,874 | \$ 0.0878 | \$ 7,014,612 | \$ 52,954,492 |
| 68 | | | | | | | | |
| 69 | Solar Surcharge (kWh) | 503,249,117 | \$ 0.00149 | \$ 752,316 | 77,302,874 | \$ 0.00149 | \$ 115,561 | \$ 867,877 |
| 70 | Hydro Generation Adjustment (kWh) | 503,249,117 | \$ - | \$ - | 77,302,874 | \$ - | \$ - | \$ - |
| 71 | Subtotal Energy Charges and Adjustment Charges | \$ 0.0893 \$ 46,692,196 | | | \$ 0.0893 \$ 7,130,173 | | | \$ 53,822,370 |
| 72 | | | | | | | | |
| 73 | Power Factor Adjustment (kVar) | 1,824,901 | \$ 0.01027 | \$ 18,733 | 255,208 | \$ 0.01027 | \$ 2,620 | \$ 21,353 |
| 74 | | | | | | | | |
| 75 | Subtotal Small Demand Service 21kw - 299kW | \$ 62,100,730 | | | \$ 9,800,531 | | | \$ 71,901,260 |
| 76 | | | | | | | | |
| 77 | TOTAL Customer Revenue | \$ 90,349,911 | | | \$ 14,599,719 | | | \$ 104,949,630 |
| 78 | | | | | | | | |
| 79 | Summary of Revenue | | | | | | | |
| 80 | Customer Charge | \$ 3,535,961 | | | \$ 613,654 | | | \$ 4,149,614 |
| 81 | Demand Charge | 13,110,304 | | | 2,276,161 | | | 15,386,465 |
| 82 | Energy Charge | 73,684,914 | | | 11,707,285 | | | 85,392,198 |
| 83 | Power Factor Adjustment | 18,733 | | | 2,620 | | | 21,353 |
| 84 | Total Revenue | \$ 90,349,911 | | | \$ 14,599,719 | | | \$ 104,949,630 |
| 85 | <i>Check</i> | | | | | | | |

| (A) | (B) | (Q) | (R) | (S) | (T) | (U) | (V) | (W) |
|----------|--|--|------------|---------------|--|------------|---------------|---|
| Line No. | Item | SMUD Structure w SMUD Revenue Requirement | | | | | | |
| | | Commecial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Commecial Secondary Voltage ≥ 10 < 50 kW (OCL) | | | Total Sacramento Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| | | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 38 | SMUD Power Rate Schedule | | | | | | | |
| 39 | <i>Small Non-Demand Service <20kW</i> | | | | | | | |
| 40 | Customer Charge (months) | | | | | | | |
| 41 | Winter (Oct - May) | 50,846 | \$ 16.00 | \$ 813,536 | 8,673 | \$ 16.00 | \$ 138,768 | \$ 952,304 |
| 42 | Summer (June - Sept) | 27,950 | \$ 16.00 | \$ 447,200 | 5,254 | \$ 16.00 | \$ 84,064 | \$ 531,264 |
| 43 | Customer Charge | 78,796 | \$ 16.00 | \$ 1,260,736 | 13,927 | \$ 16.00 | \$ 222,832 | \$ 1,483,568 |
| 44 | | | | | | | | |
| 45 | Demand Charge (kW) | 2,889,476 | \$ - | \$ - | 183,865 | \$ - | \$ - | \$ - |
| 46 | | | | | | | | |
| 47 | Energy Charge (kWh) | | | | | | | |
| 48 | On-peak (Summer Weekdays 1500-1800) | 9,467,513 | \$ 0.28620 | \$ 2,709,602 | 1,656,476 | \$ 0.28620 | \$ 474,084 | \$ 3,183,686 |
| 49 | Off-peak (All Other Hours) | 226,743,147 | \$ 0.10750 | \$ 24,374,888 | 38,312,459 | \$ 0.10750 | \$ 4,118,589 | \$ 28,493,478 |
| 50 | Subtotal Energy Charges | 236,210,660 | \$ 0.1107 | \$ 27,084,491 | 39,968,935 | \$ 0.1107 | \$ 4,592,673 | \$ 31,677,163 |
| 51 | | | | | | | | |
| 52 | Subtotal Small Non-Demand Service <20kW | | | \$ 28,345,227 | | | \$ 4,815,505 | \$ 33,160,731 |
| 53 | | | | | | | | |
| 54 | <i>Small Demand Service 21kw - 299kW, min of 1500 hrs</i> | | | | | | | |
| 55 | Customer Charge (months) | | | | | | | |
| 56 | Winter (Oct - May) | 78,796 | \$ 23.10 | \$ 1,820,188 | 13,927 | \$ 23.10 | \$ 321,714 | \$ 2,141,901 |
| 57 | Summer (June - Sept) | 20,219 | \$ 23.10 | \$ 467,059 | 3,082 | \$ 23.10 | \$ 71,194 | \$ 538,253 |
| 58 | Customer Charge | 99,015 | \$ 23.1000 | \$ 2,287,247 | 17,009 | \$ 23.1000 | \$ 392,908 | \$ 2,680,154 |
| 59 | | | | | | | | |
| 60 | Demand Charge (kW) | | | | | | | |
| 61 | Site Infrastructure Charge | 1,842,420 | \$ 7.14 | \$ 13,154,878 | 319,874 | \$ 7.14 | \$ 2,283,900 | \$ 15,438,778 |
| 62 | Subtotal Demand Charge | | \$ 7.14 | \$ 13,154,878 | | \$ 7.14 | \$ 2,283,900 | \$ 15,438,778 |
| 63 | | | | | | | | |
| 64 | Energy Charge (kWh) | | | | | | | |
| 65 | On-peak (Summer Weekdays 1500-1800) | 20,082,640 | \$ 0.24550 | \$ 4,930,288 | 2,821,312 | \$ 0.24550 | \$ 692,632 | \$ 5,622,920 |
| 66 | Off-peak (All Other Hours) | 483,166,476 | \$ 0.08520 | \$ 41,165,784 | 74,481,562 | \$ 0.08520 | \$ 6,345,829 | \$ 47,511,613 |
| 67 | Subtotal Energy Charges | 503,249,117 | \$ 0.0881 | \$ 46,096,072 | 77,302,874 | \$ 0.0881 | \$ 7,038,461 | \$ 53,134,533 |
| 68 | | | | | | | | |
| 69 | Solar Surcharge (kWh) | 503,249,117 | \$ 0.00150 | \$ 754,874 | 77,302,874 | \$ 0.00150 | \$ 115,954 | \$ 870,828 |
| 70 | Hydro Generation Adjustment (kWh) | 503,249,117 | \$ - | \$ - | 77,302,874 | \$ - | \$ - | \$ - |
| 71 | Subtotal Energy Charges and Adjustment Charge | | \$ 0.0896 | \$ 46,850,946 | | \$ 0.0896 | \$ 7,154,415 | \$ 54,005,361 |
| 72 | | | | | | | | |
| 73 | Power Factor Adjustment (kVar) | 1,824,901 | \$ 0.0103 | \$ 18,796 | 255,208 | \$ 0.0103 | \$ 2,629 | \$ 21,425 |
| 74 | | | | | | | | |
| 75 | Subtotal Small Demand Service 21kw - 299kW | | | \$ 62,311,867 | | | \$ 9,833,852 | \$ 72,145,719 |
| 76 | | | | | | | | |
| 77 | TOTAL Customer Revenue | | | \$ 90,657,094 | | | \$ 14,649,357 | \$ 105,306,450 |
| 78 | | | | | | | | |
| 79 | Summary of Revenue | | | | | | | |
| 80 | Customer Charge | | | \$ 3,547,983 | | | \$ 615,740 | \$ 4,163,722 |
| 81 | Demand Charge | | | 13,154,878 | | | 2,283,900 | 15,438,778 |
| 82 | Energy Charge | | | 73,935,436 | | | 11,747,088 | 85,682,525 |
| 83 | Power Factor Adjustment | | | 18,796 | | | 2,629 | 21,425 |
| 84 | Total Revenue | | | \$ 90,657,094 | | | \$ 14,649,357 | \$ 105,306,450 |
| 85 | <i>Check</i> | | | | | | | |

EXHIBIT 8

Rate Benchmarking Analysis – TXU

Austin Energy
Rate Benchmarking Analysis
Exhibit 8 - TXU-Oncor

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) |
|------------------|---|--|-------------------|----------------------|--|-------------------|----------------------|--|
| Proof of Revenue | | | | | | | | |
| | | Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Austin Energy Secondary Voltage ≥ 10 < 50 kW (OCL) | | | Total Austin Energy Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| Line No. | Item | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 1 | | | | | | | | |
| 2 | Austin Energy Rate Schedule | | | | | | | |
| 3 | | | | | | | | |
| 4 | Customer Charge (months) | 138,187 | \$ 25.00 | \$ 3,454,675 | 24,077 | \$ 25.00 | \$ 601,925 | \$ 4,056,600 |
| 5 | | | | | | | | |
| 6 | Demand Charges | | | | | | | |
| 7 | Winter (\$/kW-billed) | 1,877,111 | \$ 5.15 | 9,667,124 | 339,867 | \$ 5.12 | 1,740,119 | 11,407,243 |
| 8 | Summer (\$/kW-billed) | 1,012,365 | \$ 6.15 | 6,226,042 | 164,792 | \$ 6.11 | 1,006,881 | 7,232,923 |
| 9 | Subtotal Demand Charges | | \$ 5.48 | \$ 15,893,166 | | \$ 5.45 | \$ 2,747,000 | \$ 18,640,166 |
| 10 | | | | | | | | |
| 11 | Electric Delivery (\$/kW-billed) | 2,889,476 | \$ 4.00 | 11,557,904 | 504,659 | \$ 3.98 | 2,008,544 | 13,566,448 |
| 12 | Regulatory Charge (\$/kW) | 2,889,476 | \$ 2.56 | 7,397,059 | 504,659 | \$ 2.56 | 1,291,928 | 8,688,986 |
| 13 | Temporary Supplemental Charge (OCL) | 2,889,476 | \$ - | - | 504,659 | \$ 0.13 | 65,606 | 65,606 |
| 14 | Subtotal Demand Charges and Adjustment Charges | | \$ 12.04 | \$ 34,848,129 | | \$ 12.12 | \$ 6,113,077 | \$ 40,961,206 |
| 15 | | | | | | | | |
| 16 | Energy Charge (kWh) | | | | | | | |
| 17 | Winter Energy (kWh) | 433,209,672 | \$ 0.02414 | 10,457,681 | 70,674,283 | \$ 0.02399 | 1,695,476 | 12,153,158 |
| 18 | Summer Energy (kWh) | 307,959,288 | \$ 0.02914 | 8,973,934 | 46,783,352 | \$ 0.02896 | 1,354,846 | 10,328,780 |
| 19 | Subtotal Energy Charge | | \$ 0.02581 | \$ 19,431,615 | | \$ 0.02565 | \$ 3,050,322 | \$ 22,481,937 |
| 20 | | | | | | | | |
| 21 | FAC or PSA (kWh) | 741,168,960 | \$ 0.03709 | 27,489,957 | 117,457,635 | \$ 0.03709 | 4,356,504 | 31,846,460 |
| 22 | Customer Assistance Program (\$/kWh) | 741,168,960 | \$ 0.00065 | 481,760 | 117,457,635 | \$ 0.00065 | 76,347 | 558,107 |
| 23 | Service Area Street Lighting (\$/kWh) | 741,168,960 | \$ 0.00076 | 563,288 | 117,457,635 | \$ - | - | 563,288 |
| 24 | Energy Efficiency Services (\$/kWh) | 741,168,960 | \$ 0.00522 | 3,868,902 | 117,457,635 | \$ 0.00522 | 613,129 | 4,482,031 |
| 25 | Transmission Service Adjustment | 741,168,960 | \$ - | - | 117,457,635 | \$ - | - | - |
| 26 | Subtotal Energy Charge and Adjustment Charges | | \$ 0.06953 | \$ 51,835,522 | | \$ 0.06861 | \$ 8,096,302 | \$ 59,931,824 |
| 27 | | | | | | | | |
| 28 | TOTAL Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 29 | <i>Check</i> | | | | | | | |
| 30 | Summary of Revenue | | | | | | | |
| 31 | Customer Charge | | | \$ 3,454,675 | | | \$ 601,925 | \$ 4,056,600 |
| 32 | Demand Charge | | | 34,848,129 | | | 6,113,077 | 40,961,206 |
| 33 | Energy Charge | | | 51,835,522 | | | 8,096,302 | 59,931,824 |
| 34 | Total Revenue | | | \$ 90,138,326 | | | \$ 14,811,304 | \$ 104,949,630 |
| 35 | <i>Check</i> | | | | | | | |
| 36 | | | | | | | | |
| 37 | | | | | | | | |

Austin Energy
Rate Benchmarking Analysis
Exhibit 8 - TXU-Oncor

| (A) | (B) | (J) | (K) | (L) | (M) | (N) | (O) | (P) |
|--|---|--|-----------------|----------------------|--|-----------------|----------------------|--|
| TXU/Oncor Structure w AE Revenue Requirement | | | | | | | | |
| Line No. | Item | Commecial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Commecial Secondary Voltage ≥ 10 < 50 kW (OCL) | | | Total TXU/Oncor Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| | | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 38 | TXU/Oncor Rate Schedule | | | | | | | |
| 39 | | | | | | | | |
| 40 | Customer Charge | | | | | | | |
| 41 | Base Charge (months) | 138,187 | \$ 9.10 | \$ 1,257,396 | 24,077 | \$ 9.10 | \$ 219,082 | \$ 1,476,479 |
| 42 | Oncor Customer Charge (months) | 138,187 | \$ 30.11 | \$ 4,160,149 | 24,077 | \$ 30.11 | \$ 724,843 | \$ 4,884,992 |
| 43 | Subtotal Customer Charge | | \$ 39.20 | \$ 5,417,545 | | \$ 39.20 | \$ 943,926 | \$ 6,361,471 |
| 44 | | | | | | | | |
| 45 | Demand Charge (kW) | | | | | | | |
| 46 | Distribution Demand Charge | 2,889,476 | \$ 7.64 | \$ 22,080,145 | 504,659 | \$ 7.64 | \$ 3,856,391 | \$ 25,936,536 |
| 47 | Subtotal Demand Charge | | | \$ 22,080,145 | | | \$ 3,856,391 | \$ 25,936,536 |
| 48 | | | | | | | | |
| 49 | | | | | | | | |
| 50 | Energy Charge (kWh) | | | | | | | |
| 51 | Energy Charge | 741,168,960 | \$ 0.0841 | \$ 62,357,248 | 117,457,635 | \$ 0.0841 | \$ 9,882,139 | \$ 72,239,388 |
| 52 | Oncor Consumption Charge | 741,168,960 | \$ 0.0005 | \$ 355,843 | 117,457,635 | \$ 0.0005 | \$ 56,393 | \$ 412,236 |
| 53 | Subtotal Energy Charge | | \$ 0.0846 | \$ 62,713,091 | | \$ 0.0846 | \$ 9,938,532 | \$ 72,651,623 |
| 54 | | | | | | | | |
| 55 | Subtotal Energy Charge and Peak Capacity | | | \$ 62,713,091 | | | \$ 9,938,532 | \$ 72,651,623 |
| 56 | | | | | | | | |
| 57 | TOTAL Revenue | | | \$ 90,210,781 | | | \$ 14,738,849 | \$ 104,949,630 |
| 58 | | | | | | | | |
| 59 | Summary of Revenue | | | | | | | |
| 60 | Customer Charge | | | \$ 5,417,545 | | | \$ 943,926 | \$ 6,361,471 |
| 61 | Demand Charge | | | 22,080,145 | | | 3,856,391 | 25,936,536 |
| 62 | Energy Charge | | | 62,713,091 | | | 9,938,532 | 72,651,623 |
| 63 | Total Revenue | | | \$ 90,210,781 | | | \$ 14,738,849 | \$ 104,949,630 |
| 64 | <i>Check</i> | | | | | | | |

Austin Energy
Rate Benchmarking Analysis
Exhibit 8 - TXU-Oncor

| (A) | (B) | (Q) | (R) | (S) | (T) | (U) | (V) | (W) |
|---|---|---|-----------------|----------------------|--|-----------------|----------------------|--|
| TXU/Oncor Structure w TXU/Oncor Revenue Requirement | | | | | | | | |
| | | Commeccial Secondary Voltage ≥ 10 < 50 kW (ICL) | | | Commeccial Secondary Voltage ≥ 10 < 50 kW OCL) | | | Total TXU/Oncor Secondary Voltage ≥ 10 < 50 kW (ICL & OCL) |
| Line No. | Item | Billing Units | Rate | Revenues | Billing Units | Rate | Revenues | Total Revenues |
| 38 | TXU/Oncor Rate Schedule | | | | | | | |
| 39 | | | | | | | | |
| 40 | Customer Charge | | | | | | | |
| 41 | Base Charge (months) | 138,187 | \$ 9.95 | \$ 1,374,961 | 24,077 | \$ 9.95 | \$ 239,566 | \$ 1,614,527 |
| 42 | Oncor Customer Charge (months) | 138,187 | \$ 32.92 | 4,549,116 | 24,077 | \$ 32.92 | 792,615 | 5,341,731 |
| 43 | Subtotal Customer Charge | | \$ 42.87 | \$ 5,924,077 | | \$ 42.87 | \$ 1,032,181 | \$ 6,956,258 |
| 44 | | | | | | | | |
| 45 | Demand Charge (kW) | | | | | | | |
| 46 | Distribution Demand Charge | 2,889,476 | \$ 8.36 | \$ 24,144,600 | 504,659 | \$ 8.36 | \$ 4,216,957 | \$ 28,361,557 |
| 47 | Subtotal Demand Charge | | | \$ 24,144,600 | | | \$ 4,216,957 | \$ 28,361,557 |
| 48 | | | | | | | | |
| 49 | | | | | | | | |
| 50 | Energy Charge (kWh) | | | | | | | |
| 51 | Energy Charge | 741,168,960 | \$ 0.09200 | \$ 68,187,544 | 117,457,635 | \$ 0.09200 | \$ 10,806,102 | \$ 78,993,647 |
| 52 | Oncor Consumption Charge | 741,168,960 | \$ 0.00053 | \$ 389,114 | 117,457,635 | \$ 0.00053 | \$ 61,665 | \$ 450,779 |
| 53 | Subtotal Energy Charge | | \$ 0.0925 | \$ 68,576,658 | | \$ 0.0925 | \$ 10,867,768 | \$ 79,444,426 |
| 54 | | | | | | | | |
| 55 | Subtotal Energy Charge and Peak Capacity | | | \$ 68,576,658 | | | \$ 10,867,768 | \$ 79,444,426 |
| 56 | | | | | | | | |
| 57 | TOTAL Revenue | | | \$ 98,645,335 | | | \$ 16,116,906 | \$ 114,762,241 |
| 58 | | | | | | | | |
| 59 | Summary of Revenue | | | | | | | |
| 60 | Customer Charge | | | \$ 5,924,077 | | | \$ 1,032,181 | \$ 6,956,258 |
| 61 | Demand Charge | | | 24,144,600 | | | 4,216,957 | 28,361,557 |
| 62 | Energy Charge | | | 68,576,658 | | | 10,867,768 | 79,444,426 |
| 63 | Total Revenue | | | \$ 98,645,335 | | | \$ 16,116,906 | \$ 114,762,241 |
| 64 | <i>Check</i> | | | | | | | |

Appendix A

Rate Schedules Used in Benchmarking Analysis

BEC

| Rate | Wholesale Charge | Distribution Charge | Monthly Minimum Charge | Description |
|-------------------------------|--------------------|---|---|--|
| General Service | \$0.064571 per kWh | \$0.028509 per kWh | \$22.50 per month | This includes residential farm, residential non-farm, rural recreation, churches, parsonages, and schools. |
| Commercial | \$0.064571 per kWh | Single - Phase \$0.034940 per kWh Phase \$0.036840 per kWh | Single - Phase: \$30.00 per month Three - Phase: \$50.00 per month | Available to all commercial and industrial consumers and other consumers whose electric requirements for all uses are less than 50 kW. |
| Large Power | \$0.064571 per kWh | \$0.015829 per kWh \$4.50 per kW (minimum 50 kW) | \$75.00 per month | Available to all commercial and industrial consumers whose electric requirements for all uses are 50kW to 250 kW. |
| Large Power> 250 kW | \$0.064571 per kWh | \$0.010139 per kWh \$5.50 per kW (minimum 250 kW) | \$150.00 per month | Available to all commercial and industrial consumers whose electric requirements for all uses are greater than 250kW. |
| Pumping Service | \$0.064571 per kWh | \$0.044617 per kWh | \$55.00 per month | Applies to all pumping installations to which a specific rate is not applicable. |
| Lighting Service | See below | See below | | Applies to electric service for dusk-to-dawn lighting to members. |
| Public Lighting | \$0.064571 per kWh | \$0.123143 per kWh | \$30.00 per month* | Applies to metered electric service for lighting public thoroughfares and traffic lights for a term not less than one year. |

* Also includes a maintenance charge, where lights are to be furnished or paid for by the member at the next regular billing.

Lighting Service Rate:

| | | |
|-----------------------------|---|-----------------------------|
| Un-Metered Installations | | |
| 53 Watt LED | @ | \$10.37 per month per light |
| 94 Watt LED | @ | \$14.61 per month per light |
| 140 Watt LED | @ | \$19.72 per month per light |
| 175 Watt Mercury Vapor | @ | \$10.37 per month per light |
| 100 Watt Hi-Pressure Sodium | @ | \$10.37 per month per light |
| 250 Watt Hi-Pressure Sodium | @ | \$14.61 per month per light |
| 400 Watt Hi-Pressure Sodium | @ | \$19.72 per month per light |
| Metered Installations | | |
| 175 Watt Mercury Vapor | @ | \$5.53 per month per light |
| 53 Watt LED | @ | \$9.08 per month per light |
| 94 Watt LED | @ | \$12.16 per month per light |
| 140 Watt LED | @ | \$16.10 per month per light |
| 175 Watt Mercury Vapor | @ | \$5.53 per month per light |
| 100 Watt Hi-Pressure Sodium | @ | \$7.46 per month per light |
| 250 Watt Hi-Pressure Sodium | @ | \$8.15 per month per light |
| 400 Watt Hi-Pressure Sodium | @ | \$9.39 per month per light |

Note: All rates are subject to change, and are subject to all billing adjustments, including but not limited to franchise fees (where applicable).

Revised 09/02/2014

CPS Energy

GENERAL SERVICE

BASE COMMERCIAL ELECTRIC RATE

PL

APPLICATION

This rate is applicable to alternating current service, for which no specific rate is provided, to any Customer whose entire requirements on the premises are supplied at one point of delivery through one meter.

This rate is not applicable (a) when another source of electric energy is used by the Customer or (b) when another source of energy (other than electric) is used for the same purpose or an equivalent purpose as the electric energy furnished directly by CPS Energy, except that such other source of energy as mentioned in (a) and (b) may be used during temporary failure of the CPS Energy electric service.

This rate is not applicable to emergency, standby, or shared service. It also is not applicable to resale service except that submetering will be permitted under this rate only for the purpose of allocating the monthly bill among the tenants served through a master meter in accordance with CPS Energy Rules and Regulations Applying to Retail Electric & Gas Service.

TYPE OF SERVICE

The types of service available under this rate are described in CPS Energy Electric Service Standards. When facilities of adequate capacity and suitable phase and voltage are not adjacent to the premises served or to be served, the required service may be provided pursuant to CPS Energy Rules and Regulations Applying to Retail Electric & Gas Service and the CPS Energy Policy for Electric Line Extensions and Service Installations.

MONTHLY BILL

Rate

\$ 8.75 Service Availability Charge

Energy Charge

\$ 0.0719 Per KWH for the first 1600 KWH*

\$ 0.0332 Per KWH for all additional KWH

Peak Capacity Charge

Summer Billing (June - September)

\$ 0.0198 Per KWH for all KWH in excess of 600 KWH

Non-Summer Billing (October - May)

\$ 0.0100 Per KWH for all KWH in excess of 600 KWH

*200 KWH are added for each KW of Billing Demand in excess of 5 KW.

Minimum Bill

\$8.75 plus \$4.00 per KW of Billing Demand in excess of 5 KW. A higher Minimum Bill may be specified in the Customer's Application and Agreement for Electric Service. The Minimum Bill is not subject to reduction by credits allowed under the adjustments below.

Adjustments

Plus or minus an amount which reflects the difference in the unit fuel cost factor for the current month above or below a basic cost of \$0.01416 per KWH sold. The unit fuel cost factor for the current month is computed as the sum of:

- (a) The current month's estimated unit fuel cost per KWH, which is computed based upon the current month's estimated KWH generation mix, unit fuel cost by fuel type, any known changes in fuel cost, sales to other than long-term customers, purchases and line losses; plus
- (b) An adjustment, if indicated by the current status of the over and under recovery of fuel costs for the recovery year in progress, to correct for the difference between the preceding month's estimated unit fuel cost and the current computation for this value. This adjustment is computed by multiplying the difference between the preceding month's estimated unit fuel cost (corrected for any fuel supplier surcharge) and the current computation for this value times the KWH generated during the preceding month and then dividing the result by the current month's estimated KWH sales; plus
- (c) An adjustment, if indicated by the current status of the over and under recovery of fuel costs for the recovery year in progress, to correct for the difference between the preceding month's estimated value for the second preceding month's unit fuel cost and actual unit fuel cost for that month. This adjustment is computed by multiplying the difference between the preceding month's estimated value for the second preceding month's unit fuel cost and the actual unit fuel cost for that month (corrected for any fuel supplier surcharge) times the KWH generated during the preceding month and then dividing the result by the current month's estimated KWH sales; plus
- (d) An adjustment, as necessary, which may be derived and applied to the unit fuel cost factors during the months preceding, including, and/or following January each year, depending on the dollar amount of adjustment necessary to balance the annual cumulative actual fuel cost with the annual cumulative fuel cost recovery through these rates; plus
- (e) An adjustment to reflect offsetting credits to or additions to fuel costs resulting from judicial orders or settlements of legal proceedings affecting fuel costs or components thereof, including taxes or transportation costs, or to reflect accounting and billing record corrections or other out-of-period adjustments to fuel costs.
- (f) An adjustment, as necessary, which may be derived and applied to the unit fuel cost factors for recovery of dollars spent for the verifiable kW reductions that are above the level reflected in base rates for energy efficiency and conservation programs. Recovery of such costs would be allowed once an independent third party reviews and confirms the incremental kW reductions.

Plus or minus the proportionate part of the increase or decrease in taxes, required payments to governmental entities or for governmental or municipal purposes which may be hereafter assessed, imposed, or otherwise required and which are payable out of or are based upon revenues of the electric system.

Monthly Demand

The Demand will be the KW as determined from the reading of the CPS Energy demand meter for the 15 minute period of the Customer's greatest Demand reading during the month.

Billing Demand

For the period June through September, the Billing Demand is equal to the Monthly Demand as defined above. For the period October through May, the Billing Demand is equal to the Monthly Demand or 80% of the highest measured demand established during the previous summer period months (June through September), whichever is greater.

Prior to the establishment of a previous summer peak Demand, the Billing Demand shall be equal to the Monthly Demand as defined above.

Power Factor

When, based on a test of the Customer's power factor, the power factor is below 85% lagging, the Billing Demand may be increased by adding 1% of the Actual Demand for each 1% that the power factor is below 85%.

High Voltage Discount

This discount applies only to electric service supplied at CPS Energy nominal distribution voltage of 13.2 KV or higher, when (a) such service voltage requires no more than one (1) step down transformation from transmission voltage of 69 KV or higher, and when (b) such service can be supplied in accordance with CPS Energy distribution system design criteria.

For service supplied under this discount, the Energy Charge per KWH for usage up to 200 KWH per KW of Billing Demand will be discounted by \$0.00225 per KWH. The Customer must be demand metered and must own and maintain at Customer expense all other transformers and facilities that might be required to utilize this service.

LATE PAYMENT CHARGE

The Monthly Bill will be charged if payment is made within the period indicated on the bill. Bills not paid within this period will be charged an additional 2 percent times the Monthly Bill excluding the adjustment for fuel costs, garbage fees and sales taxes.

TERM OF SERVICE

The Term of Service shall be in accordance with the CPS Energy Application and Agreement for Electric Service. Should a Customer's service requirement exceed the standard of service normally provided under this rate, a longer contract term may be required.

RULES AND REGULATIONS

Service is subject to CPS Energy Rules and Regulations Applying to Retail Electric & Gas Service which are incorporated herein by this reference.

CURTAILMENT

CPS Energy shall have the right at any and all times to immediately adjust in whole or in part, the supply of electricity to Customers, in order to adjust to fuel supplies for generation of electricity or to adjust to other factors affecting delivery capability.

Sec. 26-466. General service, schedule GS.

(a) Availability. The schedule GS shall be available within the corporate limits of the City and the suburban fringe.

(b) Applicability.

(1) This schedule applies to individual commercial and industrial services, served at the established secondary voltage of the City's distribution system; and optionally, for apartments and multiple dwellings in existence prior to January 1, 1980, where more than one (1) dwelling or single living quarters are served through one (1) meter. Single-phase motors from one (1) to five (5) horsepower may be connected with the approval of the utility. This schedule applies to an individual single- or three-phase service with an energy-only meter and for demand metered services with an average metered demand of not greater than twenty-five (25) kilowatts.

(2) This schedule does not apply to single-family, individually metered residential units unless:

a. the energy delivered to such a unit is also used for commercial or business use and the commercial/business energy use comprises more than fifty (50) percent of the total energy use for the unit; and

b. the unit is not eligible for a Home Occupation License as specified in Article 3 of the Land Use Code.

(c) Monthly rate. The monthly rates for this schedule are as follows:

(1) Fixed charge, per account:

a. Single-phase, two-hundred-ampere service: three dollars and twenty-six cents (\$3.26).

b. Single-phase, above two-hundred-ampere service: nine dollars and sixty cents (\$9.60).

c. Three-phase, two-hundred-ampere service: four dollars and ninety-six cents (\$4.96).

d. Three-phase, above two-hundred-ampere service: eleven dollars and seventy-four cents (\$11.74).

(2) Demand charge, per kilowatt hour:

a. During the summer season billing months of June, July and August: two and seventy-seven one-hundredths cents (\$0.0277).

b. During the non-summer season billing months of January through May and September through December: one and forty-nine one-hundredths cents (\$0.0149).

c. The meter reading date shall generally determine the summer season billing months; however, no customer shall be billed more than three (3) full billing cycles at the summer rate.

(3) Distribution facilities charge, per kilowatt hour: two and twenty-seven one-hundredths cents (\$0.0227).

(4) Energy charge, per kilowatt hour:

a. During the summer season billing months of June, July and August: four and sixteen one-hundredths cents (\$0.0416).

b. During the non-summer season billing months of January through May and September through December: four and zero one-hundredths cents (\$0.0400).

c. The meter reading date shall generally determine the summer season billing months; however, no customer shall be billed more than three (3) full billing cycles at the summer rate.

(5) In lieu of taxes and franchise: a charge at the rate of six and zero-tenths (6.0) percent of all monthly service charges billed pursuant to this Section.

(d) Renewable resource. Renewable energy resources, including, but not limited to, energy generated by the power of wind, may be offered on a voluntary basis to customers at a premium of two and four-tenths cents (\$0.024) per kilowatt hour. The utility may establish and offer voluntary programs designed to increase and enhance the use of energy generated by renewable energy resources in support of Council-adopted policy applicable to the utility.

(e) Excess capacity charge. A monthly capacity charge of two dollars (\$2.) per kilowatt may be added to the above charges for service to intermittent loads in accordance with the provisions of the electric service rules and regulations.

(f) Service charge. Service charges and connection fees shall be as set forth in Subsection 26-712(b).

(g) Conservation assistance, rebates and incentives. The utility may establish programs to assist customers or provide incentives to customers in order to reduce energy consumption or system peak demands consistent with Council-adopted policy applicable to the utility. Such programs may include financial or technical assistance, incentives or rebates and shall be consistent with program objectives approved by the Utilities Executive Director.

(h) Billing demand. The billing demand shall be determined for each point of delivery by suitable meter measurement of the highest fifteen-minute integrated demand occurring during the billing period.

(i) Power factor adjustment. Power factor shall be determined by using watt and volt-ampere measurements collected by the electric meter at the point of service. The power factor calculated from such measurements shall be the basis of billing adjustment until satisfactory correction has been made. Review shall be conducted on a monthly basis by the utility. If the power factor falls below ninety-percent lagging, a power factor adjustment may be made by increasing the billing demand by one (1) percent for each one (1) percent or fraction thereof by which the power factor is less than ninety-percent lagging. This adjustment shall be based on the power factor at the time of maximum demand as recorded during the billing period.

(j) Service rights fee in certain annexed areas. A fee for defraying the cost of acquisition of service rights from Poudre Valley Rural Electric Association (PVREA) shall be charged for each service in areas annexed into the City after April 22, 1989, if such area was previously served by PVREA. The service rights will be collected monthly for a period of ten (10) consecutive years following the date of acquisition by the City of electric facilities in such area from PVREA. If service was previously provided by PVREA, the fee shall be twenty-five (25) percent of charges for electric power service. For services that come into existence in the affected area after date of acquisition, the fee shall be five (5) percent of charges for electric power service. In the event that the City Council has determined that a reduction of the service rights fee is justified in order to mitigate the economic impacts to a lot or parcel of land at the time of

annexation of said lot or parcel of land, the service rights fee charged pursuant to this Subsection may be reduced by the City Council pursuant to a schedule set forth in the ordinance annexing said parcel or lot. The service rights fee charged pursuant to this Subsection shall not be subject to a charge in lieu of taxes and franchise otherwise required in this Section.

(k) Special services. Special services or complex service arrangements that are beyond those required for service under this rate schedule may be arranged by a written services agreement that the Utilities Executive Director may negotiate and enter into on behalf of the utility. Said agreement shall establish the terms and conditions for any special services or arrangements and shall incorporate by reference the requirements of this Chapter, as applicable. Any special services agreement modifying the rates, fees or charges for said services from those set forth in this Article shall be subject to approval by the City Council in accordance with Section 6 of Article XII of the Charter.

(l) Parallel generation. Customers may operate all or part of their instantaneous energy or capacity needs by operation of a qualifying facility in parallel with the utility system, provided that electric service is being rendered under the special services provisions of this schedule, and provided further that such facility is constructed, operated and maintained in accordance with the provisions of the electric service rules and regulations. The credit for the energy delivered to the electric utility under this provision shall be provided at applicable Platte River Power Authority avoided cost rates. If a customer is receiving net metering service, such customer's service shall also be governed by the net metering service terms and conditions described in Subsection (q) below, and the credit for energy delivered to the electric utility shall be calculated as described in that Subsection.

(m) Commodity delivery. If the electric utility authorizes the delivery of electric capacity or energy utilizing the utility's distribution system under mandatory provisions of state or federal law, a credit will be applied to the customer's monthly electric bill based upon the electric utility's displaced costs as credited to the utility by its supplier of electric energy. Capacity, energy, standby capacity, backup capacity and special services shall be delivered, metered, billed, dispatched and controlled in accordance with a special services agreement with the electric utility.

(n) Payment of charges. Due dates and delinquency procedures shall be as set forth in § 26-713.

(o) Contract period. The applicant shall take electric service under this or any other applicable schedule which is in effect during the term of the contract subject to adjustment from time to time by the City Council. All contracts under this schedule shall be for twelve (12) months and shall be automatically renewed annually. The contract may be terminated at the end of the term upon the giving of ten (10) days' advance written notice to the City or may be terminated upon the giving of ten (10) days' advance written notice to the City in the event of vacation of the premises or a change in ownership or tenant occupancy status.

(p) Rules and regulations. Service supplied under this schedule is subject to the terms and conditions set forth in the electric utility rules and regulations as approved by the City Council. Copies may be obtained from the Utility's Customer Service Office.

(q) Net metering.

(1) Net metering service is available to a customer-generator producing electric energy exclusively with a qualifying facility using a qualifying renewable technology when the generating capacity of the customer-generator's qualifying facility meets the following two (2) criteria:

- a. The qualifying facility is sized to supply no more than one hundred twenty (120) percent of the customer-generator's average annual electricity consumption at that site, including all contiguous property owned or leased by the customer-generator, without regard to interruptions in contiguity caused by easements, public thoroughfares, transportation rights-of-way or utility rights-of-way; and
- b. The rated capacity of the qualifying facility does not exceed the customer-generator's service entrance capacity.

(2) The energy generated by an on-site qualifying facility and delivered to the utility's electric distribution facility shall be used to offset energy provided by the utility to the customer-generator during the applicable billing period.

(3) The customer-generator and electric service arrangements shall be subject to the requirements and conditions described in the City of Fort Collins Utility Services Interconnection Standards for Generating Facilities Connected to the Fort Collins Distribution System.

(4) A customer-generator who receives approval from the electric utility to obtain net metering service shall be subject to the monthly rates described above in this rate schedule section.

(5) The customer-generator's consumption of energy from the utility shall be measured on a monthly basis and, in the event that the qualifying facility has produced more electricity than the customer-generator has consumed, the customer-generator shall receive a monthly credit for such production. During the second calendar quarter of each year, the customer-generator shall receive payment for the net excess generation accrued for the preceding twelve (12) months. The credit per kilowatt hour for the energy delivered to the electric utility under this provision shall be provided at the summer season energy charge as specified in Subsection (c) of this Section.

(r) Net metering – community solar projects.

(1) Net metering service is available to a customer who holds an exclusive interest in a portion of the electric energy generated by a community solar project when the generating capacity of the customer's interest is sized to supply no more than one hundred twenty (120) percent of the customer's average annual electricity consumption at the customer's point of service, including all contiguous property owned or leased by the customer, without regard to interruptions in contiguity caused by easements, public thoroughfares, transportation rights-of-way or utility rights-of-way.

(2) The community solar project-generator and electric service arrangements shall be subject to the requirements and conditions described in the City of Fort Collins Utility Services Interconnection Standards for Generating Facilities Connected to the Fort Collins Distribution System.

(3) Both the customer's consumption of energy from Fort Collins Utilities and interest in the production of energy that flows into Fort Collins Utilities' distribution system shall be measured on a monthly basis. The energy consumed from Fort Collins Utilities by the customer shall be billed at the applicable seasonal tiered rate as outlined in Subsection (c) of this Section. The energy produced by the customer's portion of the qualifying facility shall be credited to the customer as follows:

- a. Distribution facilities charge, per kilowatt hour: one and fourteen one-hundredths cents (\$0.0114).
- b. The energy and demand credit, per kilowatt hour: four and sixteen one-hundredths cents (\$0.0416).

(Code 1972, § 112-118(D); Ord. No. 137, 1988, § 4.A—C, 10-18-88; Ord. No. 131, 1989, § 2, 10-17-89; Ord. No. 109, 1992, § 4, 11-17-92; Ord. No. 129, 1995, § 4, 11-7-95; Ord. No. 133, 1996, § 1, 11-5-96; Ord. No. 211, 1998, § 15, 12-1-98; Ord. No. 59, 1999, §§ 1, 2, 5-4-99; Ord. No. 168, 1999, § 4, 11-16-99; Ord. No. 153, 2000, § 3, 11-7-00; Ord. No. 130, 2002, §§ 33, 35, 9-17-02; Ord. No. 154, 2003, § 3, 11-18-03; Ord. No. 173, 2004, § 4, 11-16-04; Ord. No. 140, 2006, § 3, 10-3-06; Ord. No. 122, 2007, § 3, 11-20-07; Ord. No. 112, 2008, § 3, 10-21-08; Ord. 056, 2009, § 3, 6-2-09; Ord. No. 115, 2009, § 3, 11-3-09; Ord. 003, 2010, § 7, 2-2-10; Ord. No. 114, 2010, § 3, 11-16-10; Ord. No. 079, 2011, § 5, 9-6-11; Ord. No. 080, 2011, § 1, 9-6-11; Ord. No. 142, 2011, §§ 5, 6, 11-1-11; Ord. No. 114, 2012, § 3, 11-6-12; Ord. No. 146, 2013, § 3, 11-5-13; Ord. No. 108, 2014, § 5, 9-2-14; Ord. No. 154, 2014, § 3, 11-18-14)

Sec. 26-467. General service 25, schedule GS25.

(a) Availability. The schedule GS shall be available within the corporate limits of the City and the suburban fringe.

(b) Applicability. This schedule applies to individual commercial and industrial services, served at the established secondary voltage of the City's distribution system; and optionally, for apartments and multiple dwellings in existence prior to January 1, 1980, where more than one (1) dwelling or single living quarters are served through one (1) meter. Single-phase motors from one (1) to five (5) horsepower may be connected with the approval of the utility. This schedule applies to an individual single or three-phase service with an average metered demand of not less than twenty-five (25) kilowatts or greater than fifty (50) kilowatts.

(c) Monthly rate. The monthly rates for this schedule are as follows:

(1) Fixed charge, per account:

- a. Single-phase, two-hundred-ampere service: three dollars and twenty-six cents (\$3.26).
- b. Single-phase, above two-hundred-ampere service: nine dollars and sixty cents (\$9.60).
- c. Three-phase, two-hundred-ampere service: four dollars and ninety-six cents (\$4.96).
- d. Three-phase, above two-hundred-ampere service: eleven dollars and seventy-four cents (\$11.74).

(2) Demand charge, per kilowatt:

- a. During the summer season billing months of June, July and August: seven dollars and fifty-two cents (\$7.52).
- b. During the non-summer season billing months of January through May and September through December: four dollars and thirty-seven cents (\$4.37).
- c. The meter reading date shall generally determine the summer season billing months; however, no customer shall be billed more than three (3) full billing cycles at the summer rate.

(3) Distribution facilities charge, per kilowatt hour: one and seventy-six one-hundredths cents (\$0.0176).

(4) Energy charge, per kilowatt hour:

a. During the summer season billing months of June, July and August: four and sixteen one-hundredths cents (\$0.0416).

b. During the non-summer season billing months of January through May and September through December: four and zero one-hundredths cents (\$0.0400).

c. The meter reading date shall generally determine the summer season billing months; however, no customer shall be billed more than three (3) full billing cycles at the summer rate.

(5) In lieu of taxes and franchise: a charge at the rate of six and zero-tenths (6.0) percent of all monthly service charges billed pursuant to this Section.

(d) Renewable resource. Renewable energy resources, including, but not limited to, energy generated by the power of wind, may be offered on a voluntary basis to customers at a premium of two and four-tenths cents (\$0.024) per kilowatt hour. The utility may establish and offer voluntary programs designed to increase and enhance the use of energy generated by renewable energy resources in support of Council-adopted policy applicable to the utility.

(e) Excess capacity charge. A monthly capacity charge of two dollars (\$2.) per kilowatt may be added to the above charges for service to intermittent loads in accordance with the provisions of the electric service rules and regulations.

(f) Standby service charges. Standby service, if available, will be provided on an annual contract basis at a level at least sufficient to meet probable service demand (in kilowatts) as determined by the customer and approved by the utility according to the following:

(1) The monthly standby distribution charge shall be three dollars and eighty-two cents (\$3.82) per kilowatt of contracted standby service. This charge shall be in lieu of the distribution facilities charge. For all metered kilowatts in excess of the contracted amount, the standby distribution charge shall be eleven dollars and forty-five cents (\$11.45) per kilowatt.

(2) In the event the contractual kilowatt amount is exceeded, the beginning date of the contract period will be reset. The first month of the new contract period will become the current billing month and such month's metered demand shall become the minimum allowable contract demand for the standby service. Requests for standby service may be subject to a waiting period. An operation and maintenance charge may be added for special facilities required to provide standby service.

(g) Service charge. Service charges and connection fees shall be as set forth in Subsection 26-712(b) of this Chapter.

(h) Conservation assistance, rebates and incentives. The utility may establish programs to assist customers or provide incentives to customers in order to reduce energy consumption or system peak demands consistent with Council-adopted policy applicable to the utility. Such programs may include financial or technical assistance, incentives or rebates and shall be consistent with program objectives approved by the Utilities Executive Director.

(i) Billing demand. The billing demand shall be determined for each point of delivery by suitable meter measurement of the highest fifteen-minute integrated demand occurring during the billing period.

(j) Power factor. Power factor shall be determined by using watt and volt-ampere measurements collected by the electric meter at the point of service. The power factor calculated from such measurements shall be the basis of billing adjustment until satisfactory correction has been made. Review shall be conducted on a monthly basis by the utility. If the power factor falls below ninety-percent lagging, a power factor adjustment may be made by increasing the billing demand by one (1) percent for each one (1) percent or fraction thereof by which the power factor is less than ninety-percent lagging. This adjustment shall be based on the power factor at the time of maximum demand as recorded during the billing period.

(k) Service rights fee in certain annexed areas. A fee for defraying the cost of acquisition of service rights from Poudre Valley Rural Electric Association (PVREA) shall be charged for each service in areas annexed into the City after April 22, 1989, if such area was previously served by PVREA. The service rights will be collected monthly for a period of ten (10) consecutive years following the date of acquisition by the City of electric facilities in such area from PVREA. If service was previously provided by PVREA, the fee shall be twenty-five (25) percent of charges for electric power service. For services that come into existence in the affected area after date of acquisition, the fee shall be five (5) percent of charges for electric power service. In the event that the City Council has determined that a reduction of the service rights fee is justified in order to mitigate the economic impacts to a lot or parcel of land at the time of annexation of said lot or parcel of land, the service rights fee charged pursuant to this Subsection may be reduced by the City Council pursuant to a schedule set forth in the ordinance annexing said parcel or lot. The service rights fee charged pursuant to this Subsection shall not be subject to a charge in lieu of taxes and franchise otherwise required in this Section.

(l) Special services. Special services or complex service arrangements that are beyond those required for service under this rate schedule may be arranged by a written services agreement that the Utilities Executive Director may negotiate and enter into on behalf of the utility. Said agreement shall establish the terms and conditions for any special services or arrangements and shall incorporate by reference the requirements of this Chapter, as applicable. Any special services agreement modifying the rates, fees or charges for said services from those set forth in this Article shall be subject to approval by the City Council in accordance with Section 6 of Article XII of the Charter.

(m) Parallel generation. Customers may operate all or part of their instantaneous energy or capacity needs by operation of a qualifying facility in parallel with the utility system, provided that electric service is being rendered under the special services provisions of this schedule, and provided further that such facility is constructed, operated and maintained in accordance with the provisions of the electric service rules and regulations. The credit for the energy delivered to the electric utility under this provision shall be provided at applicable Platte River Power Authority avoided cost rates. If a customer is receiving net metering service, such customer's service shall also be governed by the net metering service terms and conditions described in Subsection (r) below, and the credit for energy delivered to the electric utility shall be calculated as described in the Subsection.

(n) Commodity delivery. If the electric utility authorizes the delivery of electric capacity or energy utilizing the utility's distribution system under mandatory provisions of state or federal law, a credit will be applied to the customer's monthly electric bill based upon the electric utility's displaced costs as

credited to the utility by its supplier of electric energy. Capacity, energy, standby capacity, backup capacity and special services shall be delivered, metered, billed, dispatched and controlled in accordance with a special services agreement with the electric utility.

(o) Payment of charges. Due dates and delinquency procedures shall be as set forth in § 26-713.

(p) Contract period. The applicant shall take electric service under this or any other applicable schedule which is in effect during the term of the contract subject to adjustment from time to time by the City Council. All contracts under this schedule shall be for twelve (12) months and shall be automatically renewed annually. The contract may be terminated at the end of the term upon the giving of ten (10) days' advance written notice to the City or may be terminated upon the giving of ten (10) days' advance written notice to the City in the event of vacation of the premises or a change in ownership or tenant occupancy status.

(q) Rules and regulations. Service supplied under this schedule is subject to the terms and conditions set forth in the electric utility rules and regulations as approved by the City Council. Copies may be obtained from the Utility's Customer Service Office.

(r) Net metering.

(1) Net metering service is available to a customer-generator producing electric energy exclusively with a qualifying facility when the generating capacity of the customer-generator's qualifying facility meets the following two (2) criteria:

a. The qualifying facility is sized to supply no more than one hundred twenty (120) percent of the customer-generator's average annual electricity consumption at that site, including all contiguous property owned or leased by the customer-generator, without regard to interruptions in contiguity caused by easements, public thoroughfares, transportation rights-of-way or utility rights-of-way; and

b. The rated capacity of the qualifying facility does not exceed the customer-generator's service entrance capacity.

(2) The energy generated by an on-site qualifying facility and delivered to the utility's electric distribution facility shall be used to offset energy provided by the utility to the customer-generator during the applicable billing period.

(3) The customer-generator and electric service arrangements shall be subject to the requirements and conditions described in the City of Fort Collins Utility Services Interconnection Standards for Generating Facilities Connected to the Fort Collins Distribution System.

(4) A customer-generator who receives approval from the electric utility to obtain net metering service shall be subject to the monthly rates described above in this rate schedule section.

(5) The customer-generator's consumption of energy from the utility shall be measured on a monthly basis and, in the event that the qualifying facility has produced more electricity than the customer-generator has consumed, the customer-generator shall receive a monthly credit for such production. During the second calendar quarter of each year, the customer-generator shall receive payment for the net excess generation accrued for the preceding twelve (12) months. The credit per kilowatt hour for

the energy delivered to the electric utility under this provision shall be provided at the summer season energy charge as specified in Subsection (c) of this Section.

(Ord. No. 142, 2011, § 7, 11-1-11; Ord. No. 114, 2012, § 4, 11-6-12; Ord. No. 146, 2013, § 4, 11-5-13; Ord. No. 154, 2014, § 4, 11-18-14)

Sec. 26-468. General service 50, schedule GS50.

(a) Availability. The general service 50, schedule GS50 shall be available within the corporate limits of the City and the suburban fringe.

(b) Applicability. This schedule applies to customers served at the established secondary voltage of the City's distribution system. This schedule applies only to individual services with an average metered demand not less than fifty (50) kilowatts and not greater than seven hundred fifty (750) kilowatts.

(c) Monthly rate. The monthly rates for this schedule are as follows:

(1) Fixed charge, per account: nine dollars and forty-five cents (\$9.45). An additional charge of forty dollars and zero cents (\$40.) may be assessed if telephone communication service is not provided by the customer.

(2) Coincident demand charge, per kilowatt:

a. During the summer season billing months of June, July and August: eleven dollars and eighteen cents (\$11.18).

b. During the non-summer season billing months of January through May and September through December: seven dollars and eighty cents (\$7.80).

c. The meter reading date shall generally determine the summer season billing months; however, no customer shall be billed more than three (3) full billing cycles at the summer rate.

(3) Distribution facilities demand charge, per kilowatt: five dollars and ninety cents (\$5.90).

(4) Energy charge, per kilowatt hour:

a. During the summer season billing months of June, July and August: four and sixteen one-hundredths cents (\$0.0416).

b. During the non-summer season billing months of January through May and September through December: four and zero one-hundredths cents (\$0.0400).

c. The meter reading date shall generally determine the summer season billing months; however, no customer shall be billed more than three (3) full billing cycles at the summer rate.

(5) In lieu of taxes and franchise: a charge at the rate of six and zero-tenths (6.0) percent of all monthly service charges billed pursuant to this Section.

(d) Renewable resource. Renewable energy resources, including, but not limited to, energy generated by the power of wind, may be offered on a voluntary basis to customers at a premium of two and four-tenths cents (\$0.024) per kilowatt hour. The utility may establish and offer voluntary programs designed

to increase and enhance the use of energy generated by renewable energy resources in support of Council-adopted policy applicable to the utility.

(e) Excess capacity charge. A monthly capacity charge of two dollars (\$2.) per kilowatt may be added to the above charges for service to intermittent loads in accordance with the provisions of the electric service rules and regulations.

(f) Standby service charges. Standby service, if available, will be provided on an annual contract basis at a level at least sufficient to meet probable service demand (in kilowatts) as determined by the customer and approved by the utility according to the following:

(1) Standby distribution charge.

a. The monthly standby distribution charge shall be four dollars and seventy-two cents (\$4.72) per kilowatt of contracted standby service. This charge shall be in lieu of the distribution facilities charge. For all metered kilowatts in excess of the contracted amount, the standby distribution charge shall be fourteen dollars and sixteen cents (\$14.16) per kilowatt.

b. In the event the contractual kilowatt amount is exceeded, the beginning date of the contract period will be reset. The first month of the new contract period will become the current billing month and such month's metered demand shall become the minimum allowable contract demand for the standby service. Requests for standby service may be subject to a waiting period. An operation and maintenance charge may be added for special facilities required to provide standby service.

(2) Standby generation and transmission charge. All charges incurred by the utility under Platte River Power Authority's applicable tariffs, as may be amended from time to time, will be billed to the customer as a standby generation and transmission charge.

(g) Excess circuit charge. In the event a utility customer in this rate class desires excess circuit capacity for the purpose of controlling the available electric capacity of a backup circuit connection, this service, if available, will be provided on an annual contract basis at a level at least sufficient to meet probable backup demand (in kilowatts) as determined by the customer and approved by the utility according to the following:

(1) The excess circuit charge shall be eighty-six cents (\$0.86) per contracted kilowatt of backup capacity per month. For any metered kilowatts in excess of the contracted amount, the excess circuit charge shall be two dollars and fifty-eight cents (\$2.58) per kilowatt.

(2) In the event the contractual kilowatt limit is exceeded, a new annual contract period will automatically begin as of the month the limit is exceeded. The metered demand in the month of exceedance shall become the minimum contracted demand level for the excess circuit charge.

(h) Service charge. Service charges and connection fees shall be as set forth in Subsection 26-712(b).

(i) Conservation assistance, rebates and incentives. The utility may establish programs to assist customers or provide incentives to customers in order to reduce energy consumption or system peak demands consistent with Council-adopted policy applicable to the utility. Such programs may include financial or technical assistance, incentives or rebates and shall be consistent with program objectives approved by the Utilities Executive Director.

(j) Coincident demand. The coincident demand for any month shall be the customer's sixty-minute integrated kilowatt demand recorded at the hour coincident with the monthly system peak demand for Platte River Power Authority. The monthly system peak demand for Platte River Power Authority shall be the maximum coincident sum of the measured demands for the participating municipalities recorded during the billing month.

(k) Distribution facilities demand. The distribution facility demand charge used by the utility is designed to recover the costs of operating and maintaining the electric distribution system, including customer service and administrative functions, and it is based on a per unit rate tied to the peak demand (kW) of a customer's monthly electric use. Under the utility's billing system, cost recovery is based on a twelve-month model. Monthly billing is one-twelfth (1/12) of the annual cost recovery required for given service and the twelve-month use patterns serve as the reference base for monthly billings.

(1) The distribution facilities demand shall be determined for each point of delivery by suitable meter measurement of the highest one-hour integrated demand occurring during the billing period and shall not be less than seventy (70) percent of the highest distribution facilities demand (in kilowatts) occurring in any of the preceding eleven (11) months.

(2) If the Utilities Executive Director determines that the calculation described in Paragraph (1) above does not recover the customer's share of the actual distribution facilities costs, the customer's distribution facilities demand charge may be determined according to a billing calendar designed to fully recover said customer's share of the distribution facilities costs.

(l) Power factor adjustment. Power factor shall be determined by using watt and volt-ampere reactive measurements collected by the electric meter at the point of service. The power factor calculated from such measurements shall be the basis of billing adjustment until satisfactory correction has been made. Review shall be conducted on a monthly basis by the utility. If the power factor falls below ninety-percent lagging, a power factor adjustment may be made by increasing the coincident and distribution facilities demand by one (1) percent for each one (1) percent or fraction thereof by which the power factor is less than ninety-percent lagging. This adjustment shall be based on the power factor at the time of maximum demand as recorded during the billing period.

(m) Primary service. When service is metered under this schedule at primary voltage, a discount shall be made each month of one and one-half (1½) percent of the bill for service. Where service is taken at the City's established primary voltage and the City does not own the transformers and substations converting to secondary voltage, an additional credit of two (2) percent of the monthly bill shall be allowed.

(n) Service rights fee in certain annexed areas. A fee for defraying the cost of acquisition of service rights from Poudre Valley Rural Electric Association (PVREA) shall be charged for each service in areas annexed into the City after April 22, 1989, if such area was previously served by PVREA. The service rights fee will be collected monthly for a period of ten (10) consecutive years following the date of acquisition by the City of electric facilities in such area from PVREA. If service was previously provided by PVREA, the fee shall be twenty-five (25) percent of charges for electric power service. For services that come into existence in the affected area after date of acquisition, the fee shall be five (5) percent of charges for electric power service. In the event that the City Council has determined that a reduction of the service rights fee is justified in order to mitigate the economic impacts to a lot or parcel of land at

the time of annexation of said lot or parcel of land, the service rights fee charged pursuant to this Subsection may be reduced by the City Council pursuant to a schedule set forth in the ordinance annexing said parcel or lot. The service rights fee charged pursuant to this Subsection shall not be subject to the charge in lieu of taxes and franchise otherwise required in this Subsection.

(o) Special services. Special services or complex service arrangements that are beyond those required for service under this rate schedule may be arranged by a written services agreement that the Utilities Executive Director may negotiate and enter into on behalf of the utility. Said agreement shall establish the terms and conditions for any special services or arrangements and shall incorporate by reference the requirements of this Chapter, as applicable. Any special services agreement modifying the rates, fees or charges for said services from those set forth in this Article shall be subject to approval by the City Council in accordance with Section 6 of Article XII of the Charter.

(p) Parallel generation. Customers may operate all or part of their instantaneous energy or capacity needs by operation of a qualifying facility in parallel with the utility system, provided that electric service is being rendered under the special services provisions of this schedule, and provided further that such facility is constructed, operated and maintained in accordance with the provisions of the electric service rules and regulations. The credit for the energy delivered to the electric utility under this provision shall be provided at applicable Platte River Power Authority avoided cost rates. Parallel generation will be provided consistent with all of the requirements contained in Platte River Power Authority's Tariff Schedule 3: Parallel Generation Purchases, as may be amended from time to time. All charges incurred by the utility under this tariff will be billed to the customer. If a customer is receiving net metering service, such customer's service shall also be governed by the net metering service terms and conditions described in Subsection (u) below, and the credit for energy delivered to the electric utility shall be calculated as described in that Subsection.

(q) Commodity delivery. If the electric utility authorizes the delivery of electric capacity or energy utilizing the utility's distribution system under mandatory provisions of state or federal law, a credit will be applied to the customer's monthly electric bill based upon the electric utility's displaced costs as credited to the utility by its supplier of electric energy. Capacity, energy, standby capacity, backup capacity and special services shall be delivered, metered, billed, dispatched and controlled in accordance with a special services agreement with the electric utility.

(r) Payment of charges. Due dates and delinquency procedures shall be as set forth in § 26-713.

(s) Contract period. The applicant shall take electric service under this or any other applicable schedule which is in effect during the term of the contract, subject to adjustment from time to time by the City Council. All contracts under this schedule shall be for twelve (12) months and shall be automatically renewed annually. The contract may be terminated at the end of the term upon the giving of thirty (30) days' advance written notice to the City or may be terminated upon the giving of thirty (30) days' advance written notice to the City in the event of vacation of the premises or a change in ownership or tenant occupancy status.

(t) Rules and regulations. Service supplied under this schedule is subject to the terms and conditions set forth in the electric utility rules and regulations as approved by the City Council. Copies may be obtained from the Utility's Customer Service Office.

(u) Net metering.

(1) Net metering service is available to a customer-generator producing electric energy exclusively with a qualifying facility using a qualifying renewable technology when the generating capacity of the customer-generator's qualifying facility meets the following two (2) criteria:

a. the qualifying facility is sized to supply no more than one hundred twenty (120) percent of the customer-generator's average annual electricity consumption at that site, including all contiguous property owned or leased by the customer-generator, without regard to interruptions in contiguity caused by easements, public thoroughfares, transportation rights-of-way or utility rights-of-way; and

b. the rated capacity of the qualifying facility does not exceed the customer-generator's service entrance capacity.

(2) The energy generated by an on-site qualifying facility and delivered to the utility's electric distribution facility shall be used to offset energy provided by the utility to the customer-generator during the applicable billing period.

(3) The customer-generator and electric service arrangements shall be subject to the requirements and conditions described in the City of Fort Collins Utility Services Interconnection Standards for Generating Facilities Connected to the Fort Collins Distribution System.

(4) A customer-generator who receives approval from the electric utility to obtain net metering service shall be subject to the monthly rates described above in this rate schedule section.

(5) The customer-generator's consumption of energy from the utility shall be measured on a monthly basis and, in the event that the qualifying facility has produced more electricity than the customer-generator has consumed, the customer-generator shall receive a monthly credit for such production. During the second calendar quarter of each year, the customer-generator shall receive payment for the net excess generation accrued for the preceding twelve (12) months. The credit per kilowatt hour for the energy delivered to the electric utility under this provision shall be provided at the summer season energy charge as specified in Subsection (c) of this Section.

(Code 1972, § 112-118(F); Ord. No. 137, 1988, § 6.A—E, 10-18-88; Ord. No. 131, 1989, § 4, 10-17-89; Ord. No. 109, 1992, § 6, 11-17-92; Ord. No. 129, 1995, § 6, 11-7-95; Ord. No. 133, 1996, § 1, 11-5-96; Ord. No. 211, 1998, § 17, 12-1-98; Ord. No. 59, 1999, §§ 1, 2, 5-4-99; Ord. No. 168, 1999, § 6, 11-16-99; Ord. No. 153, 2000, § 4, 11-7-00; Ord. No. 130, 2002, §§ 33, 35, 9-17-02; Ord. No. 154, 2003, § 4, 11-18-03; Ord. No. 173, 2004, § 5, 11-16-04; Ord. No. 140, 2006, § 4, 10-3-06; Ord. No. 122, 2007, § 4, 11-20-07; Ord. No. 112, 2008, § 4, 10-21-08; Ord. 056, 2009, § 4, 6-2-09; Ord. No. 077, 2009, §§ 1, 2, 7-21-09; Ord. No. 115, 2009, § 4, 11-3-09; Ord. No. 003, 2010, § 8, 2-2-10; Ord. No. 114, 2010, § 4, 11-16-10; Ord. No. 079, 2011, § 6, 9-6-11; Ord. No. 080, 2011, § 1, 9-6-11; Ord. No. 142, 2011, §§ 7, 8, 11-1-11; Ord. No. 114, 2012, § 5, 11-6-12; Ord. No. 146, 2013, § 5, 11-5-13; Ord. No. 154, 2014, § 5, 11-18-14)

Effective upon enactment \$6.81
Effective July 1, 2008 \$7.49
Effective July 1, 2009 \$8.17

e. Selection of Rates

A customer may receive service under any of the General Service Rate Schedules, if desired, but will be ineligible for both the Lifeline Service Credit and the Low-Income Credit as set forth in Sections 4.c. and 4.d., above, and still obliged to provide Rates R-1(D) and R-1(E) to eligible Sub-metered units.

f. Posting Rates

The owner shall post, in a conspicuous place, the prevailing residential electric rate schedule published by the Department, which would be applicable to the tenants if they were individually served by the Department.

g. Tenant Billing

The owner shall provide separate written electricity bills for each tenant, including the opening and closing meter readings for each billing period, the date the meters were read, the total electricity metered for the billing period, and the amount of the bill.

SCHEDULE A-1
SMALL GENERAL SERVICE
Rate Effective July 1, 2009

1. Applicability

Applicable to General Service below 30 kW demand, the highest demand recorded in the last twelve months, including lighting and power, charging of batteries of commercial electric vehicles, which may be delivered through the same service in compliance with the Department's Rules, and to single-family residential service with an on-site transformer dedicated solely to that individual customer. Not applicable to service which parallels, and connects to, customer's own generating facilities, except as such facilities are intended solely for emergency standby.

2. Monthly Rates

| | | High Season June - Sep. | Low Season Oct. - May |
|------------------------------|----|-------------------------------|-----------------------------|
| a. Rate A | | | |
| 1 Service Charge | \$ | 6.50 | \$ 6.50 |
| 2 Facilities Charge - per kW | \$ | 5.00 | \$ 5.00 |

| | | | |
|---|-------------------------|------------------------|------------|
| 3 | Energy Charge - per kWh | \$ 0.06558 | \$ 0.04268 |
| 4 | ECA - per kWh | See General Provisions | |
| 5 | ESA - per kW | See General Provisions | |
| 6 | RCA - per kW | See General Provisions | |

b. Rate B - Time-of-Use

| | | | |
|---|-------------------------------------|------------------------|-------------|
| 1 | Service Charge | \$ 15.00 | \$ 15.00 |
| 2 | Facilities Charge - per kW | \$ 5.00 | \$ 5.00 |
| 3 | Energy Charge - per kWh | | |
| | High Peak Period | \$ 0.16385 | \$ 0.05854 |
| | Low Peak Period | \$ 0.10256 | \$ 0.05854 |
| | Base Period | \$ 0.03122 | \$ 0.03122 |
| 4 | Electric Vehicle Discount - per kWh | \$(0.02500) | \$(0.02500) |
| 5 | ECA - per kWh | See General Provisions | |
| 6 | ESA - per kW | See General Provisions | |
| 7 | RCA - per kW | See General Provisions | |

3. Billing

The bill under Rate A shall be the sum of parts (1) through (6). The bill under Rate B shall be the sum of parts (1) through (7).

4. General Conditions

a. Facilities Charge

The Facilities Charge shall be based on the highest demand recorded in the last 12 months, but not less than 4 kW.

b. Selection of Rates

- (1) The Department requires mandatory service under Rate B for single-family residential service with an on-site transformer dedicated solely to that individual customer.
- (2) If a customer is not a single-family residential service with an on-site transformer dedicated solely to that individual customer in accordance with conditions as set forth in Section 4.b.(1), above, a customer may choose to receive service either under Rate A or B. However, when a customer served under Rate B requests a change to Rate A, that customer may not revert to Rate B before 12 months have elapsed.
- (3) The customer shall be placed on Schedule A-2 or A-3 whose Maximum Demand either:
 - Reaches or exceeds 30 kW in any three billing months or two bimonthly billing periods during the preceding 12 month period

- Reaches or exceeds 30 kW during two High Season billing months or one High Season bimonthly billing period within a calendar year

c. Electric Vehicle Discount

Owners of licensed passenger or commercial electric vehicles shall be entitled to a discount on the block of energy designated by the Department as necessary for basic vehicle charging. Proof of vehicle registration and charging location is required.

SCHEDULE A-2

PRIMARY SERVICE

Rate Effective July 1, 2009

1. Applicability

Applicable to General Service delivered from the Department's 4.8kV system and 30kW demand or greater, the highest demand recorded in the last twelve months, including lighting and power, charging of batteries of commercial electric vehicles, which may be delivered through the same service in compliance with the Department's Rules, and to single-family residential service with an on-site transformer dedicated solely to that individual customer. Not applicable to service which parallels, and connects to, the customer's own generating facilities, except as such facilities are intended solely for emergency standby.

2. Monthly Rates

| | High Season June - Sep. | Low Season Oct. - May |
|-------------------------------------|-------------------------------|-----------------------------|
| a. Rate A - Standard Service | | |
| 1 Service Charge | \$ 25.00 | \$ 25.00 |
| 2 Facilities Charge - per kW | \$ 5.00 | \$ 5.00 |
| 3 Demand Charge - per kW | \$ 9.00 | \$ 5.50 |
| 4 Energy Charge - per kWh | \$ 0.03645 | \$ 0.02995 |
| 5 ECA - per kWh | See General Provisions | |
| 6 ESA - per kW | See General Provisions | |
| 7 RCA - per kW | See General Provisions | |
| b. Rate B - Time-of-Use | | |
| 1 Service Charge | \$ 28.00 | \$ 28.00 |
| 2 Facilities Charge - per kW | \$ 5.00 | \$ 5.00 |
| 3 Demand Charge - per kW | | |
| High Peak Period | \$ 9.00 | \$ 4.25 |

| | | | |
|---|---|----------------------------|---------------------|
| | Low Peak Period | \$ 3.25 | \$ - |
| | Base Period | \$ - | \$ - |
| 4 | Energy Charge - per kWh | | |
| | High Peak Period | \$ 0.04679 | \$ 0.04045 |
| | Low Peak Period | \$ 0.03952 | \$ 0.04045 |
| | Base Period | \$ 0.01879 | \$ 0.02252 |
| 5 | Electric Vehicle Discount - per kWh | \$(0.02500) | \$ 0.02500) |
| 6 | ECA - per kWh | See General Provisions | |
| 7 | ESA - per kW | See General Provisions | |
| 8 | RCA - per kW | See General Provisions | |
| 9 | Reactive Energy Charge (Applied if demand as determined for the Facilities Charge is greater than 250 kW) | | |
| | a. Unmetered - per kWh | | |
| | High Peak Period | \$ 0.00026 | \$ 0.00023 |
| | Low Peak Period | \$ 0.00017 | \$ 0.00023 |
| | Base Period | \$ 0.00011 | \$ 0.00014 |
| | b. Metered - per kvarh per Power Factor level below | | |
| | | High Season - (June - Sep) | |
| | Power Factor Range | High Peak | Low Peak Base |
| | 0.995-1.000 | \$ - | \$ - \$ - |
| | 0.950-0.994 | \$0.00088 | \$0.00059 \$0.00036 |
| | 0.900-0.949 | \$0.00167 | \$0.00113 \$0.00058 |
| | 0.800-0.899 | \$0.00509 | \$0.00339 \$0.00153 |
| | 0.700-0.799 | \$0.00853 | \$0.00571 \$0.00254 |
| | 0.600-0.699 | \$0.01185 | \$0.00787 \$0.00351 |
| | 0.000-0.599 | \$0.01293 | \$0.00859 \$0.00383 |
| | | Low Season - (Oct - May) | |
| | Power Factor Range | High Peak | Low Peak Base |
| | 0.995-1.000 | \$ - | \$ - \$ - |
| | 0.950-0.994 | \$0.00076 | \$0.00076 \$0.00043 |
| | 0.900-0.949 | \$0.00145 | \$0.00145 \$0.00070 |
| | 0.800-0.899 | \$0.00439 | \$0.00439 \$0.00183 |
| | 0.700-0.799 | \$0.00737 | \$0.00737 \$0.00305 |
| | 0.600-0.699 | \$0.01023 | \$0.01023 \$0.00421 |
| | 0.000-0.599 | \$0.01116 | \$0.01116 \$0.00460 |

3. Billing

The bill under Rate A shall be the sum of parts (1) through (7). The bill under Rate B shall be the sum of parts (1) through (9).

4. General Conditions

a. Demand Charge

The Demand Charge under Rate A-2(A) shall be based on the Maximum Demand recorded at any time during the billing month. The Demand Charge under Rate A-2(B) shall be based on the Maximum Demands recorded within the applicable Rating Periods during the billing month.

b. Facilities Charge

The Facilities Charge shall be based on the highest demand recorded in the last 12 months, but not less than 30 kW.

c. Selection of Rates

(1) The Department requires mandatory service under Rate B for customers whose Maximum Demand reach or exceed the demand levels below in any three billing months during the preceding 12 month period, or whose Maximum Demand reach or exceed the demand levels below during two High Season billing months within a calendar year:

- 75 kW effective January 1, 2009
- 50 kW effective January 1, 2010
- 30 kW effective January 1, 2011

(2) If a customer's monthly Maximum Demand does not reach or exceed the demand levels in accordance with conditions as set forth in Section 4.c.(1), above, a customer may choose to receive service either under Rate A or B. However, when a customer served under Rate A requests a change to Rate B, that customer may not revert to Rate A before 12 months have elapsed.

(3) Customers shall be placed on the applicable rate under Schedule A-1 if demand, as determined for the Facilities Charge, drops below 30 kW. Rate A-2(A) shall expire on December 31, 2011.

d. Electric Vehicle Discount

Owners of licensed passenger or commercial electric vehicles shall be entitled to a discount on the block of energy designated by the Department as necessary for basic vehicle charging. Proof of vehicle registration and charging location is required.

e. Reactive Energy Charge

Reference Schedule A-3, Section 4.a.

PEDERNALES ELECTRIC COOPERATIVE, INC. TARIFF

Delivery Charge [This rate shall become effective December 1, 2014]: \$0.02712 per KWH

Base Power Cost: The per kWh base power costs for Power Supply Charges stated in the Power Cost Recovery (PCR) Tariff

Power Cost Adjustment: The charge per kWh for changes in Power Supply Charges relative to the base power cost and calculated in accordance with the Power Cost Recovery (PCR) Tariff

The monthly bill shall be the sum of the above charges plus any applicable fees.

100.2 Water Well (W)

Applicability - Applicable to water wells used solely for small scale agricultural purposes. Agricultural purposes include livestock watering, crop irrigation, and fisheries. Irrigation for recreational purposes is served under other Tariffs.

Rates

Service Availability Charge: \$19.50 per month

Delivery Charge [This rate shall become effective December 1, 2014]: \$0.02712 per KWH

Base Power Cost: The per kWh base power costs for Power Supply Charges stated in the Power Cost Recovery (PCR) Tariff

Power Cost Adjustment: The charge per kWh for changes in Power Supply Charges relative to the base power cost and calculated in accordance with the Power Cost Recovery (PCR) Tariff

The monthly bill shall be the sum of the above charges plus any applicable fees.

100.3 Small Power (SP)

Applicability - Applicable to all commercial and industrial members whose rolling 12-month average demand is less than 75 kilowatts and whose use is not covered by another specific rate schedule. Member owned street lighting will also be billed under the Small Power Rate.

Rates

Service Availability Charge: \$37.50 per month

Delivery Charge [This rate shall become effective December 1, 2014]: \$0.02101 per KWH

Base Power Cost: The per kWh base power costs for Power Supply Charges stated in the Power Cost Recovery (PCR) Tariff

Power Cost Adjustment: The charge per kWh for changes in Power Supply Charges relative to the base power cost and calculated in accordance with the Power Cost Recovery (PCR) Tariff

The monthly bill shall be the sum of the above charges plus any applicable fees.

100.4 Large Power (LP)

Applicability - Applicable to all commercial and industrial members whose rolling 12-month average demand is 75 kilowatts but less than 10,000 kilowatts, and whose use is not covered by another specific rate schedule.

Rates

Service Availability Charge: \$150.00 per month

Electricity Facts Label
Reliant Energy Retail Services, LLC
Reliant Rockets Secure Advantage 12 plan
CenterPoint Energy service area
Issue Date: 10/14/2014

Electricity price

| | | | |
|------------------------|---------|----------|----------|
| Average monthly use: | 500 kWh | 1000 kWh | 2000 kWh |
| Average price per kWh: | 15.2¢ | 12.4¢ | 11.9¢ |

This price disclosure is based on the following components:

Usage Charge: \$9.95 per billing cycle < 800 kWh

\$0.00 per billing cycle ≥ 800 kWh

Energy Charge: 7.4¢ per kWh

CenterPoint Energy Delivery Charges: \$8.52 per month and 4.0981¢ per kWh

CenterPoint Energy Delivery Charges include all recurring charges from CenterPoint Energy passed through without mark-up

This price disclosure is an example based on average prices - your average price for electricity service will vary according to your usage. The price you pay each month will consist of the Usage Charge, Energy Charge, and CenterPoint Energy Delivery Charges. The Usage Charge will not be included for each billing cycle in which your usage is 800 kilowatt hours (kWh) or more.

Other Key Terms and questions

See Terms of Service statement for full listing of fees, deposit policy, and other terms.

Disclosure Chart

| | |
|--|---|
| Type of Product | Fixed Rate |
| Contract Term | 12 months |
| Do I have a termination fee or any fees associated with terminating service? | Yes. \$150. Applies through the end of the contract term. This fee does not apply if the customer moves, and provides a forwarding address and other evidence that may be requested to verify that the customer moved. |
| Can my price change during the contract period? | Yes |
| If my price can change, how will it change and by how much? | The price can change to reflect actual price changes that are allowed by Public Utility Commission rules due to changes in law or regulatory charges after the Issue Date. |
| What other fees may I be charged? | Fees not included in the price above: Disconnect Notice Fee: \$10; Returned Payment Charge: \$25; Disconnect Recovery: \$25; Service Processing Fee: up to \$5.95; Late Payment Penalty: 5% of past due balances; Information on other non-recurring fees is available in the pricing section of your Terms of Service. |
| Is this a pre-pay or pay in advance product? | No |
| Does Reliant purchase excess distributed renewable generation? | Yes |
| Renewable Content | This product is 6% renewable. |
| Statewide average for renewable content | The statewide average for renewable content is 11%. |

Reliant, PO Box 3765, Houston, TX, 77253

reliant.com, e-mail: service@reliant.com, phone: 1-866-RELIANT, 24 hours a day / 7 days a week

PUCT Certificate Number #10007

R1F00110199285a

General Service Rate Schedule GS

I. Applicability

This Rate Schedule 1-GS applies to single- or three-phase nonresidential general service delivered at standard voltages designated by SMUD as available at the customer's premise. This schedule is mandatory for all commercial and industrial (C&I) accounts with monthly maximum demand that does not exceed 299 kW for three or more consecutive months. This schedule also applies to General Service accounts with contract capacity of 299 kW or less. The demand for any month shall be the maximum 15-minute kW delivery during the month. For the purposes of this schedule a "month" is considered to be a single billing period of 27 to 34 days.

A. Small Nondemand Service (GSN_T)

This rate applies to General Service accounts with a monthly maximum demand of 20 kW or less. Whenever the monthly maximum demand exceeds 20 kW for *any* three consecutive months and the monthly energy usage is at least 7,300 kWh for *any* three consecutive months within a 12-month period, the account will be billed on the applicable demand rate. To return to the nondemand rate, the monthly maximum demand must be 20 kW or less for 12-consecutive months or the usage must be less than 7,300 kWh for 12 consecutive months.

B. Small Nondemand, Nonmetered Service (GFN)

This rate applies to General Service accounts where an account's monthly consumption of electricity is consistently small or can be predetermined with reasonable accuracy by reference to the capacity of equipment served and the hours of operation. SMUD, at its discretion, and with the customer's consent, will calculate electricity consumed in lieu of providing metering equipment. The calculated electricity consumption will be billed at the average of the GSN_T rate's annual electricity usage charges.

C. Small Demand Service (GSS_T)

This rate applies to General Service accounts with a monthly maximum demand of at least 21 kW but does not exceed 299 kW for *any* three consecutive months and monthly energy usage of at least 7,300 kWh for *any* three consecutive months within a 12-month period. The customer will be billed on this demand rate unless the monthly usage is less than 7,300 for 12 consecutive months; or the maximum demand falls below 21 kW for 12 consecutive months or the monthly maximum demand exceeds 299 kW for three consecutive months.

II. Firm Service Rates

| Rate Category | Nondemand GSN_T | Flat GFN | Demand GSS_T |
|---|--------------------|-------------|-----------------|
| Winter Season - October 1 through May 31 | | | |
| System Infrastructure Fixed Charge - per month per meter | \$16.00 | \$8.45 | \$23.10 |
| Site Infrastructure Charge <i>(per 12 months max kW or contract capacity)</i> | n/a | n/a | \$7.14 |
| Electricity Usage Charge | | | |
| All day \$/kWh | \$0.1266 | \$0.1278 | \$0.0962 |
| Summer Season - June 1 through September 30 | | | |
| System Infrastructure Fixed Charge - per month per meter | \$16.00 | \$8.45 | \$23.10 |
| Site Infrastructure Charge <i>(per 12 months max kW or contract capacity)</i> | n/a | n/a | \$7.14 |
| Electricity Usage Charge | | | |
| On-peak \$/kWh | \$0.2862 | \$0.1278 | \$0.2455 |
| Off-peak \$/kWh | \$0.1075 | \$0.1278 | \$0.0852 |

III. Electricity Usage Surcharges

Refer to the following rate schedules for details on these surcharges:

- A. Solar Surcharge. Refer to Rate Schedule 1-SB1.
- B. Hydro Generation Adjustment (HGA). Refer to Rate Schedule 1-HGA.

General Service Rate Schedule GS

IV. Rate Option Menu

A. **Energy Assistance Program for Nonprofit Agencies.** Refer to Rate Schedule 1-EAPR.

B. **Campus Rates.** Refer to Rate Schedule 1-CB.

C. **Implementation of Energy Efficiency Program or Installation of New Solar/Photovoltaic Systems**

Customers who implement a SMUD-sponsored Energy Efficiency program or who install a SMUD-approved solar/photovoltaic system to offset their on-site energy usage may request, in writing, within 30 days of the project completion and commissioning, an adjustment to their billing demand based on the anticipated reduction in kW from the Energy Efficiency Project Worksheet. The adjusted billing demand is valid for 12 months or until it is exceeded by actual maximum demand.

D. **Generator Standby Service Option**

Generator Standby Service applies when the following conditions are met:

1. The customer has generation, sited on the customer premise, that serves all or part of the customer's load; and
2. The generator(s) are not fueled by a renewable resource; and
3. The generator(s) are connected to SMUD's electrical system; and
4. SMUD is required to have resources available to provide supplemental service, backup electricity and/or to supply electricity during generator(s) maintenance service.

| Generator Standby Service Charge by Voltage Level (\$/kW of Contract Capacity per month) | Secondary | Primary | Subtransmission |
|---|-----------|---------|-----------------|
| | \$6.25 | \$4.95 | \$2.50 |

In addition to the Generator Standby Service Charge, SMUD will continue to bill for all applicable charges under this rate schedule, including, but not limited to, System Infrastructure Fixed Charges, Site Infrastructure Charges, and electricity usage charges for SMUD-provided power.

The Generator Standby Service Charge will be waived for qualifying net metered generation. Refer to Rate Schedule 1-NEM.

E. **Net Energy Metering Option.** Refer to Rate Schedule 1-NEM.

F. **Green Pricing Options**

1. **SMUD Community Solar Option**

Under this premium service option, customers elect to contribute monthly payments toward the installation of a photoelectric system at a selected community locale. Refer to the SMUD website, www.smud.org, for further information on monthly contribution options and projects.

2. **SMUD Renewable Energy Option**

Customers electing this premium power service will receive an additional charge for monthly energy of no less than 1/2 cent and no greater than 2 cents per kWh. SMUD may offer up to three premium rate options representing various blends of renewable resources and/or renewable energy credits within the 1/2 cent to 2 cent range. The actual prices will be published each November and will be based on the expected above market cost of renewable resources for the upcoming year. Participation will be limited to the amount of resources that SMUD is able to secure at or below the 2 cent premium limit.

G. **Special Metering Charge**

For customers who purchase and install additional equipment and software identified by SMUD meter specialists as necessary for load data collection and transfer to electronic media outside SMUD, SMUD will charge a monthly service fee to cover maintenance, software support and licensing fees. Payment for this nonstandard equipment and service will be made through

SACRAMENTO MUNICIPAL UTILITY DISTRICT
Resolution No. 13-08-01 adopted August 15, 2013

Sheet No. 1-GS-2
Effective: January 1, 2015
Edition: January 1, 2015

General Service Rate Schedule GS

provisions in Rule and Regulation 2, Section IV. Special Facilities. The fee schedule is available at SMUD's website, www.smud.org.

V. Conditions of Service

A. Type of Electric Service

SMUD will provide customers on this rate schedule standard, firm service consisting of a continuous and sufficient supply of electricity.

B. Service Voltage Definition

The following defines the three voltage classes available. The rate will be determined by the voltage level at which service is provided according to the following:

1. *Secondary Service Voltage*
This service class provides power at voltage levels below 12 kilo-Volts (kV), or at a level not otherwise defined as "Primary" or "Subtransmission."
2. *Primary Service Voltage*
This service class provides power at a voltage level of 12 kV or 21 kV. To be eligible for Primary Service Voltage, the customer's monthly demand must exceed 299 kW, the voltage must be available in the area being served, and SMUD must approve the arrangement for power provision.
3. *Subtransmission Service Voltage*
This subtransmission service class provides power at a voltage level of 69 kV or as otherwise defined by SMUD. To be eligible for voltage service at this level, the customer's monthly demand must exceed 499 kW, the voltage must be available in the area being served, and SMUD must approve the arrangement for power provision.

C. Power Factor Adjustment or Waiver

1. Adjustment (charge per month varies)

Accounts on a demand rate may be subject to a power factor (PF) adjustment charge. When a customer's monthly power factor falls below 95 percent leading or lagging, the following billing adjustment will apply:

Electricity Usage x [(95% ÷ Power Factor) - 1] x Power Factor Adjustment Rate

Electricity Usage: the total monthly kWh for the account

Power Factor: the lesser of the customer's monthly power factor or 95 percent

Power Factor Adjustment Rate per excess KVAR\$0.0103

2. Waiver Contract (charge per month is set for the term of the waiver)

Customers may apply for a power factor waiver contract that compensates SMUD for the power factor correction for the portion that is covered under the contract.

The waiver amount per month is calculated:

Excess KVAR x Waiver Rate

Excess KVAR: Maximum 12-month KVAR in excess of 32.868 percent of kW

Waiver Rate per excess KVAR \$0.2719

D. Winter (October 1 – May 31) All hours are off-peak.

SACRAMENTO MUNICIPAL UTILITY DISTRICT
Resolution No. 13-08-01 adopted August 15, 2013

Sheet No. 1-GS-3
Effective: January 1, 2015
Edition: January 1, 2015

General Service Rate Schedule GS

E. Summer Time-of-Use Billing Periods (June 1 – September 30)

| | |
|-----------------|---|
| On-Peak | Summer weekdays between 3:00 p.m. and 6:00 p.m. |
| Off-Peak | All other hours, including holidays shown below |

Off-peak pricing shall apply during the following holidays:

| <u>Holiday</u> | <u>Month</u> | <u>Date</u> |
|----------------------------|--------------|-----------------|
| New Year's Day | January | 1 |
| Martin Luther King Jr. Day | January | Third Monday |
| Lincoln's Birthday | February | 12 |
| Presidents Day | February | Third Monday |
| Memorial Day | May | Last Monday |
| Independence Day | July | 4 |
| Labor Day | September | First Monday |
| Columbus Day | October | Second Monday |
| Veterans Day | November | 11 |
| Thanksgiving Day | November | Fourth Thursday |
| Christmas Day | December | 25 |

VI. Billing

A. Meter Data

Meter data for service rendered in accordance with this rate will not be combined for billing purposes unless SMUD determines it is necessary or convenient to do so.

B. Proration of Charges

Charges are prorated when the billing period is less than 27 days, more than 34 days or spans more than one season. The System Infrastructure Fixed Charge and Site Infrastructure Charge will be prorated as shown in the following table.

| Billing Circumstance | Basis for Proration |
|-------------------------------------|--|
| Bill period is shorter than 27 days | Relationship between the length of the billing period and 30 days. |
| Bill period is longer than 34 days | |
| Seasons overlap within bill period | Relationship between the length of the billing period and the number of days that fall within the respective season. |

C. Contract Capacity

Use of Contract Capacity for billing is at SMUD's sole discretion. Refer to Rule and Regulation 1 and Rule and Regulation 6.

D. Discontinuance of Service

Any customer resuming service at the same premise within 12 months after discontinuing service will be required to pay the System Infrastructure Fixed Charges and Site Infrastructure Charges that would have been billed if service had not been discontinued, except when a customer agrees to lock out service during the full period. The System Infrastructure Fixed Charge and Site Infrastructure Charge will be waived during each of those months. Retroactive billing shall be at SMUD's sole discretion.

(End)

Electricity Facts Label (EFL)
TXU Energy Retail Company LLC
TXU Energy Business Monthly Saver 36SM
Oncor Electric Delivery
January 29, 2015

| | | | | | | | | | | | |
|--|---|--|-----------|---------------------|----------|----------|----------|-----------------------|-------|-------|-------|
| Electricity Price | <table><tr><td>Average Monthly Use</td><td>1500 kWh</td><td>2500 kWh</td><td>3500 kWh</td></tr><tr><td>Average price per kWh</td><td>14.3¢</td><td>15.5¢</td><td>15.2¢</td></tr></table> | | | Average Monthly Use | 1500 kWh | 2500 kWh | 3500 kWh | Average price per kWh | 14.3¢ | 15.5¢ | 15.2¢ |
| | Average Monthly Use | 1500 kWh | 2500 kWh | 3500 kWh | | | | | | | |
| | Average price per kWh | 14.3¢ | 15.5¢ | 15.2¢ | | | | | | | |
| | Average Price per kWh during the Discount ⁽¹⁾ period | | | | | | | | | | |
| | <table><tr><td></td><td>10.9¢</td><td>13.5¢</td><td>13.8¢</td></tr></table> | | | | 10.9¢ | 13.5¢ | 13.8¢ | | | | |
| | | 10.9¢ | 13.5¢ | 13.8¢ | | | | | | | |
| | The average prices per kWh above are based on the specified monthly kWh consumption using a Billing Demand of 7 kW for 1,500 kWh, 11kW for 2,500 kWh, and 16kW for 3,500 kWh and a 30% load factor. Your average price per kWh for electric service will depend on your usage and the following pricing components: | | | | | | | | | | |
| | Base Charge | Per ESI ID: | Per Month | | | | | | | | |
| | | | \$9.95 | | | | | | | | |
| | Energy Charge | All kWh | per kWh | | | | | | | | |
| | | 10.1000¢ | | | | | | | | | |
| TDU Delivery Charges: | | | | | | | | | | | |
| Other Key Terms and Questions | Transmission and Distribution Utility ("TDU") Charges for delivering electricity will be passed through to customer with no increase or markup. For updated TDU delivery charge factors go to txu.com/tduchargesbiz . | | | | | | | | | | |
| | Average prices per kWh listed above do not include facility relocation fees or other charges ordered by a municipality. For more information, see txu.com/municipalfees . | | | | | | | | | | |
| | Sign-in at 'MyAccount' on txu.com for details or call 1-888-399-5501. | | | | | | | | | | |
| | You will receive a discount consisting of a Monthly Savings bill credit of \$25 on your bill when usage in a month falls between 500-799 kWh or a total of \$50 when your monthly usage is equal to or greater than 800 kWh. | | | | | | | | | | |
| Disclosure Chart | Each month you will also be billed all taxes, including sales tax and reimbursement for the state miscellaneous gross receipts tax as applicable. | | | | | | | | | | |
| | See Terms of Service Agreement for a full listing of fees, deposit policy, and other terms. | | | | | | | | | | |
| | Type of Product | Fixed Rate | | | | | | | | | |
| | Contract Term | 36 Months | | | | | | | | | |
| | Do I have a termination fee or any fees associated with terminating service? | Yes Early cancellation fee is the greater of one-sixth of the estimated billing for the remainder of the term for electric service per ESI ID, or \$300.00 per ESI ID. | | | | | | | | | |
| | Can my price change during the contract period? | Yes | | | | | | | | | |
| | If my price can change, how will it change, and by how much? | TXU Energy believes that customers should be fully informed about their price. Your price will not change during the term of this plan except in the limited circumstances of changes made to reflect actual changes in TDU Delivery Charges; changes to the Electric Reliability Council of Texas or Texas Regional Entity administrative fees charged to loads; or changes resulting from federal, state, or local laws that impose new or modified fees or costs that are beyond our control. | | | | | | | | | |
| | What other fees may I be charged? | See Pricing and Fees Section of your Terms of Service Agreement for non-recurring fees. | | | | | | | | | |
| Is this a pre-pay or pay in advance product? | | | | | | | | | | | |
| No | | | | | | | | | | | |

| | | |
|--------------------------|---|--|
| | Does the REP purchase excess distributed renewable generation? | No |
| | Renewable Content | This product is 9 % renewable |
| | The statewide average for renewable content is | 11% |
| | TXU Energy Retail Company LLC P.O. Box 650764, Dallas, TX 75265-0764 972-791-2830 or 1-888-399-5501 (toll free) M-F 7a-7p; Sat 8a-5p CT E-mail address: txuenergy@txu.com Website: txu.com | REP Certificate No. 10004 Version: ALBIZMOSVR36AB January 29, 2015 V20140211 |
| Additional Detail | For an explanation of how your Billing Demand is determined, see the Pricing and Fees section of your Terms of Service Agreement. | |

COMMERCIAL GREATER THAN 10kW CHARGE

| Description (Online): Updated February 2015 | Charge Type by TDU: | | | | | | |
|--|---------------------|-----------------------|--------------------|-------------------|-------------------|------------------------|----------------------|
| | ONCOR | CenterPoint Energy | AEP TX Central | AEP TX North | TNMP | Sharyland Utilities | Sharyland McAllen |
| Per Month Charges: | | | | | | | |
| Customer Charge | \$6.80 | \$2.26 | \$3.26 | \$4.25 | \$2.56 | \$16.71 | \$26.52 |
| Metering Charge | \$22.14 | \$18.82 | \$15.81 | \$18.68 | \$10.74 | \$24.53 | \$15.81 |
| Energy Efficiency Cost Recovery Factor | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Energy Efficiency Cost Recovery Factor - Remand Surcharge | \$0 | \$2.5781 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Advanced Metering Cost Recovery Factor | \$3.98 | \$3.16 | \$2.05 | \$1.46 | \$13.63 | \$0 | \$0 |
| Total Per Month Charges: | \$32.92 | \$26.8181 | \$21.12 | \$24.39 | \$26.93 | \$41.24 | \$42.33 |
| Per kWh Charges: | | | | | | | |
| Transition Charge (TC2) | \$0 | \$0.002695 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Transition Charge (TC3) | \$0 | \$0.001375 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Transition Charge (TC5) | \$0 | \$0.001302 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Rate Case Expense Surcharge 2 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Energy Efficiency Cost Recovery Factor | \$0.000525 | \$0.000601 | \$0.000398 | \$0.000405 | \$0.000619 | \$0.000516 | \$0.000516 |
| Total Consumptions Charges Per kWh: | \$0.000525 | \$0.0005973 | \$0.000398 | \$0.000405 | \$0.000619 | \$0.000516 | \$0.000516 |
| Per kW Charges: | | | | | | | |
| Transmission System Charge | \$0 | \$1.431800 | \$1.286000 | \$1.245000 | \$0 | \$0 | \$1.790000 |
| Distribution System Charge | \$4.380000 | \$3.059429 | \$3.314000 | \$3.210000 | \$6.098100 | \$12.290000 | \$6.950000 |
| Nuclear Decommissioning Fee | \$0.044000 | \$0.001828 | \$0.003884 | \$0 | \$0 | \$0 | \$0 |
| Transmission Cost Recovery Factor | \$3.481646 | \$1.104613 | \$1.634057 | \$1.181748 | \$2.833359 | \$2.308039 | \$3.831282 |
| Transition Charge (TC1) | \$0.172000 | \$0 | \$0.912719 | \$0 | \$0 | \$0 | \$0 |
| Transition Charge (TC2) | \$0.267000 | \$0 | \$2.243617 | \$0 | \$0 | \$0 | \$0 |
| Transition Charge (TC3) | \$0 | \$0 | \$0.863688 | \$0 | \$0 | \$0 | \$0 |
| Transition Charge (TC5) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Power Cost Recovery Factor Reconciliation | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Rate Case Expense Surcharge | \$0 | \$0 | \$0 | \$0 | \$0 | \$0.280000 | \$0 |
| Rate Case Expense Surcharge 2 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Rate Case Expense Surcharge 3 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Rate Case Surcharge (RCE-R) | \$0.011400 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Storm Recovery Charge | \$0 | \$0.099644 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Storm Recovery Tax Credit | \$0 | (\$0.031644) | \$0 | \$0 | \$0 | \$0 | \$0 |
| Energy Efficiency Cost Recovery Factor | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Competition Transition Charge | \$0 | \$0 | \$0 | \$0 | \$0.451940 | \$0.110000 | \$0 |
| Hurricane Cost Recovery Factor | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total Per kW Charges: | \$8.356046 | \$5.665670 | \$10.257965 | \$5.636748 | \$9.383399 | \$14.988039 | \$12.571282 |

COMMERCIAL LESS THAN 10kW CHARGE

| Description (Online): Updated February 2015 | Charge Type by TDU: | | | | | |
|---|---------------------|-----------------------|-------------------|-------------------|-------------------|------------------------|
| | ONCOR | CenterPoint Energy | AEP TX Central | AEP TX North | TNMP | Sharyland Utilities |
| Per Month Charges: | | | | | | |
| Customer Charge | \$1.71 | \$1.61 | \$3.20 | \$4.25 | \$2.50 | \$9.53 |
| Metering Charge | \$5.19 | \$4.41 | \$3.68 | \$7.50 | \$2.20 | \$13.17 |
| Energy Efficiency Cost Recovery Factor | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Energy Efficiency Cost Recovery Factor - Remand Surcharge | \$0 | \$0.0476 | \$0 | \$0 | \$0 | \$0 |
| Advanced Metering Cost Recovery Factor | \$2.39 | \$3.14 | \$4.17 | \$4.40 | \$8.20 | \$0 |
| Total Per Month Charges: | \$9.29 | \$9.2076 | \$11.05 | \$16.15 | \$12.90 | \$22.70 |
| Per kWh Charges: | | | | | | |
| Transmission System Charge | \$0 | \$0.004437 | \$0.002512 | \$0.003148 | \$0 | \$0 |
| Distribution System Charge | \$0.020109 | \$0.012218 | \$0.015489 | \$0.031948 | \$0.033323 | \$0.044779 |
| Nuclear Decommissioning Fee | \$0.000146 | \$0.000007 | \$0.000017 | \$0 | \$0 | \$0 |
| Transmission Cost Recovery Factor | \$0.006736 | \$0.004879 | \$0.003601 | \$0.004939 | \$0.013736 | \$0.009282 |
| Transition Charge (TC1) | \$0.000480 | \$0 | \$0.008508 | \$0 | \$0 | \$0 |
| Transition Charge (TC2) | \$0.000798 | \$0.002695 | \$0.017463 | \$0 | \$0 | \$0 |
| Transition Charge (TC3) | \$0 | \$0.001375 | \$0.008207 | \$0 | \$0 | \$0 |
| Transition Charge (TC5) | \$0 | \$0.001302 | \$0 | \$0 | \$0 | \$0 |
| Power Cost Recovery Factor Reconciliation | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Rate Case Expense Surcharge | \$0 | \$0 | \$0 | \$0 | \$0 | \$0.001055 |
| Rate Case Expense Surcharge 2 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Rate Case Expense Surcharge 3 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Rate Case Surcharge (RCE-R) | \$0.000067 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Storm Recovery Charge | \$0 | \$0.001349 | \$0 | \$0 | \$0 | \$0 |
| Storm Recovery Tax Credit | \$0 | (\$0.000574) | \$0 | \$0 | \$0 | \$0 |
| Energy Efficiency Cost Recovery Factor | \$0.000437 | (\$0.000097) | \$0.000511 | \$0.000284 | \$0.008816 | \$0.000516 |
| Competition Transition Charge | \$0 | \$0 | \$0 | \$0 | \$0.003090 | \$0.000505 |
| Hurricane Cost Recovery Factor | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total Per kWh Charges: | \$0.028773 | \$0.027591 | \$0.056308 | \$0.040319 | \$0.058965 | \$0.056137 |

Also see our [Glossary of Invoicing Terms](#).

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