

BEFORE THE CORPORATION COMMISSION OF OKLAHOMA

IN THE MATTER OF THE APPLICATION OF)
OKLAHOMA GAS AND ELECTRIC COMPANY)
FOR AN ORDER OF THE COMMISSION) CAUSE NO. PUD 201100087
AUTHORIZING APPLICANT TO MODIFY ITS)
RATES, CHARGES, AND TARIFFS FOR RETAIL)
ELECTRIC SERVICE IN OKLAHOMA)

Direct Testimony

of

Gregory W. Tillman

on behalf of

Oklahoma Gas and Electric Company

July 28, 2011

1 Q. **Have you previously filed testimony before the Oklahoma Corporation Commission**
2 **(the “Commission” or “OCC”)?**

3 A. No, I have not filed testimony in the Oklahoma jurisdiction. However, I did file
4 testimony in OG&E’s most recent Arkansas rate case, Docket No. 10-067-U.
5

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

7 A. The purpose of my testimony is to sponsor OG&E’s Proof of Revenue (Schedule M-4),
8 proposed rate design and updated tariffs (Schedule N). I also sponsor several of the
9 Company’s proposed tariffs, including a new dynamic pricing program for our Public
10 Schools Demand, Power and Light and Large Power and Light customers. I begin my
11 testimony by providing an overview of the role of the pricing department with respect to
12 the rate case filing and explain the rate design process.
13

14 **PRICING RESPONSIBILITIES**

15 Q. **What are the Pricing department’s responsibilities in preparing the rate case filing?**

16 A. The pricing department’s primary duties in the rate case preparation are to: develop the
17 pro forma revenue adjustments to test year actual sales data; determine the corresponding
18 revenue from current rates; allocate the new revenue requirements to each rate class;
19 design the proposed rate structures and prices to ensure the recovery of the proposed
20 revenue requirement; develop new pricing products and update the tariffs, including the
21 terms and conditions of service, as necessary.
22

23 **PRO FORMA REVENUE ADJUSTMENTS**

24 Q. **What is the purpose of the pro forma revenue adjustments to test year actual sales**
25 **data?**

26 A. Test year data are adjusted to ensure that rates are designed to reflect the representative
27 revenues and expenses which are expected to occur in a normal, ongoing year of
28 operations. The results of these adjustments are typically referred to as the *pro forma*
29 *year* data.

1 Q. **What are the typical types of adjustments used to normalize the test year revenue?**

2 A. Pro forma revenue adjustments generally fall into two categories.

3 1. Restatement of sales data to adjust revenues that are not at issue in the current
4 and/or proposed rate revenue within the rate proceeding. Examples of these
5 include removal of ongoing rider revenues, addition of rider revenues being
6 incorporated into base rates, fuel revenues not included in base rates, out-of-
7 period revenue adjustments and any below-the-line revenues or sales that were
8 recorded during the test year.

9 2. Adjustments to sales data to reflect all known and measurable changes that are
10 not reflected in the test year data. These types of adjustments include end-of-
11 year customer adjustments to reflect growth or decline in the customer base,
12 adjustments to incorporate the effects of energy efficiency programs, and
13 adjustments to remove the effects of abnormal weather on the sales data.
14

15 Q. **What specific pro forma revenue adjustments were made in the present rate case?**

16 A. The pro forma revenue adjustments made to the test year sales data include 15
17 adjustments. The adjustments reflect changes to the customer counts, kWh and kW sales
18 data and revenues for the various classes of service. The Oklahoma jurisdiction pro forma
19 adjustments to test year revenue resulted in a decrease to test year energy sales of
20 560,760,158 kWh and an overall reduction to the Oklahoma jurisdiction test year
21 revenues of \$127,834,788. The specific adjustments are presented in Schedule H-2 of this
22 filing. These adjustments are sponsored by OG&E witness Adam Bigknife and described
23 in his direct testimony.
24

25 Q. **How are pro forma energy sales utilized?**

26 A. Pro forma sales data are primarily used within the Cost of Service Study (“COSS”) as
27 inputs to cost allocation factors. Additionally, the billing determinant information
28 contained within the pro forma year sales data is used within the pricing function to
29 determine the Company’s current rate revenue and establish the billing determinants
30 under which rate design will occur.

1 Q. **How is pro forma revenue utilized?**

2 A. Pro forma revenue is used in the calculation of the Oklahoma retail revenue deficiencies
3 for each rate class. OG&E witness Greg Veitch sponsors the Company's cost of service
4 study which provides the foundation for the pricing department to begin the rate design
5 process.

6

7 DETERMINATION OF REVENUE FROM CURRENT RATES

8 Q. **Why must current rate revenues be determined for the pro forma year data?**

9 A. Current rate revenues are the foundation of the proposed rate design. The proposed rates
10 are determined to ensure that the revenue deficiency—the difference between the current
11 rate revenue and the proposed rate revenue—will be recovered following the
12 implementation of the rate changes approved in the rate case.

13

14 Q. **How is current rate revenue determined for the purpose of rate design?**

15 A. Current rate revenue is calculated by applying the rates approved in the Company's
16 previous rate case to the billing determinants contained within the pro forma year data.
17 The Proof of Revenue section of Minimum Filing Requirements, Schedule M-4, includes
18 the calculation of current rate revenue for each rate class.

19

20 Q. **Is the current rate revenue shown in the Proof of Revenue equivalent to the pro
21 forma year revenue shown in Schedule H-2?**

22 A. No. The pro forma revenue reflected on Schedule H-2 and Schedule M-4 revenue differ
23 due to the manner in which they are derived. The Schedule M-4 revenue contains
24 adjustments to account for these differences and ensure that rates are designed against the
25 appropriate revenue deficiency.

26

27 Q. **Can you provide examples of specific differences between Schedule H-2 and
28 Schedule M-4 revenue?**

29 A. Returned check fees are an example of miscellaneous revenue that is not directly
30 attributable to the billing determinants used to calculate current rate revenue. While the
31 revenue from returned check charges is applicable to the Company's allowed revenue, it

1 is not included in Schedule M-4 revenue calculations based on billing determinants. The
2 difference due to these types of charges is captured in the Schedule M-4 revenue by
3 allocating these to the various classes and adjusting the current revenues by the allocated
4 amount.

5 Cancel and re-bill activities create differences between the revenue within each schedule.
6 When a bill is cancelled and re-billed outside of the accounting period in which the
7 original bill was issued a mismatch of the determinants and revenues is created in the
8 month containing the cancel/re-bill. The issue is compounded when the rates in the
9 original period are different than those in the current period. If a winter bill is re-billed in
10 a summer period, the cancellation and re-bill results in the removal and addition of the
11 quantities through an adjustment in the current month. The resulting misalignment of
12 these adjustments creates a difference in the calculation of the revenue within Schedule
13 M current rate revenue. In order to ensure the current rate revenue upon which rate design
14 is based is accurately reflected in the Schedule M-4 revenues, a reconciliation adjustment
15 is made to match the current rate revenue to Schedule H-2 revenue. The same adjustment
16 is made to then adjust the proposed rate revenues in Schedule M-4.

17
18 **Q. Why is it important for the current rate revenues to match the pro forma year**
19 **revenues?**

20 A. The Company must ensure that the proposed rate change results in a level of revenue
21 recovery that is consistent with the COSS.

22
23 **Q. Are there adjustments to the proposed rate revenue calculation in Schedule M-4?**

24 A. Yes. In order to account for the lost kWh sales occurring from the Company's authorized
25 Demand-Side Management ("DSM") program, an adjustment has been made to the
26 proposed revenue billing determinants. The Company is compensated for reduced sales
27 through the Demand Program Rider ("DPR"). The reduced sales, through December
28 2010 have been captured in the pro forma revenue adjustments, as discussed by OG&E
29 witness Adam Bigknife. The Company has captured additional lost sales for the year
30 2011 through a reduction to the proposed rate revenue sales of 52,413,200 kWh and
31 62,508 kW across the applicable rate classes. The DPR factor used for bill impact in

Schedule M-4 is adjusted accordingly to remove the collection of lost contribution to fix costs associated with these sales.

Q. How are the COSS results used within the rate design process?

A. The COSS establishes the amount of revenues that would be collected from each class if each class were to pay the exact amount of revenue associated with its contribution to overall costs. When the class revenue requirement matches the allocated cost of service the class' revenue requirement is considered to be at 100% relative rate of return ("RROR") or equalized rate of return ("ROR"). The Chart 1 shows the results of the COSS which depict the revenue requirements, revenue deficiency and percent increases which would provide a 100% relative rate of return for each rate class.

Chart 1. COSS Results

Rate Class	Current Revenue	Proposed Revenue	Proposed Increase	Proposed Change
RS	\$770,163,126	\$820,217,622	\$50,054,496	6.5%
GS	\$163,809,281	\$167,280,797	\$3,471,516	2.1%
OGP	\$13,535,701	\$12,512,274	-\$1,023,427	-7.6%
PS-ND	\$18,480,008	\$18,534,494	\$54,486	0.3%
PS-D	\$10,068,147	\$9,688,148	-\$379,999	-3.8%
PL	\$257,549,452	\$257,342,054	-\$207,398	-0.1%
PL TOU	\$164,047,969	\$159,750,123	-\$4,297,846	-2.6%
LPL TOU	\$268,994,433	\$286,703,305	\$17,708,872	6.6%
MP	\$8,091,164	\$7,824,536	-\$266,628	-3.3%
ML	\$11,688,479	\$15,029,704	\$3,341,225	28.6%
OSL	\$16,650,271	\$21,450,931	\$4,800,660	28.8%
Total Retail	\$1,703,078,031	\$1,776,333,988	\$73,255,957	4.3%

At times a particular class' allocated revenues may be set at an amount slightly higher or lower than is allocated in the COSS. The process of adjusting the COSS results to determine the target revenue requirement for each class is *revenue allocation*.

REVENUE ALLOCATION

Q. What are the primary considerations in the revenue allocation process?

A. A primary concern in revenue allocation, from OG&E's perspective, is to set each class' revenue requirement as close as possible to a target RROR of 100%. The Company believes fairness is achieved when the revenue assignment fully reflects the cost

1 causation of each class. In seeking fairness, however, we must also consider the stability
2 of the rates of each rate class. When moving classes toward their allocated cost of
3 service, we must avoid unexpected changes which are seriously adverse to customers.
4 Additionally, external factors or unusual circumstances must be considered in the
5 allocation of revenues to each class.
6

7 **Q. Were there any external factors or unusual circumstances considered during the**
8 **revenue allocation process for this case?**

9 A. Yes, there were two circumstances that the Company considered. First, as part of
10 OG&E's franchise agreements, the Company provides a specified amount of free service
11 to municipalities. Of the total deficiency of \$3,341,225 for the Municipal Lighting class,
12 \$726,234 is associated with free service to municipalities. In order to ensure that the
13 overall deficiency is accounted for within the rate design process, this portion of the
14 class' deficiency is allocated to other classes.

15 Second, the Public School Non-Demand ("PS-ND") class revenue requirement as
16 determined by the costs would have caused pricing for this class to increase to a level
17 above that of the General Service class. In order to ensure the continuation of the relative
18 price levels between these rates some of the revenue requirement was transferred to the
19 General Service class.
20

21 **Q. Did the final revenue allocation achieve the goal of an equalized ROR for each of the**
22 **rate classes?**

23 A. No. However, in all cases, we were able to achieve significant movement toward the
24 targeted 100% RROR.
25

26 **Q. What was the final result of the revenue allocation process?**

27 A. Chart 2 shows the results of the revenue allocation process and includes the relative rate
28 of return for each rate class as well as the percent of the total cost of service included in
29 the final revenue requirement.

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Chart 2. Final Revenue Allocation

Customer Group	Current Revenue	Proposed Revenue	Proposed Increase	Total Bill % Increase	Proposed Rate of Return	Proposed Relative RoR	Percent of Total Cost of Service
RS	\$770,163,126	\$820,236,460	\$50,073,334	6.5%	8.8%	100.0%	100.0%
GS	\$163,809,281	\$167,584,519	\$3,775,238	2.3%	8.8%	100.6%	100.2%
OGP	\$13,535,701	\$12,795,015	-\$740,686	-5.5%	9.6%	109.2%	102.3%
PS-ND	\$18,480,008	\$18,234,890	-\$245,118	-1.3%	8.3%	94.8%	98.4%
PS-D	\$10,068,147	\$9,943,147	-\$125,000	-1.2%	9.6%	110.0%	102.6%
PL	\$257,549,452	\$257,549,452	\$0	0.0%	8.8%	100.3%	100.1%
PL TOU	\$164,047,969	\$163,402,379	-\$645,590	-0.4%	9.6%	110.1%	102.3%
LPL TOU	\$268,994,433	\$286,709,446	\$17,715,013	6.6%	8.8%	100.0%	100.0%
MP	\$8,091,164	\$8,016,164	-\$75,000	-0.9%	9.6%	110.1%	102.4%
ML	\$11,688,479	\$12,712,245	\$1,023,766	8.8%	5.7%	64.6%	84.6%
OSL	\$16,650,271	\$19,150,271	\$2,500,000	15.0%	6.6%	75.9%	89.3%
Total Retail	\$1,703,078,031	\$1,776,333,988	\$73,255,957	4.3%	8.7%	100.0%	100.0%

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3 **Q. What specific changes were made in the allocation of revenues to the rate classes in**
4 **which the RROR of 100% was not achieved?**

5 **A.** In order to reach the final revenue allocation, we identified those classes which had a net
6 surplus of revenues. These classes include the Oil and Gas Producers, Public Schools –
7 Demand, Power and Light – TOU and Municipal Pumping classes. For all other classes
8 we considered whether the amount of increase necessary to bring the class to 100%
9 RROR was excessive.

10 Within the lighting classes, the 30% increase suggested by the COSS was limited to a
11 15% increase which reduced the Municipal Lighting class revenue requirement by
12 \$1,591,225 and the requirement for the Outdoor Security lighting class by \$2,300,660.
13 An additional reduction to the Municipal Lighting class revenue requirement of \$726,234
14 reflects the free service adjustment discussed earlier. These increases were allocated to
15 those classes with a revenue surplus. This re-allocation reduced the reductions to those
16 classes, resulting in a RROR for each of these classes of approximately 110%.

17 Finally, \$300,000 of the PS-ND revenue requirement was transferred to the General
18 Service class as discussed above. The result of this transfer was a net decrease to the PS-
19 ND class of \$245,119, instead of the slight increase that was determined under 100%
20 RROR. This resulted in a combined RROR for the Public Schools Non-Demand and
21 Public Schools Demand classes of 99%.

1 Q. **Are the deficiencies further allocated within the major rate classes?**

2 A. Yes. The deficiencies determined for each major class, shown in Chart 2 are further
3 divided within the major rate class to assess the impact on each subordinate rate class
4 and/or service level within the class. For example, the Residential class is segmented into
5 three rate classes: 1) Residential Standard; 2) Residential TOU; and 3) Residential VPP.
6 The deficiency for a class is further allocated within the class using the same philosophy
7 of the revenue allocation I discussed previously. The results of these allocations are
8 provided within Exhibit GWT-1 to my testimony.
9

10 Q. **How are the allocated revenues utilized to establish the prices in the proposed
11 tariffs?**

12 A. The deficiencies from the final revenue allocation are used to establish the target
13 revenues in rate design by adding the deficiencies to the Schedule M-4 current rate
14 revenues for each of the rate classes. Rate design was conducted within the guidelines of
15 established rate design objectives to determine the prices included in the proposed tariffs.
16

17 RATE DESIGN OBJECTIVES

18 Q. **Are there established industry rate design principles under which OG&E conducts
19 its rate design?**

20 A. The objectives most often quoted for sound rate structure are those articulated by James
21 Bonbright¹:

- 22 • The related, “practical” attributes of simplicity, understandability, public
23 acceptability, and feasibility of application.
- 24 • Freedom from controversies as to proper interpretation.
- 25 • Effectiveness in yielding total revenue requirements under the fair-return standard.
- 26 • Revenue stability from year to year.
- 27 • Stability of the rates themselves, with a minimum of unexpected changes seriously
28 adverse to existing customers. (Compare “The best tax is an old tax.”)
- 29 • Fairness of the specific rates in the apportionment of total costs of service amount to
30 the different consumers.

¹ James C. Bonbright, Principles of Public Utility Rates (New York: Columbia University Press, 1961), p. 290-1

- 1 • Avoidance of “undue discrimination” in rate relationships.
- 2 • Efficiency of the rate classes and rate blocks in discouraging wasteful use of service
- 3 while promoting all justified types and amount of use:
- 4 ○ In the control of the total amounts of service supplied by the Company
- 5 ○ In the control of the relative uses of alternative types of service (on-peak
- 6 versus off-peak electricity, Pullman travel versus coach travel, single-part
- 7 telephone service versus service from a multi-party line, etc.)
- 8

9 Q. **Is it possible to strictly adhere to each of Bonbright’s principles during the rate**

10 **design process?**

11 A. Not entirely. As rates are designed, there are trade-offs between conflicting principles to

12 establish the most appropriate rate design. It is important to realize that regardless of how

13 important one single criterion may seem, the principles are intended to be used as

14 comprehensive guidelines and must be considered as a whole when assessing the

15 soundness of the rate structures.

16

17 Q. **Do all of the above principles have the same importance in the rate design process**

18 **and when assessing the soundness of the proposed rate design?**

19 A. No, while all the principles are important, Bonbright defines the following three

20 objectives as those which are “primary”:

- 21 • The revenue requirement or financial need objective
- 22 • The fair-cost-apportionment objective
- 23 • The optimum-use or consumer-rationing objective
- 24

25 Q. **Do other sources provide guidance to the objectives of the rate design?**

26 A. Another source often quoted for the establishment of rate design objectives is the Public

27 Utility Regulatory Policies Act (“PURPA”). These are:

- 28 • Conservation of energy by users of electricity
- 29 • Efficient use of facilities and resources by utilities
- 30 • Equitable rates to consumers

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Q. Given these industry objectives, has OG&E established specific goals for its proposed rate design?

A. Yes. The Company has defined three broad goals to guide our rate design activities. As discussed in the testimony of OG&E witness Bryan Scott, the Company’s rate design is driven by the following goals:

- Recovery of authorized revenue requirements in a fair manner
- Promote efficient consumption of energy
- Provide pricing product choices that meet customers’ pricing preferences

Q. Is the Company proposing any new tariffs for non-demand customers consistent with these goals?

A. Yes. OG&E is proposing several new tariffs to expand its TOU and VPP options to all non-demand customer segments. These new tariffs are discussed later in my testimony.

Q. Is the Company proposing new tariffs for demand based customers?

A. Yes. OG&E desires to encourage greater participation in dynamic pricing programs within its demand based customer classes. To that end, OG&E is proposing to implement Flex Price, a new marginal cost-based dynamic pricing pilot program.

FLEX PRICE PILOT

Q. Why is OG&E proposing the Flex Price pilot?

A. The Company is proposing this pilot program to encourage its larger customers to participate in a dynamic pricing program. The new pilot removes barriers that may have prevented certain customers from participating in the current dynamic pricing program, DAP, and enhances the opportunity to access OG&E’s best pricing. Because of Smart Grid technology, Flex Price will expose a much larger portion of our customer base to the opportunities which accompany dynamic pricing programs. The success of this pilot could lead to the development of similar programs for non-demand customers. The Company expects to make recommendations in its next rate case proceeding based on results of the pilot.

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Q. Who will be allowed to participate in the new pilot?

A. The new pilot will be targeted at customers currently taking service under the PL, PL-TOU, PS-D, PS-D-TOU, and LPL-TOU programs. This will also include customers from the previously mentioned tariffs that participate in the LR rider.

Q. Please describe the Flex Price pilot program.

A. Flex Price is a simplified form of our existing Day Ahead Pricing (“DAP”) program. While DAP is an hourly program, Flex Price will be priced in six 4-hour time periods beginning at 3 a.m. each day. Similar to DAP, a Customer Base Line (“CBL”) will be determined using historical data. The Flex Price CBL will be a seasonal CBL (“SCBL”) which will convert the seasonal hourly load profile for each customer to an average weekday and weekend daily load profile for each month. The SCBL will be averaged over the same four hour time periods as the pricing. The prices for each period will be posted and communicated to participants on a day-ahead basis. Flex Price will also be seasonal. In other words, customers will have the choice of participating during the summer season, winter season or year-round. The summer season includes the 5 revenue months of June through October and the winter season includes the 7 revenue months of November through May. Billing and regulatory treatment for the program would be the same as the DAP program. To remove barriers to enrollment, customers will be offered a guarantee that the Flex Price billing will not exceed their otherwise applicable rate during their first year of participation in the pilot.

Q. Why is Flex Price a seasonal program?

A. Seasonality of the rate provides flexibility to customer participation to target differences in the seasonal attributes of the customer’s energy requirements. OG&E envisions Flex Price as a transitional program between TOU and DAP to provide the best opportunities to participate in dynamic pricing programs. Customers that participate in the Flex Price pilot may choose Flex Price on a seasonal basis. For example, a school currently on PS-D can elect to participate in Flex Price for the summer season and then switch back to the PS-D rate for the winter season.

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Q. What is the function of the SCBL in Flex Price?

A. The SCBL serves the same purpose as the CBL in the DAP program. It establishes revenue neutrality for customers choosing to participate in the program – in other words, if the customer’s consumption remains the same there is no difference in the billing charges to the customer. Revenue neutrality will mitigate the risks associated with the dynamic prices to the participant and will ensure that other customers are not adversely impacted by the program. Participants will be required to have a SCBL which will convert the seasonal monthly hourly loads to an average weekday and weekend daily load broken in to six four hour time-of-use periods, one SCBL profile for the weekdays and one SCBL profile for the weekend days. Each month of the season will have its unique set of SCBL profiles. Unlike the CBL for DAP, the SCBL provides the customer with an average load profile to allow a simpler planning and decision making process to benefit from participation in the Flex Price program.

Q. How will the prices for Flex Price be developed?

A. The prices for Flex Price will be developed by averaging the hourly prices and the underlying price components under the standard DAP program over the six four-hour time-of-use periods. This smoothing of the DAP hourly prices will also make it easier for customers to respond to the dynamic pricing signal.

Q. How will the customer’s bill under Flex Price be calculated?

A. The Flex Price monthly bill will be calculated in the same manner as the DAP bill. It will consist of the bill for the SCBL load priced under the customer’s standard tariff, plus the bill for the difference between the SCBL and actual load priced at the Flex Price time-of-use period price.

1 Q. **Will Flex Price customers be allowed to participate in the Load Reduction (LR)**
2 **program?**

3 A. Yes Flex Price customers can participate in the same manner as DAP customers.
4 However, under the Flex Price program the SCBL by time-of-use period will replace the
5 CBL in the LR program when determining performance credits and buy-through charges.
6

7 Q. **Why has the Company included a best bill provision in the Flex Price pilot?**

8 A. The best bill provision will allow customers the freedom to experience the opportunities
9 available under a dynamic pricing program without the risk of paying more than they
10 otherwise would under their previous rates. Flex Price participants will have the Best Bill
11 Provision for both seasons of the initial 12 month subscription. The participant's Flex
12 Price billing will be compared to their otherwise applicable tariff at the end of each
13 season using their actual usage. If the Flex Price billing is higher, then the customer will
14 be credited the difference. After the initial 12-month period, the Best Bill provision will
15 no longer apply for that customer.
16

17 RATE DESIGN

18 Q. **How does the pricing department develop the proposed rates for each class of**
19 **service based on the rate design objectives outlined?**

20 A. As discussed previously in my testimony, proposed rates are designed to incorporate the
21 change in rates that ensure revenues match the deficiency or surplus defined within the
22 revenue allocation process. Major steps of the rate design process include determination
23 of the unit costs for each rate class, estimation of the marginal costs, application of the
24 unit costs and marginal costs to create initial price levels, determination of rate structure
25 and final rates through an iterative process to ensure proper recovery of revenue
26 requirements. The iterative process includes the evaluation of proposed rates against rate
27 design objectives through impact and unit cost analyses.

Unit Costs

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Q. What are unit costs?

A. Unit costs are developed from the functionalized and classified cost components in the cost of service model and are determined for each class and service level of customers. Functionalized cost data breaks the cost of service revenue requirement into the production, transmission, distribution and customer functions. Classified cost data provides a separation of the cost of service revenue requirement into customer, demand, and energy components that correspond to how customers are billed.

Q. Why is it important to understand what the unit costs are when designing rates?

A. The unit costs are important when assessing the proper recovery of embedded costs from customers or customer segments within each rate class, *i.e.* the intra-class allocation of embedded costs. If fairness were the only criterion for rate design, the unit costs would define the most appropriate rate design.

In addition, when designing rates, a common misconception is to assume that the existing rates continue to be of sound design and fairly collect revenues from customers. When this assumption is made, any flaws that result from changing cost structures are not eliminated in ensuing rate designs. The previous balance of principles incorporated in the existing rates may not be appropriate for current costs or circumstances. It is important that the rate itself is evaluated in its entirety and not simply in the context of the proposed changes.

Q. Please describe the three classifications of costs included in the COSS revenue requirement.

A. The demand component is comprised of that portion of the revenue requirement associated with the capacity of the system related to the production, transmission, distribution and customer functions. In like manner, the energy component is the portion of revenue requirement associated with the variable O&M related to the production function. Finally, the customer component is that portion of revenue requirement directly associated with the distribution function which enables the delivery and support of

1 electricity to the customer (*e.g.* wires, poles, line transformation, service connection,
2 metering and billing and customer service activities).

3
4 **Q. Can the production demand component be disaggregated?**

5 A. Yes. The production demand portion of the demand component can be further separated
6 using the functionalized costs into peak and average demand components. The peak
7 portion is directly related to the demand constraints placed on the generation system. The
8 average portion is directly related to the energy production. OG&E disaggregated the
9 production demand component using the peak and average components of the ICP
10 Average and Excess cost allocation methodology by rate class and service level.

11
12 **Q. What is the value of having the components, and their sub-categorization, by rate
13 class and service level?**

14 A. The component revenue requirements are divided by *pro forma* billing units, in each
15 applicable rate category and service level, to determine what the tariff rate per billing unit
16 should be in an embedded cost based rate structure. The resulting unit costs are used to
17 evaluate rate design for the proper allocation of costs to specific customers or customer
18 groups.

19
20 **Q. Have you developed a unit cost for each rate category and service level based on the
21 component cost revenue requirements?**

22 A. Yes. The unit costs for each rate class and service level contained within our cost of
23 service study was calculated in the manner I have described. Exhibit GWT-2 illustrates
24 the unit cost calculations for the Residential class and the General Service - Service Level
25 5 class.

26
27 **Q. Would it be proper to set prices using only unit costs?**

28 A. No. It is important to keep in mind all objectives for rate design. The impact to
29 customers is an important consideration. It may take one or two sets of price changes
30 (accomplished through rate cases) to transition component rates to unit cost levels. Unit
31 costs provide an embedded cost basis for each rate and represent the fairest simple

1 division of costs among customer classes; however, this is not always the most
2 appropriate pricing, since it does little to incorporate the variations of costs by time
3 periods (*e.g.* hourly marginal costs) which encourage more efficient allocation of
4 resources to customers. Therefore, while unit costs are very important, other criteria must
5 also be considered when establishing prices and tariff structures. Our proposed prices
6 reflect a realistic and reasonable balance between embedded cost, marginal cost,
7 customer preference, and recovery of the proposed revenue requirement without undue
8 impacts on customers.

10 Marginal Costs

11 **Q. What are marginal costs?**

12 A. Marginal costs are the change in total cost of production that results from the production
13 in one additional unit of product. In the electric utility industry, we typically refer to the
14 cost of production of the next kWh. Marginal costs are also divided into short-run
15 marginal costs and long-run marginal costs. Short-run marginal cost typically includes
16 only the variable costs such as fuel and variable operations and maintenance costs
17 associated with production occurring within the constraints of currently available assets.
18 Long-run marginal costs consider the cost of expanding production capabilities to meet
19 future load growth.

21 **Q. How are marginal costs used within the rate design process?**

22 A. Marginal costs are a consideration when setting rates to promote efficient use of
23 resources. One example is the use of marginal costs in setting on-peak period pricing.
24 Marginal cost pricing is also considered when the Company sets the price for the tail-
25 block² in its block rates. If consumers are exposed to the marginal cost of energy, the
26 resulting consumption decisions would promote a more efficient use of production
27 resources and serve to lower the overall production cost to all consumers.

² Tail-block refers to the last block of energy pricing defined within the Company's rate structure. For example, the Residential summer rate contains two blocks: the first block of 1400 kWh is priced lower than the remaining kWh used in a monthly period. All usage above 1400 kWh is referred to as the tail-block usage.

1 Q. **Has the Company performed a marginal cost study to determine the marginal costs**
2 **used with the proposed rate design?**

3 A. No. A thorough marginal cost study is very expensive and has not been performed for
4 this case. Instead we have developed a proxy for marginal costs to use in rate design.

5
6 Q. **How is the proxy for marginal costs determined for use in rate design?**

7 A. The Company uses the Day-Ahead Pricing forecast of hourly prices to establish the
8 marginal costs for use in rate design. The hourly price forecast is developed based on
9 estimations of short-run marginal costs and long-run marginal costs.

10 Using the production model that supports resource planning, we have estimated short-run
11 marginal costs for the year 2012 by comparing the results of the expected production case
12 with results produced by two change cases, a 100 MW increase in production and a 100
13 MW decrease in production. The change in cost between the expected and change cases
14 are used to establish the expected short-run marginal production cost for each hour.

15 Long-run marginal cost estimates are determined using the Company's future avoided
16 capacity costs. We determine a present value of the future cost of new plant and allocate
17 these costs based on system conditions expected for each hour. In hours where the system
18 capacity is constrained, or the load is higher, a greater portion of the cost of production is
19 allocated to the cost for that hour.

20

21 Q. **Has this method been used in the past rate cases for guiding the tail-block and on-**
22 **peak prices?**

23 A. Yes. This is the same method used in Cause No. PUD 200800398 to provide a proxy for
24 marginal costs used to guide rate design.

25

26 Q. **Following development of the unit costs and determination of the marginal cost**
27 **proxy used in rate design how are the proposed tariff prices determined for the**
28 **filing?**

29 A. At this point, the rate design process becomes an iterative process of developing an initial
30 design, followed by an evaluation using unit costs and customer impact models to
31 determine changes needed to best meet the various objectives of rate design.

Residential Rate Design

Q. **Please describe the proposed changes to OG&E’s current residential rates.**

A. The price changes to the Residential (“R-1”) tariff include an increase in the monthly customer charge to more accurately reflect the fixed cost of providing electric service to a customer, and changes to the energy prices applicable to the tail-block in both summer and winter. The tail-block prices have been more closely aligned with the marginal cost of energy during the respective season. The proposed rate changes are presented in Chart 3, below.

Chart 3. Comparison of Residential Prices

Residential Monthly Prices		
	Proposed	Current
<i>Customer Charge</i>	\$19.77	\$13.00
Summer Season		
	Jun - Sep	Jun - Sep
<i>First 1,400 kWh</i>	\$0.0840 per kWh	\$0.0840 per kWh
<i>Over 1,400 kWh</i>	\$0.1200 per kWh	\$0.0968 per kWh
Winter Season		
	Nov - Apr	Nov - Apr
<i>First 600 kWh</i>	\$0.0840 per kWh	\$0.0840 per kWh
<i>Over 600 kWh</i>	\$0.0470 per kWh	\$0.0471 per kWh
Shoulder		
	May & Oct	May & Oct
<i>All kWh</i>	\$0.0840 per kWh	\$0.0840 per kWh

Q. **How much will the monthly customer charge increase?**

A. OG&E’s current customer charge for R-1 customers is \$13.00 per month. Our unit cost for the customer component on average is \$20.43 as shown in Chart 4. Our proposed customer charge of \$19.77 per month was selected to allow a significant movement toward the unit cost.

Chart 4. Residential Unit Cost: Customer Component

Customer Charge	Annual Billing Units	Miscellaneous Revenue	Customer	Dist Demand	Cust and Dist Less Miscellaneous	Unit Cost Price
	7,371,480	\$ 11,139,258	\$ 161,733,357		\$ 150,594,099	\$ 20.43
LIAP Discount	578,712					\$ (10.00)

The Low Income Assistance Program (“LIAP”) provides a \$10 per month discount to each LIAP-eligible customer.

1 Q. **How will energy prices for residential customers change under OG&E’s proposed**
 2 **rate design?**

3 A. OG&E proposes to maintain the current price for the first 1,400 kWh in the summer
 4 season, which includes usage billed during the months of June through September. An
 5 increase of \$0.0232 per kWh to all usage above 1,400 kWh is proposed. This increase
 6 moves the tail-block price to a level that approximates the on-peak period marginal costs.
 7 This clear signal incents customers to reduce energy usage during the higher cost periods.
 8 OG&E proposes to maintain the current price in the first 600 kWh for the winter season,
 9 which includes the billing for November through April, and proposes to reduce the
 10 additional usage price from \$0.0471 to \$0.0470 per kWh. The shoulder season, May and
 11 October billing periods, remains unchanged in the proposed rates.

13 Q. **What is the impact of the proposed rate design changes to residential customers?**

14 A. The overall average bill impact to residential customers included in the analysis is a
 15 monthly bill increase of 6.0% or \$6.62. In order to assess the rate design for customers
 16 with different characteristics within the class, the impact analysis was performed across
 17 several sub-groups of customers based on size, income level and seasonality of use. The
 18 impact for each of the defined sub-groups is shown in Chart 5.

19 **Chart 5. Residential Customer Impact Results**

Segmented Results Current Residential VS Proposed Residential											
Segment	Number of Customers	Current Residential Revenue	Proposed Residential Revenue	Total Difference	Percent Difference	Annual kWh	Average Monthly kWh		Current Average \$/Month	Proposed Average \$/Month	Average Difference \$/Month
							Summer	Winter			
Total	448,902	\$596,044,004	\$631,718,273	\$35,674,269	6.0%	13,921	1,464	1,048	\$110.65	\$117.27	\$6.62
Small Users	37,067	\$13,551,366	\$16,329,879	\$2,778,513	20.5%	2,340	247	175	\$30.47	\$36.71	\$6.25
Normal Users	357,420	\$440,698,673	\$466,315,841	\$25,617,168	5.8%	12,539	1,384	898	\$102.75	\$108.72	\$5.97
Large Users	52,918	\$141,558,224	\$148,715,197	\$7,156,974	5.1%	31,766	2,894	2,709	\$222.92	\$234.19	\$11.27
Low Income	38,906	\$48,332,979	\$51,027,589	\$2,694,610	5.6%	14,134	1,362	1,160	\$103.53	\$109.30	\$5.77
Not Low Income	409,996	\$547,711,025	\$580,690,683	\$32,979,658	6.0%	13,901	1,473	1,038	\$111.32	\$118.03	\$6.70
Summer Users	51,254	\$54,693,959	\$59,358,888	\$4,664,930	8.5%	9,874	1,507	440	\$88.93	\$96.51	\$7.58
Winter Users	89,715	\$124,618,225	\$129,562,663	\$4,944,438	4.0%	16,363	1,083	1,745	\$115.75	\$120.35	\$4.59
Non-Seasonal	307,933	\$416,731,820	\$442,796,721	\$26,064,901	6.3%	13,884	1,568	947	\$112.78	\$119.83	\$7.05

21 Q. **How did the Company calculate the impact of these changes to customers?**

22 A. OG&E computed the monthly billing amount for customers with twelve months of test
 23 year data under the current prices and compared the result to the bill amount calculated
 24 for those same customers under the proposed rate. The impact to customers was

1 determined using data extracted from the Company's billing system for 2010 actual usage
2 data which was adjusted to reflect normal weather. The analysis includes all customers
3 billed on the residential standard rate and LIAP were used in the analysis. Those
4 customers without a complete year of usage data were excluded, resulting in an analysis
5 of 448,902 residential customers. Sub-categories based on customer size, income level
6 and seasonality of consumption were analyzed.

7
8 **Q. How were residential customers segmented by size?**

9 A. Three classifications of customers were created based on size. These are low use,
10 standard use and high use. Low use and high use customer segments were identified by
11 determining the mean annual usage (13,925 kWh) and standard deviation (9,417 kWh)
12 and identifying those that fell below one standard deviation from the mean as low use and
13 those that fell above one standard deviation from the mean as high use. All other
14 customers were classified as standard use. The results for these classifications are shown
15 in Chart 5.

16
17 **Q. What is the proposed increase for low income customers?**

18 A. As shown on Chart 5, low income customers received on average increase of 5.6% or
19 \$5.77 increase per month.

20
21 **Q. How does OG&E determine which customers should be classified as low income?**

22 A. Customers that receive the LIAP discount of \$10.00 per month and any other customers
23 that have received direct social services assistance of any type are classified as low
24 income customers for the purpose of the impact analysis. There are approximately
25 48,000 LIAP customers.

26
27 **Q. How was the designation of summer and winter users determined?**

28 A. The customers were segmented based on a seasonality ratio that determines the ratio of
29 each season to total electricity use. This entails determining the mean seasonal usage of
30 44% and the standard deviation of 13% for the summer season. All customers that have a
31 ratio of greater than one standard deviation above the mean were classified as summer

1 users. Likewise, the mean winter season usage of 43% and standard deviation of 13%
 2 was used to determine those customers which we consider to be winter users. The
 3 remaining customers were considered to be non-seasonal.

4
 5 **Q. Why is it important to analyze impacts with respect to seasonality of usage?**

6 A. Customers that use a greater proportion of their total energy during the summer months
 7 create higher costs than other customers. Causality of cost must be identified and
 8 incorporated into rate design to ensure the proper price signals are presented to customers
 9 during the appropriate seasons. Conversely, customers that have a lower proportion of
 10 summer usage are utilizing lower cost energy to fulfill their total energy needs.

11
 12 **Q. Did you assess the proposed rates against the unit cost for the residential class?**

13 A. Yes. To ensure that our proposed rates limit intra-class subsidies, we compared the
 14 billing under the proposed rates to the billing under a unit cost based rate. The result will
 15 indicate if any of the identified customer groups are not aligned with their fair share of
 16 costs. Chart 6 shows the results of this comparison.

17 **Chart 6. Comparison of unit costs and proposed rate for residential customers**

Segmented Results Residential Unit Costs VS Proposed Residential											
Segment	Number of Customers	Residential Unit Costs Revenue	Proposed Residential Revenue	Total Difference	Percent Difference	Annual kWh	Average Monthly kWh		Current Average \$/Month	Proposed Average \$/Month	Average Difference \$/Month
							Summer	Winter			
Total	448,902	\$631,237,857	\$631,719,513	\$481,656	0.1%	13,921	1,464	1,048	\$117.18	\$117.27	\$0.09
Small Users	37,067	\$16,339,970	\$16,329,821	(\$10,149)	-0.1%	2,340	247	175	\$36.74	\$36.71	(\$0.02)
Normal Users	357,420	\$463,236,111	\$466,315,149	\$3,079,038	0.7%	12,539	1,384	898	\$108.00	\$108.72	\$0.72
Large Users	52,918	\$151,291,725	\$148,717,188	(\$2,574,538)	-1.7%	31,766	2,894	2,709	\$238.25	\$234.19	(\$4.05)
Low Income	38,907	\$53,499,466	\$51,028,167	(\$2,471,299)	-4.6%	14,134	1,362	1,160	\$114.59	\$109.30	(\$5.29)
Not Low Income	409,995	\$577,738,391	\$580,691,346	\$2,952,954	0.5%	13,901	1,473	1,038	\$117.43	\$118.03	\$0.60
Summer Users	51,255	\$60,821,129	\$59,359,544	(\$1,461,584)	-2.4%	9,873	1,507	440	\$98.89	\$96.51	(\$2.38)
Winter Users	89,716	\$125,999,763	\$129,563,384	\$3,563,621	2.8%	16,363	1,082	1,745	\$117.04	\$120.35	\$3.31
Non-Seasonal	307,931	\$444,416,966	\$442,796,585	(\$1,620,381)	-0.4%	13,884	1,568	947	\$120.27	\$119.83	(\$0.44)

18 A percent difference that is less than zero indicates those groups in which customers will
 19 typically pay less than the costs they create, or are being subsidized, while a positive
 20 difference indicates those segments that are paying more than their share of the costs. The
 21 average difference column indicates the average absolute difference relative to the unit
 22 cost. For example, under the proposed rate design, winter users are paying 2.8%, or
 23 \$3.31, more than residential unit costs indicate should be paid. The feedback to the rate
 24 design process is to set the prices such that those groups which are being subsidized by

1 other groups receive, within reason, higher increases to create a reasonable movement
2 toward eliminating intra-class subsidies.

3
4 Guaranteed Flat Bill (“GFB”) Rate Design

5 **Q. Is the Company proposing any changes to the Residential and General Service GFB**
6 **tariffs?**

7 A. Yes. The Company proposes to create a provision in the General Service GFB tariff to
8 make the program available to customers taking service under the Public Schools Non-
9 Demand tariff. In addition, the Company requests that the Commission approve a
10 language change to eliminate the reference to the FCA in both tariffs and to allow, where
11 the individual customer historical data exists, use of 24-months of historical usage
12 information, instead of 12 months of historical usage information, to determine the offer
13 amount. The advantage to the use of a longer historical period is the increased accuracy
14 of customer usage estimation and mitigation of adverse effects of unusual consumption
15 events on offer amounts.

16
17 Time-of-Use Rate Design

18 **Q. What changes are you proposing to the non-demand Time-of-Use (“TOU”) tariffs?**

19 A. The proposed pricing for these tariffs include a reduced customer charge relative to the
20 classes’ respective standard tariff customer charges. Evidence from the Company’s
21 pricing research, discussed by OG&E witness Bryan Scott, indicates the reduced
22 customer charge should encourage customer subscription to optional rates. OG&E also
23 believes the reduced customer charges will result in a reduction in the cost of customer
24 enrollment. OG&E has also added a time-of-use rate for the Municipal Pumping class.
25 Modifications have been made to the best bill clauses in all applicable tariffs to clarify
26 the application of the best bill feature. Finally, prices have been modified, as reflected in
27 Chart 7 below, to meet the revenue requirements for each of these classes.

Chart 7. Comparison of Time-of-Use Rates

Residential Time-Of-Use Monthly Prices		
	Proposed	Current
<i>Customer Charge</i>	\$18.77	\$13.00
Summer Season	Jun - Oct	Jun - Oct
<i>On Peak</i>	\$0.2300 per kWh	\$0.2300 per kWh
<i>Off Peak</i>	\$0.0530 per kWh	\$0.0450 per kWh
Winter Season	Nov - May	Nov - May
<i>First 600 kWh</i>	\$0.0840 per kWh	\$0.0840 per kWh
<i>Over 600 kWh</i>	\$0.0470 per kWh	\$0.0471 per kWh
Residential Time-Of-Use w/ CPP Monthly Prices		
	Proposed	Current
<i>Customer Charge</i>	\$18.77	\$13.00
Summer Season	Jun - Oct	Jun - Oct
<i>On Peak</i>	\$0.2300 per kWh	\$0.2300 per kWh
<i>Off Peak</i>	\$0.0510 per kWh	\$0.0420 per kWh
Winter Season	Nov - May	Nov - May
<i>First 600 kWh</i>	\$0.0840 per kWh	\$0.0840 per kWh
<i>Over 600 kWh</i>	\$0.0470 per kWh	\$0.0470 per kWh
Critical Peak		
	\$0.4600 per kWh	\$0.4600 per kWh
General Service Time-Of-Use Monthly Prices (Service Levels 3 - 5)		
	Proposed	Current
<i>Customer Charge</i>	\$29.26	\$24.00
Summer Season	Jun - Oct	Jun - Oct
<i>On Peak</i>	\$0.3000 per kWh	\$0.3000 per kWh
<i>Off Peak</i>	\$0.0560 per kWh	\$0.0500 per kWh
Winter Season	Nov - May	Nov - May
<i>First 1,000 kWh</i>	\$0.0900 per kWh	\$0.0900 per kWh
<i>Over 1,000 kWh</i>	\$0.0510 per kWh	\$0.0500 per kWh
General Service Time-Of-Use w/ CPP Monthly Prices		
	Proposed	Current
<i>Customer Charge</i>	\$29.26	\$24.00
Summer Season	Jun - Oct	Jun - Oct
<i>On Peak</i>	\$0.3000 per kWh	\$0.3000 per kWh
<i>Off Peak</i>	\$0.0540 per kWh	\$0.0470 per kWh
Winter Season	Nov - May	Nov - May
<i>First 1,000 kWh</i>	\$0.0900 per kWh	\$0.0900 per kWh
<i>Over 1,000 kWh</i>	\$0.0510 per kWh	\$0.0500 per kWh
Critical Peak		
	\$0.6000 per kWh	\$0.6000 per kWh
Oil & Gas Producers Time-Of-Use Monthly Prices (Service Levels 3 - 5)		
	Proposed	Current
<i>Customer Charge</i>	\$28.50	\$24.00
Summer Season	Jun - Oct	Jun - Oct
<i>On Peak</i>	\$0.2300 per kWh	\$0.3000 per kWh
<i>Off Peak</i>	\$0.0500 per kWh	\$0.0500 per kWh
Winter Season	Nov - May	Nov - May
<i>All kWh</i>	\$0.0500 per kWh	\$0.0500 per kWh

1

(Chart 7 Continued)

Public Schools Non-Demand Time-Of-Use Monthly Prices (Service Levels 3 - 5)		
	Proposed	Current
<i>Customer Charge</i>	\$21.50	\$12.80
Summer Season		
	Jun - Oct	Jun - Oct
<i>On Peak</i>	\$0.2900 per kWh	\$0.3000 per kWh
<i>Off Peak</i>	\$0.0560 per kWh	\$0.0500 per kWh
Winter Season		
	Nov - May	Nov - May
<i>First 1,000 kWh</i>	\$0.0900 per kWh	\$0.0910 per kWh
<i>Over 1,000 kWh</i>	\$0.0500 per kWh	\$0.0540 per kWh

2

3 **Q. Who participates in the Company’s TOU program for non-demand customers?**

4 A. The Company offers TOU programs for residential, general service, public schools non-
5 demand, and the Oil and Gas Producers. As of May, 2011 the participation counts are:
6 Residential – 3,124; General Service – 1,309; Public Schools – 383; and Oil and Gas
7 Producers – 107. The Company believes there is an opportunity to expand participation
8 in the non-demand TOU programs which in turn could produce a significant reduction in
9 peak demand. The Company is proposing a customer education program for optional
10 rates, sponsored by OG&E witness Bryan Scott, and enhancements to these rate designs
11 to reduce enrollment costs and encourage customer participation.

12

13 **Q. Has the Company made any other changes to any of the TOU tariffs?**

14 A. Yes. The application of the GS-TOU rate as it applies to billboard and home owner
15 association lighting has been modified to bill those customers for the on-peak and off-
16 peak energy where Smart Grid technology is installed and time-of-use information is
17 available. Where Smart Grid technology is not available, all usage will continue to be
18 billed as off-peak usage. Additional modifications have been proposed within the TOU
19 with Critical Peak Pricing (“CPP”) rates. These include a change to include municipal
20 pumping customers in the availability clause, and a reduction to the hours available for
21 price overcall to 80 hours from the current 120 hours. The change to the hours available
22 for price overcall aligns the CPP limitations with proposed changes to the Company’s
23 Load Reduction program.

Variable Peak Pricing Rate Design

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Q. What is the history of the Residential and General Service VPP pilot?

A. The VPP pilot program was introduced and approved in Cause PUD No. 200800398 for the specific purpose of testing the rate within the Smart Study Together pilot being conducted by the Company. The Company believes the pilot program should be continued and introduced to the entire customer base as the Smart Grid installation is completed.

Q. Why does the Company believe the pilot program should be continued?

A. The limited number of customers in the VPP rate, while demonstrating customer response to dynamic pricing, has not provided sufficient understanding of the cost structures associated with the rate. Because of this, OG&E is recommending that the rate be continued in its pilot status. While we believe the rate to be accurately designed, it appears that characteristics of the General Service VPP participants and the overall General Service class differ significantly. The average annual consumption (3,761 kWh) for General Service VPP class customers is more than twice that of the General Service population average (1,680 kWh). OG&E is proposing to maintain the structure of GS-VPP with respect to the General Service Class. To mitigate risks to current participants, the Company proposes to extend the Best Bill guarantee to existing GS-VPP customers for an additional year beginning when the proposed rates become effective.

Q. Are you proposing changes to the VPP pilot program?

A. Yes. The Company is proposing new VPP pilot rates for each of the non-demand classes. The tariffs have been modified and the embedded fuel included in the standard peak pricing rate has been adjusted to reflect the off-peak value for embedded fuel. In the case of Public Schools VPP, the on-peak period has been aligned with the defined on-peak period of the PS-ND TOU rate. We updated DAP average price criteria is used to select the daily on-peak price level for the VPP pilot. The proposed ranges have been modified to reflect changes in marginal cost levels from the DAP price forecast. Finally, the VPP tariffs have been modified to reflect a change in the number of hours for which a critical event may be called. The hours available for price overcall have been reduced to 80 hours

1 from the previous 120 hours. This change reflects proposed changes to the Company's
 2 Load Reduction program.

3
 4 **Q. How many residential and general service customers participate in the VPP pilots?**

5 A. As of May, 2011, 1,994 residential and 456 general service customers are enrolled in
 6 VPP rates.

7
 8 General Service Rate Design

9 **Q. What are the proposed changes to the General Service (“GS”) tariff?**

10 A. OG&E proposes to increase the customer charge, include an inclining block summer
 11 price schedule and modify the prices to meet the revenue requirement. Chart 8 below
 12 shows the proposed prices and the current prices.

13 **Chart 8. Comparison of GS Current and Proposed Rates**

General Service Monthly Prices			
(Service Levels 2 - 5)	Proposed	Current	
Customer Charge	\$31.26	\$24.00	
Summer Season	Jun - Oct	Jun - Oct	
First 5,000 kWh	\$0.1000 per kWh	All kWh	\$0.1045 per kWh
Over 5,000 kWh	\$0.1200 per kWh		
Winter Season	Nov - May	Nov - May	
First 1,000 kWh	\$0.0900 per kWh	\$0.0900 per kWh	
Over 1,000 kWh	\$0.0510 per kWh	\$0.0500 per kWh	

14
 15 **Q. What is the unit cost for the customer charge component?**

16 A. The unit cost customer charge for the GS Service Level 5 class was determined to be
 17 \$38.86 as shown in Chart 9 below. The proposed customer charge of \$31.26 is
 18 approximately 20% below the unit cost.

19
 20 **Chart 9. Determination of unit cost for the GS SL-5 customer component**

Customer Charge	Annual Billing Units	Miscellaneous Revenue	Customer	Dist Demand	Cust and Dist Less Miscellaneous	Unit Cost Price
	889,044	\$ 721,567	\$ 35,267,748		\$ 34,546,181	\$ 38.86

1 Q. **Why is OG&E proposing a modification of the GS block structures?**

2 A. The Company adjusted the block structure for its GS class of customers to encourage
 3 more efficient utilization of resources. As in the design of the residential rate, OG&E
 4 applied pricing that better reflects the marginal costs, and added an inclining block
 5 structure beginning at 5,000 kWh to the summer rates. This new tail-block will expose
 6 approximately one-quarter of summer season kWh sales to the tail-block price and aligns
 7 the rate structure with the Company’s Arkansas jurisdiction General Service rate
 8 structure.

9
 10 Q. **What is the impact of these changes to GS SL-5 customers?**

11 A. As shown in Chart 10, the average billing impact to a GS SL-5 customer is approximately
 12 2.3 percent, or a \$3.93 per month increase. The chart also shows the impact to customers
 13 segmented by size and seasonality.

14 **Chart 10. Customer impacts to GS SL-5 customers**

Segmented Results Current GS-1 VS Proposed GS-1											
Segment	Number of Customers	Current GS-1 Revenue	Proposed GS-1 Revenue	Total Difference	Percent Difference	Annual kWh	Average Monthly kWh		Current Average \$/Month	Proposed Average \$/Month	Average Difference \$/Month
							Summer	Winter			
Total	64,003	\$131,807,542	\$134,826,577	\$3,019,035	2.3%	19,265	2,324	1,662	\$171.62	\$175.55	\$3.93
Small Users	30,662	\$17,558,026	\$19,843,469	\$2,285,444	13.0%	2,747	234	226	\$47.72	\$53.93	\$6.21
Large Users	32,000	\$113,860,581	\$114,477,347	\$616,766	0.5%	35,899	3,495	2,632	\$296.51	\$298.12	\$1.61
Summer Users	9,157	\$19,821,579	\$20,297,317	\$475,738	2.4%	18,540	2,471	884	\$180.39	\$184.72	\$4.33
Winter Users	8,070	\$7,103,216	\$7,633,623	\$530,407	7.5%	7,153	284	819	\$73.35	\$78.83	\$5.48
Non-Seasonal	46,776	\$104,882,747	\$106,895,637	\$2,012,890	1.9%	21,496	2,011	1,634	\$186.85	\$190.44	\$3.59

15

16 Q. **How did OG&E determine the impact of these changes to customers?**

17 A. OG&E determined the impact using the same method described for residential customers.
 18 A database of all GS customers with a complete year of data was created and included
 19 64,003 customers. The impact was determined by computing annual bills under the
 20 current prices, the proposed prices, and then determining the difference in revenue.
 21 Customers were segmented by size and seasonality for analysis of sub-groups within the
 22 class.

23

24 Q. **What were the results of the unit cost analysis for the GS customers?**

25 A. The results for the unit cost run are shown in Chart 11.

1 **Chart 11. Comparison of unit costs and proposed rates for GS SL-5 customers**

Segmented Results GS-1 Unit Costs VS Proposed GS-1											
Segment	Number of Customers	GS-1 Unit Costs Revenue	Proposed GS-1 Revenue	Total Difference	Percent Difference	Annual kWh	Average Monthly kWh		Current Average \$/Month	Proposed Average \$/Month	Average Difference \$/Month
							Summer	Winter			
Total	64,003	\$134,074,473	\$134,826,577	\$752,104	0.6%	19,265	2,324	1,662	\$174.57	\$175.55	\$0.98
Small Users	30,662	\$22,023,928	\$19,843,469	(\$2,180,459)	-9.9%	2,747	234	226	\$59.86	\$53.93	(\$5.93)
Large Users	32,000	\$111,422,488	\$114,477,347	\$3,054,859	2.7%	35,899	3,495	2,632	\$290.16	\$298.12	\$7.96
Summer Users	9,157	\$20,538,446	\$20,297,317	(\$241,129)	-1.2%	18,540	2,471	884	\$186.91	\$184.72	(\$2.19)
Winter Users	8,070	\$7,854,206	\$7,633,623	(\$220,583)	-2.8%	7,153	284	819	\$81.10	\$78.83	(\$2.28)
Non-Seasonal	46,776	\$105,681,821	\$106,895,637	\$1,213,816	1.1%	21,496	2,011	1,634	\$188.28	\$190.44	\$2.16

2 Public Schools Non-Demand (“PS-ND”) and Public Schools Demand (“PS-D”) Rate Design

3

4 Q. What are the proposed rate changes to the PS-ND and PS-D rates?

5 A. The proposed pricing for Public Schools classes is presented in Chart 12.

6 **Chart 12. Comparison of current and proposed Public Schools rates**

Public Schools Non-Demand Monthly Prices (Service Levels 3 - 5)		
	Proposed	Current
Customer Charge	\$24.50	\$12.80
Summer Season Jun - Oct Jun - Oct		
All kWh	\$0.1050 per kWh	\$0.1045 per kWh
Winter Season Nov - May Nov - May		
First 1,000 kWh	\$0.0900 per kWh	\$0.0910 per kWh
Over 1,000 kWh	\$0.0500 per kWh	\$0.0540 per kWh
Public Schools Non-Demand Time-Of-Use Monthly Prices (Service Levels 3 - 5)		
	Proposed	Current
Customer Charge	\$21.50	\$12.80
Summer Season Jun - Oct Jun - Oct		
On Peak	\$0.2900 per kWh	\$0.3000 per kWh
Off Peak	\$0.0560 per kWh	\$0.0500 per kWh
Winter Season Nov - May Nov - May		
First 1,000 kWh	\$0.0900 per kWh	\$0.0910 per kWh
Over 1,000 kWh	\$0.0500 per kWh	\$0.0540 per kWh
Public Schools Demand Monthly Prices (Service Level 4)		
	Proposed	Current
Customer Charge	\$99.00	\$75.00
Summer Season Jun - Oct Jun - Oct		
All kWh	\$0.0400 per kWh	\$0.0400 per kWh
Maximum kW	\$11.00 per kW	\$11.00 per kW
Winter Season Nov - May Nov - May		
All kWh	\$0.0400 per kWh	\$0.0400 per kWh
Maximum kW	\$6.00 per kW	\$5.95 per kW

(Chart 12 Continued)

Public Schools Demand Monthly Prices		
(Service Level 5)	Proposed	Current
<i>Customer Charge</i>	\$99.00	\$75.00
Summer Season	Jun - Oct	Jun - Oct
<i>All kWh</i>	\$0.0400 per kWh	\$0.0400 per kWh
<i>Maximum kW</i>	\$11.35 per kW	\$11.35 per kW
Winter Season	Nov - May	Nov - May
<i>All kWh</i>	\$0.0400 per kWh	\$0.0400 per kWh
<i>Maximum kW</i>	\$6.05 per kW	\$6.00 per kW
Public Schools Demand Time-Of-Use Monthly Prices		
(Service Levels 3)	Proposed	Current
<i>Customer Charge</i>	\$75.00	\$75.00
Summer Season	Jun - Oct	Jun - Oct
<i>On Peak</i>	\$0.1700 per kWh	\$0.1610 per kWh
<i>Off Peak</i>	\$0.0380 per kWh	\$0.0360 per kWh
<i>Maximum kW</i>	\$5.30 per kW	\$5.90 per kW
Winter Season	Nov - May	Nov - May
<i>All kWh</i>	\$0.0380 per kWh	\$0.0360 per kWh
<i>Maximum kW</i>	\$5.30 per kW	\$5.90 per kW
Public Schools Demand Time-Of-Use Monthly Prices		
(Service Levels 4)	Proposed	Current
<i>Customer Charge</i>	\$75.00	\$75.00
Summer Season	Jun - Oct	Jun - Oct
<i>On Peak</i>	\$0.1700 per kWh	\$0.1610 per kWh
<i>Off Peak</i>	\$0.0380 per kWh	\$0.0360 per kWh
<i>Maximum kW</i>	\$5.35 per kW	\$5.95 per kW
Winter Season	Nov - May	Nov - May
<i>All kWh</i>	\$0.0380 per kWh	\$0.0360 per kWh
<i>Maximum kW</i>	\$5.35 per kW	\$5.95 per kW
Public Schools Demand Time-Of-Use Monthly Prices		
(Service Levels 5)	Proposed	Current
<i>Customer Charge</i>	\$75.00	\$75.00
Summer Season	Jun - Oct	Jun - Oct
<i>On Peak</i>	\$0.1700 per kWh	\$0.1610 per kWh
<i>Off Peak</i>	\$0.0380 per kWh	\$0.0360 per kWh
<i>Maximum kW</i>	\$5.40 per kW	\$6.00 per kW
Winter Season	Nov - May	Nov - May
<i>All kWh</i>	\$0.0380 per kWh	\$0.0360 per kWh
<i>Maximum kW</i>	\$5.40 per kW	\$6.00 per kW

2

3 **Q. What are the impacts to these classes?**

4 A. The overall impact to the Public Schools-ND Service Level 5 customers is a decrease of
 5 1.5%, about \$7.50 per month on average. For the PS-ND Service Level 5 customers, the
 6 average monthly bill is reduced by 1.4% or slightly more than \$40.00.

7

Oil & Gas Producers (“OGP”) Rate Design

Q. What are the proposed rate changes to the OGP rates?

A. The proposed pricing for the OGP class customers is shown in Chart 13.

Chart 13. Comparison of current and proposed OGP rates

Oil & Gas Producers Monthly Prices (Service Levels 2 - 5)		
	Proposed	Current
Customer Charge	\$30.50	\$24.00
Summer Season	Jun - Oct	Jun - Oct
All kWh	\$0.0710 per kWh	\$0.0820 per kWh
Winter Season	Nov - May	Nov - May
All kWh	\$0.0500 per kWh	\$0.0500 per kWh

Q. What are the overall impacts to these classes?

A. The overall impact to OGP, Service Level 5 customers is a decrease of 4.4%, equating to an average monthly reduction of \$8.70.

Municipal Pumping (“PM”) Rate Design

Q. What are the proposed rate changes to the PM rate?

A. The proposed pricing for the PM tariff is shown in Chart 14.

Chart 14. Comparison of current and proposed PM rates

Municipal Pumping Monthly Prices (Service Levels 3 - 5)		
	Proposed	Current
Customer Charge	\$28.73	\$24.00
Summer Season	Jun - Oct	Jun - Oct
All kWh	\$0.0660 per kWh	\$0.0660 per kWh
Winter Season	Nov - May	Nov - May
All kWh	\$0.0500 per kWh	\$0.0500 per kWh

Q. What are the overall impacts to these classes?

A. PM Service Level 5 customer’s average billing will decrease by 1.2% or \$5.66 per month.

Power & Light (“PL”) and PL Time of Use (“PL-TOU”) Rate Design

Q. What are the proposed prices for the PL and PL-TOU rates?

A. The proposed prices and the prices currently in effect are reflected in Charts 15 and 16.

Chart 15. Comparison of current and proposed PL rates

Power & Light Monthly Prices		
(Service Level 1)	Proposed	Current
Customer Charge	\$300.00	\$300.00
All kWh	\$0.040 per kWh	\$0.039 per kWh
Summer Season	Jun - Oct	Jun - Oct
Maximum kW	\$9.60 per kW	\$9.60 per kW
Winter Season	Nov - May	Nov - May
Maximum kW	\$4.75 per kW	\$4.75 per kW
(Service Level 2)	Proposed	Current
Customer Charge	\$200.00	\$300.00
All kWh	\$0.043 per kWh	\$0.040 per kWh
Summer Season	Jun - Oct	Jun - Oct
Maximum kW	\$9.60 per kW	\$9.60 per kW
Winter Season	Nov - May	Nov - May
Maximum kW	\$4.80 per kW	\$4.80 per kW
(Service Levels 3 & 4)	Proposed	Current
Customer Charge	\$125.00	\$135.00
All kWh	\$0.042 per kWh	\$0.041 per kWh
Summer Season	Jun - Oct	Jun - Oct
Maximum kW	\$10.65 per kW	\$10.65 per kW
Winter Season	Nov - May	Nov - May
Maximum kW	\$6.50 per kW	\$5.95 per kW
(Service Level 5)	Proposed	Current
Customer Charge	\$93.25	\$75.00
All kWh	\$0.044 per kWh	\$0.042 per kWh
Summer Season	Jun - Oct	Jun - Oct
Maximum kW	\$11.45 per kW	\$12.25 per kW
Winter Season	Nov - May	Nov - May
Maximum kW	\$6.55 per kW	\$6.35 per kW

Chart 16. Comparison of current and proposed PL-TOU rates

Power & Light Time-Of-Use Monthly Prices		
(Service Level 1)	Proposed	Current
Customer Charge	\$300.00	\$300.00
On Peak kWh	\$0.175 per kWh	\$0.162 per kWh
Off Peak kWh (incl. winter)	\$0.039 per kWh	\$0.037 per kWh
Maximum kW	\$4.50 per kW	\$4.75 per kW
(Service Level 2)	Proposed	Current
Customer Charge	\$200.00	\$300.00
On Peak kWh	\$0.175 per kWh	\$0.162 per kWh
Off Peak kWh (incl. winter)	\$0.039 per kWh	\$0.037 per kWh
Maximum kW	\$4.50 per kW	\$4.80 per kW
(Service Level 3 & 4)	Proposed	Current
Customer Charge	\$135.00	\$135.00
On Peak kWh	\$0.175 per kWh	\$0.167 per kWh
Off Peak kWh (incl. winter)	\$0.039 per kWh	\$0.037 per kWh
Maximum kW	\$5.55 per kW	\$5.95 per kW
(Service Level 5)	Proposed	Current
Customer Charge	\$79.00	\$75.00
On Peak kWh	\$0.175 per kWh	\$0.162 per kWh
Off Peak kWh (incl. winter)	\$0.039 per kWh	\$0.037 per kWh
Maximum kW	\$5.75 per kW	\$6.35 per kW

1 Q. **What are the impacts and unit cost analysis results based on the proposed rates?**

2 A. The class impacts and unit cost analysis results are determined and shown based on a
3 division of customers by size and load factor. These are provided in Exhibit GWT-3.

4
5 Q. **Is the Company proposing other changes to the Power and Light tariffs?**

6 A. Yes. In accordance with the Joint Stipulation and Settlement Agreement and final Order
7 in Cause No. PUD 200800398, the Company is modifying the Power Factor clause in all
8 of the tariffs to which it applies to reflect an increase of the power factor requirement
9 from 85% to 90%.

10

11

DAY AHEAD PRICING

12 Q. **Have there been any changes made to other existing tariffs and riders which impact
13 demand customers?**

14 A. Yes. Changes have been made to the Day-Ahead Pricing (DAP) tariff and the Load
15 Reduction (LR) rider.

16

17 Q. **Please provide an overview of the changes made to DAP tariff.**

18 A. The DAP tariff has been changed in the following five areas:

- 19 • The tariff has been modified to allow seasonal subscription periods.
- 20 • Billing and administration of the LR program has been modified for DAP
21 customers participating in the Load Reduction program.
- 22 • The Administration Charge for the DAP program have been eliminated.
- 23 • Best Bill provision has been added for RTP DAP customers during the first year
24 of enrollment.
- 25 • Modified the availability section to define the classes of customer to which DAP
26 is available and eliminated the demand requirement of 200 kW.

27

28 Q. **Why is the DAP program being modified to allow seasonal subscription?**

29 A. Seasonality provides flexibility to customer participation to recognize differences in the
30 seasonal attributes of the customer's energy consumption. The current DAP tariff
31 termination clause requires a customer to wait a full 12 months from the termination date

1 prior to re-subscribing to the program. Customers will have the choice of participating
2 during the summer season, winter season or year-round. The summer season includes the
3 five revenue months of June through October and the winter season includes the seven
4 revenue months of November through May.
5

6 **Q. Describe the changes to billing of LR curtailment events under the proposed DAP**
7 **tariff.**

8 A. The billing changes associated with the LR portion of the DAP program modify how a
9 customer is compensated for performance under the LR program. Customers will receive
10 performance credits at the greater of the DAP or LR performance price for all kWh
11 reduced below the CBL. Modifications to the Buy-Through charges limit the amount paid
12 for excess energy usage above the customers subscribed level to the DAP CBL level.
13 Additional energy used in excess of the DAP CBL level is billed at the hourly DAP price.
14 The LR rider governs all pricing and notifications of curtailment events. These include
15 price, duration, and notification of the LR event. The DAP tariff does not address these
16 components for participants in LR.
17

18 **Q. Why is the Company proposing to eliminate the Administration charge and provide**
19 **a best bill guarantee in the DAP tariff?**

20 A. The elimination of the Administration charges and the adoption of a “Best Bill” provision
21 is intended to eliminate these barriers to subscription to the DAP program. Increased
22 participation will lead to increased benefits available to OG&E customers through the
23 increased efficiencies gained through load-shifting and on-peak period demand
24 reductions.
25

26 **Q. Why have the kW limits been removed from the DAP tariff?**

27 A. The availability of Smart Grid technology provides the opportunity to expand the DAP
28 program to customers with a maximum demand of less than 200 kW.

1 LOAD REDUCTION

2 Q. **Please discuss the modifications to the LR rider.**

3 A. The Company is proposing changes to the LR rider which include:

- 4 • Enrollment outside of the subscription period with prorated Subscription Credit
- 5 payments.
- 6 • Addition of a Monthly Subscription Price Factor (MSPF).
- 7 • Modifications to the notification time period options.
- 8 • Modifications to the curtailment hours choices available to customers.
- 9 • Modification of the Subscribed Curtailment Load (“SCL”) language to specify a
- 10 minimum.
- 11 • Elimination of the zero SCL option.
- 12 • Increasing the Direct Load Control (DLC) notification window to a one (1) hour
- 13 notice and decreasing the total hours under the DLC to 80 hours from 120 hours.
- 14 • Creation of a Compliance Ratio (CR) under the Special Condition section of the tariff
- 15 to recognize high levels of compliance performance.
- 16 • Changes in the applicability of the Buy-Through charge.
- 17 • Changes in language governing participation of DAP customers.

18
19 Q. **Why are these modifications to the LR rider being proposed?**

20 A. These modifications are proposed to increase the demand reduction potential of the
21 program, enhance the program for existing customers and attract additional customers
22 through increased benefits and additional options. The LR program was originally
23 designed to reward customers for performance and these modifications provide additional
24 rewards for those customers that perform well. The Company recognizes that not all
25 customers are able to respond within the parameters of the LR program and therefore not
26 all customers should participate. However, we do believe the success of the program in
27 inducing demand reductions will be enhanced by these changes.

1 Q. **Have the prices for subscription and performance for 2012 been included in this**
 2 **filing?**

3 A. No. The subscription and minimum performance prices will be determined pursuant to
 4 the existing and proposed tariffs, and posted prior to the beginning of the 2012
 5 subscription period.
 6

7 Large Power & Light (“LPL”) Rate Design

8 Q. **What changes are proposed for the LPL rates?**

9 A. The Company is proposing the elimination of the winter season declining block rate
 10 currently included in the Service Level 1 and Service Level 2 rates. All kWh will be
 11 priced at the off-peak rate. The proposed prices and the prices currently in effect are
 12 reflected in Chart 17.

13 **Chart 17. Comparison of current and proposed LPL rates**

Large Power & Light Time-Of-Use Monthly Prices			
(Service Level 1)	Proposed		Current
<i>Customer Charge</i>	\$365.00		\$300.00
<i>On Peak kWh</i>	\$0.175 per kWh		\$0.170 per kWh
<i>Off Peak kWh (incl. winter)</i>	\$0.037 per kWh	<i>Winter First 2 mil kWh</i>	\$0.034 per kWh
		<i>Winter Over 2 mil kWh</i>	\$0.032 per kWh
<i>Maximum kW</i>	\$3.20 per kW		\$3.45 per kW
(Service Level 2)	Proposed		Proposed
<i>Customer Charge</i>	\$365.00		\$300.00
<i>On Peak kWh</i>	\$0.175 per kWh		\$0.170 per kWh
<i>Off Peak kWh (incl. winter)</i>	\$0.037 per kWh	<i>Winter First 2 mil kWh</i>	\$0.034 per kWh
		<i>Winter Over 2 mil kWh</i>	\$0.032 per kWh
<i>Maximum kW</i>	\$3.86 per kW		\$4.07 per kW
(Service Level 3 & 4)	Proposed		Current
<i>Customer Charge</i>	\$200.00		\$135.00
<i>On Peak kWh</i>	\$0.175 per kWh		\$0.162 per kWh
<i>Off Peak kWh (incl. winter)</i>	\$0.038 per kWh		\$0.034 per kWh
<i>Maximum kW</i>	\$5.61 per kW		\$5.55 per kW
(Service Level 5)	Proposed		Current
<i>Customer Charge</i>	\$75.00		\$75.00
<i>On Peak kWh</i>	\$0.176 per kWh		\$0.162 per kWh
<i>Off Peak kWh (incl. winter)</i>	\$0.040 per kWh		\$0.035 per kWh
<i>Maximum kW</i>	\$6.55 per kW		\$6.45 per kW

14
 15 Q. **What are the impacts to these customer classes under the proposed tariffs?**

16 A. The class impacts and unit cost analyses results determined by size and load factor are
 17 contained within Exhibit GWT-4.

1 Municipal Lighting (“LM”) and Outdoor Security Lighting (“OSL”) Rate Design

2 Q. **How did OG&E design the prices for the lighting classes?**

3 A. The first objective is to move the proposed prices for the various fixtures and poles closer
4 to current costs. Prices were adjusted based on the ratio of costs to current prices and the
5 final overall increase for any fixture or pole was limited to 1.5 times the targeted increase
6 for the classes. The proposed prices for LM and OSL are shown in the proposed tariffs
7 and in Schedule M-4 filed in this docket.

8
9 Q. **Did the Company add or remove any fixtures from the LM or OSL tariffs?**

10 A. Yes. The Company added two new decorative fixtures to both tariffs. Pricing for the new
11 fixtures was established based on current costs. We have also removed several fixtures
12 which are no longer offered and are not currently installed on the Company’s system.

13
14 Rider Additions, Terminations and Modifications

15 Q. **Are any new riders being proposed at this time?**

16 A. No.

17
18 Q. **Is OG&E proposing to terminate any existing riders?**

19 A. Yes. The OU Spirit Rider is being terminated to reflect the inclusion of the associated
20 costs in the base rates; the OSSE rider is being eliminated and the associated credits are
21 being included in the FCA, which is discussed by OG&E witness Donald R. Rowlett;
22 and, the Smart Grid Best Bill rider, the Curtailment rider, Interruptible Rider, and PACE
23 riders are being terminated because they are no longer applicable. Also, the Economic
24 Incentive Credit (“EIC”) rider expires at the end of 2011 and is being removed-the
25 Company proposes to allocate the final over or under collection amount to customers
26 through the rider for Fuel Cost Adjustment.

- 1 Q. **Does the termination of the OU Spirit Rider require additional action?**
- 2 A. Yes. Commission Order No. 571788, in Cause No. PUD 200900167, addresses the
3 construction of the OU Spirit wind farm and other related matters. The Joint Stipulation
4 and Settlement Agreement (“Settlement Agreement”) entered into by the parties in that
5 cause was adopted by the Commission. The Settlement Agreement provided that
6 revenues from the sale of renewable energy credits (RECs) associated with OU Spirit
7 would be passed through to customers via a combination of the Renewable Transmission
8 System Additions rider (“RTSA”) and the OU Spirit Rider. The portion of the credit
9 associated with the OU Spirit rider was not included in the base rate revenue requirement
10 within this Cause and must be returned to customers through an alternative means.
11
- 12 Q. **Please explain the Company’s proposal for treatment of revenues from the sale of**
13 **RECs resulting from the operation of the OU Spirit wind farm.**
- 14 A. Commission Order No. 571788 provided that when new rates go into effect at the
15 completion of rate review, the sale proceeds are to be distributed through a new rider, the
16 OU REC Rider. Instead, OG&E is proposing to satisfy this requirement by crediting that
17 portion of the revenues to customers through the NREC component of the RTSA rider.
18
- 19 Q. **Why does the Company recommend utilizing the RTSA rider?**
- 20 A. The proposed change to the NREC component of the RTSA accomplishes the intent of
21 properly crediting customers for the portion of the revenues from the sale of OU Spirit
22 RECs and avoids the administration of an additional rider.
23
- 24 Q. **Are you sponsoring changes to the Green Power Wind Rider (“GPWR”)?**
- 25 A. Yes. The current GPWR includes specific tariff pricing for 2008-2010. OG&E is
26 currently applying the 2010 price to sales in 2011. OG&E is requesting a modification to
27 extend the 2010 tariff price into future years.
28
- 29 Q. **Is OG&E requesting a change to the Low Income Assistance Program (“LIAP”)?**
- 30 A. Yes. We are requesting that limitations on the applicability of the LIAP be removed. The
31 LIAP currently provides a discounted customer charge to all residential customers that

1 receive benefits from the Low Income Home Energy Assistance Program (“LIHEAP”).
2 This discount currently applies to only the standard residential rate and OG&E is
3 proposing to allow the discount to apply to all residential service tariffs. This change will
4 not impact the overall revenues of the Company and will allow the affected customers to
5 continue to receive the discount regardless of their selected rate plan.
6

7 **Q. What additional changes to riders and tariffs are you sponsoring?**

8 A. The Company is proposing to update the Crossroads rider to reflect allocation factors
9 resulting from this filing. The Net Energy Billing Option rider has been updated to
10 eliminate language that established a grace period for customers to enroll in a TOU rate
11 because the grace period has expired. The Military Base Tariff Credit rider has been
12 updated to reflect new billing factors under the test year sales information included in this
13 filing.
14

15 **Q. What other changes to existing riders are presented for approval by other witnesses
16 in this Cause?**

17 A. In addition to the changes mentioned related to the removal of the OSSE rider, OG&E
18 witness Donald Rowlett is proposing modifications to the rider for Fuel Cost Adjustment,
19 the Renewable Transmission System Additions rider and the SPP Cost Tracker. OG&E
20 witness Malini Gandhi is sponsoring changes to the storm cost recovery rider and system
21 hardening program rider.
22

23 TARIFFS AND TERMS AND CONDITIONS OF SERVICE

24 **Q. Are you sponsoring the updated Tariffs and Terms and Conditions of Service filed
25 in this cause?**

26 A. Yes. The modifications resulting from rate design as well as the changes required to
27 reflect proposed rider changes and new tariffs are reflected in the tariffs files as Section N
28 of the Company’s application in this Cause.

1 Q. **Is the Company making substantive changes to the Terms and Conditions of**
2 **Service?**

3 A. No. The changes to the Terms and Conditions of Service reflect formatting modifications.

4

5 Q. **Does this conclude your direct testimony?**

6 A. Yes.

	Current Revenue (\$)	Revenue Requirement (\$)	% of Class Total	Target Revenue (\$)	Revenue Change (\$)	Percent Change
TOTAL RESIDENTIAL SERVICE	770,163,126	820,217,622		820,236,460	50,073,334	6.50%
RESIDENTIAL STANDARD S/L-5	765,854,330	815,605,935	99.44%	815,647,991	49,793,661	6.50%
RESIDENTIAL STANDARD-Special Contract C S/L-5	21,159	30,718		21,159	0	0.00%
RESIDENTIAL TOU S/L-5	3,089,009	3,277,870	0.40%	3,289,127	200,118	6.48%
RESIDENTIAL VVP S/L-5	1,198,628	1,303,099	0.16%	1,278,184	79,556	6.64%
TOTAL GENERAL SERVICE	163,809,281	167,280,797		167,584,519	3,775,238	2.30%
TOTAL GENERAL SVC STANDARD	155,098,701	158,446,243				
GENERAL SVC STANDARD S/L-2	184,042	207,500	0.13%	188,801	4,759	2.59%
GENERAL SVC STANDARD S/L-3	446,863	443,813	0.27%	457,041	10,178	2.28%
GENERAL SVC STANDARD S/L-4	384,245	316,739	0.19%	391,509	7,264	1.89%
GENERAL SVC STANDARD S/L-5	151,852,687	154,816,206	94.05%	155,403,120	3,550,433	2.34%
GENERAL SVC STANDARD-Special Contract C S/L-5	2,230,864	2,661,986		2,230,864	0	0.00%
TOTAL GENERAL SVC TOU	7,864,615	7,952,598				
GENERAL SVC TOU S/L-3	68,126	75,350	0.05%	69,854	1,728	2.54%
GENERAL SVC TOU S/L-5	7,796,489	7,877,248	4.79%	7,977,140	180,651	2.32%
GENERAL SVC VPP S/L-5	845,965	881,956	0.54%	866,191	20,226	2.39%
TOTAL OIL & GAS PRODUCTION	13,535,701	12,512,274		12,795,015	-740,686	-5.47%
TOTAL OIL & GAS PROD STANDARD	13,104,229	12,115,761				
OIL & GAS PROD STANDARD S/L-2	4,062	29,086	0.23%	2,340	-1,722	-42.39%
OIL & GAS PROD STANDARD S/L-3	3,229,934	3,031,029	24.22%	3,050,507	-179,427	-5.56%
OIL & GAS PROD STANDARD S/L-4	170,839	181,442	1.45%	160,098	-10,741	-6.29%
OIL & GAS PROD STANDARD S/L-5	9,699,394	8,874,203	70.92%	9,174,070	-525,324	-5.42%
TOTAL OIL & GAS PROD TOU	431,472	396,513				
OIL & GAS PROD TOU S/L-3	26,213	36,150	0.29%	24,073	-2,140	-8.16%
OIL & GAS PROD TOU S/L-4	8,594	9,142	0.07%	8,053	-541	-6.30%
OIL & GAS PROD TOU S/L-5	396,665	351,221	2.81%	375,874	-20,791	-5.24%
TOTAL SCHOOLS NON_DEMAND	18,480,008	18,534,494		18,234,890	-245,118	-1.33%
TOTAL SCHOOLS ND-STANDARD	12,235,016	11,888,628				
SCHOOLS ND-STANDARD S/L-3	120,356	139,096	0.75%	118,516	-1,840	-1.53%
SCHOOLS ND-STANDARD S/L-4	277,302	252,778	1.36%	273,959	-3,343	-1.21%
SCHOOLS ND-STANDARD S/L-5	11,837,358	11,496,754	62.03%	11,685,314	-152,044	-1.28%
TOTAL SCHOOLS ND-TOU	6,244,992	6,645,866				
SCHOOLS ND-TOU S/L-3	236,814	246,321	1.33%	233,556	-3,258	-1.38%
SCHOOLS ND-TOU S/L-4	150,388	152,340	0.82%	148,373	-2,015	-1.34%
SCHOOLS ND-TOU S/L-5	5,857,790	6,247,205	33.71%	5,775,171	-82,619	-1.41%
TOTAL SCHOOLS DEMAND	10,068,147	9,688,148		9,943,147	-125,000	-1.24%
TOTAL SCHOOLS D-STANDARD	4,752,879	4,295,914				
SCHOOLS D-STANDARD S/L-4	548,239	479,896	4.95%	542,047	-6,192	-1.13%

	Current Revenue (\$)	Revenue Requirement (\$)	% of Class Total	Target Revenue (\$)	Revenue Change (\$)	Percent Change
SCHOOLS D-STANDARD S/L-5	4,204,640	3,816,018	39.39%	4,155,404	-49,236	-1.17%
TOTAL SCHOOLS D-TOU	5,315,268	5,392,234				
SCHOOLS D-TOU S/L-3	373,330	355,401	3.67%	368,744	-4,586	-1.23%
SCHOOLS D-TOU S/L-4	1,178,113	1,119,683	11.56%	1,163,666	-14,447	-1.23%
SCHOOLS D-TOU S/L-5	3,763,825	3,917,150	40.43%	3,713,285	-50,540	-1.34%
TOTAL POWER & LIGHT	421,597,421	417,092,177				
TOTAL PWR & LGHT STANDARD	257,549,452	257,342,054		257,549,452	0	0.00%
PWR & LGHT STANDARD S/L-1	84,657	70,685	0.03%	84,657	0	0.00%
PWR & LGHT STANDARD S/L-2	183,566	436,418	0.17%	183,566	0	0.00%
PWR & LGHT STANDARD S/L-3	20,974,636	19,188,455	7.49%	20,974,636	0	0.00%
PWR & LGHT STANDARD S/L-4	7,618,995	7,272,956	2.84%	7,618,995	0	0.00%
PWR & LGHT STANDARD S/L-5	227,510,967	229,158,149	89.47%	227,510,967	0	0.00%
PWR & LGHT STANDARD-Special Contract C S/L-5	1,176,631	1,215,390		1,176,631	0	0.00%
TOTAL PWR & LGHT TOU	164,047,969	159,750,123		163,402,379	-645,590	-0.39%
PWR & LGHT TOU S/L-1	534,372	343,344	0.21%	532,984	-1,388	-0.26%
PWR & LGHT TOU S/L-2	4,082,106	3,617,064	2.26%	4,067,489	-14,617	-0.36%
PWR & LGHT TOU S/L-3	29,535,717	26,467,480	16.57%	29,428,755	-106,962	-0.36%
PWR & LGHT TOU S/L-4	10,508,587	10,741,861	6.72%	10,465,176	-43,411	-0.41%
PWR & LGHT TOU S/L-5	119,387,187	118,580,374	74.23%	118,907,974	-479,213	-0.40%
TOTAL LRG. POWER & LIGHT-TOU	268,994,433	286,703,305		286,709,446	17,715,013	6.59%
LRG. POWER & LIGHT-TOU S/L-1	27,429,591	29,990,417	10.78%	29,339,355	1,909,764	6.96%
LRG. POWER & LIGHT-TOU S/L-2	155,575,007	164,284,861	59.05%	166,036,526	10,461,519	6.72%
LRG. POWER & LIGHT-TOU-Special Contract B S/L-2	5,916,383	8,511,540		5,916,383	0	0.00%
LRG. POWER & LIGHT-TOU S/L-3	39,671,382	42,012,180	15.10%	42,346,682	2,675,300	6.74%
LRG. POWER & LIGHT-TOU S/L-4	15,236,258	15,887,883	5.71%	16,247,985	1,011,727	6.64%
LRG. POWER & LIGHT-TOU S/L-5	25,165,812	26,016,425	9.35%	26,822,516	1,656,704	6.58%
TOTAL MUNICIPAL PUMPING	8,091,164	7,824,536		8,016,164	-75,000	-0.93%
MUNICIPAL PUMPING S/L-3	14,911	35,462	0.45%	14,571	-340	-2.28%
MUNICIPAL PUMPING S/L-4	671,661	650,367	8.31%	665,427	-6,234	-0.93%
MUNICIPAL PUMPING S/L-5	7,404,592	7,138,707	91.23%	7,336,166	-68,426	-0.92%
TOTAL LIGHTING SERVICE	28,338,750	36,480,636				
MUNICIPAL LIGHTING S/L-5	11,688,479	15,029,704	100.00%	12,712,245	1,023,766	8.76%
SECURITY LIGHTING S/L-5	16,650,271	21,450,931	100.00%	19,150,271	2,500,000	15.01%
TOTAL OKLA RETAIL JURISDICTION	1,703,078,031	1,776,333,988		1,776,333,988		

Residential - Service Level 5

Unit Cost Components			
Total Customer Component	\$ 161,733,357	PD (Excess Component)	\$ 136,341,758
Total Energy Component	\$ 257,863,493	PD (Avg Component)	\$ 99,663,272
FCA Removal	\$ 9,524,723	Trans Demand	\$ 63,214,035
Adjusted Energy Component	\$ 248,338,770	Dist Demand	\$ 96,808,760
Total Cost of Service Revenue Requirement	\$ 815,624,674	Total Demand Component	\$ 396,027,825
Muni/LIAP Adjustment + Reconciliation	\$ 1,623,715		
POR tie	\$ 814,000,960		

Customer Charge	Annual Billing Units	Miscellaneous Revenue	Customer	Dist Demand	Cust and Dist Less Miscellaneous	Unit Cost Price
	7,371,480	\$ 11,139,258	\$ 161,733,357		\$ 150,594,099	\$ 20.43
LIAP Discount	578,712					\$ (10.00)

Energy Charge	Proforma Billing Units	Energy	PD (Excess Component)*	PD (Avg Component)	Transmission Demand	Distribution Demand	Energy and Demand Total Revenue Req From Unit Cost	Unit Cost Price
Summer								Summer
First 1400 kWh	2,603,051,022	\$ 78,352,152	\$ 43,629,362	\$ 31,444,272	\$ 29,914,820.44	\$ 45,812,874	\$ 229,153,482	First 1400 kWh \$ 0.088033
Over 1,400 kWh	878,275,128	\$ 26,436,188	\$ 92,712,395	\$ 10,609,366			\$ 129,757,950	Over 1,400 kWh \$ 0.147742
Winter								Winter
First 600 kWh	1,851,685,765	\$ 55,735,967		\$ 22,367,948	\$ 21,279,969.82	\$ 32,589,084	\$ 131,972,969	First 600 kWh \$ 0.071272
Over 600 kWh	1,871,552,438	\$ 56,333,956		\$ 22,607,933			\$ 78,941,889	Over 600 kWh \$ 0.042180
Shoulder								Shoulder
All kWh	1,045,859,797	\$ 31,480,507		\$ 12,633,752	\$ 12,019,245.02	\$ 18,406,802	\$ 74,540,305	All kWh \$ 0.071272
Total	8,250,424,150	\$ 248,338,770	\$ 136,341,758	\$ 99,663,272	\$ 63,214,035	\$ 96,808,760	\$ 644,366,595	
Check		\$ 248,338,770	\$ 136,341,758	\$ 99,663,272	\$ 63,214,035	\$ 96,808,760	\$ 644,366,595	
Difference		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

General - Service Level 2,3,4,5

Unit Cost Components			
Total Customer Component	\$ 35,359,630	PD (Excess Component)	\$ 25,551,470
Total Energy Component	\$ 46,928,289	PD (Avg Component)	\$ 18,296,794
FCA Removal	\$ 1,711,872	Trans Demand	\$ 11,345,294
Adjusted Energy Component	\$ 45,216,417	Dist Demand	\$ 18,204,203
Total of All Components	\$ 155,685,681	Total Demand Component	\$ 73,397,761
Muni/LIAP Adjustment + Reconciliation	\$ 156,854,184		
POR tie	\$ (1,168,503)		

Customer Charge	Annual Billing Units	Miscellaneous Revenue	Customer	Dist Demand	Cust and Dist Less Miscellaneous	Unit Cost Price
	889,044	\$ 721,567	\$ 35,359,630		\$ 34,638,063	\$ 38.96

Energy Charge	Proforma Billing Units	Energy	PD (Excess Component)*	PD (Avg Component)	Transmission Demand	Distribution Demand	Energy and Demand Total Revenue Req From Unit Cost	Unit Cost Price
Summer								Summer
All kWh	719,432,273	\$ 21,837,431	\$ 25,551,470	\$ 8,836,502	\$ 8,021,434	\$ 12,870,870	\$ 77,117,707	All kWh \$ 0.107192
Winter								Winter
First 1,000 kWh	298,112,829	\$ 9,048,827		\$ 3,661,602	\$ 3,323,860	\$ 5,333,333	\$ 21,367,622	First 1,000 kWh \$ 0.071676
Over 1,000 kWh	472,105,877	\$ 14,330,160		\$ 5,798,690			\$ 20,128,850	Over 1,000 kWh \$ 0.042636
Total	1,489,650,978	\$ 45,216,417	\$ 25,551,470	\$ 18,296,794	\$ 11,345,294	\$ 18,204,203	\$ 118,614,179	
Check		\$ 45,216,417	\$ 25,551,470	\$ 18,296,794	\$ 11,345,294	\$ 18,204,203	\$ 118,614,179	
Difference		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

Chart 1. PL SL1 Impact Matrix

PL-1 SL1	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total	
Over 59 kW	0	0	0	0	0	0	1 -\$1,066 -1.43%	0	0	0	1 -\$1,066 -1.43%	
55 to 59 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
50 to 54 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
45 to 49 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
40 to 44 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
35 to 39 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
30 to 34 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
25 to 29 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
20 to 24 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
15 to 19 kW	0	0	1 -\$24 -0.44%	0	0	0	0	0	0	0	1 -\$24 -0.44%	
10 to 14 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
5 to 9 kW	0	0	0	0	0	0	0	0	0	1 -\$11 -0.93%	1 -\$11 -0.93%	
Totals	0 \$0 0.00%	0 \$0 0.00%	1 -\$24 -0.44%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	1 -\$1,066 -1.43%	0 \$0 0.00%	0 \$0 0.00%	1 -\$11 -0.93%	3 -\$1,101 -1.35%

Chart 2. PL SL1 Unit Cost Analysis Matrix

PL-1 SL1	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total	
Over 59 kW	0	0	0	0	0	0	1 \$7,329 11.04%	0	0	0	1 \$7,329 11.04%	
55 to 59 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
50 to 54 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
45 to 49 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
40 to 44 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
35 to 39 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
30 to 34 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
25 to 29 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
20 to 24 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
15 to 19 kW	0	0	1 \$2,257 73.61%	0	0	0	0	0	0	0	1 \$2,257 73.61%	
10 to 14 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
5 to 9 kW	0	0	0	0	0	0	0	0	0	1 \$294 33.50%	1 \$294 33.50%	
Totals	0 \$0 0.00%	0 \$0 0.00%	1 \$2,257 73.61%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	1 \$7,329 11.04%	0 \$0 0.00%	0 \$0 0.00%	1 \$294 33.50%	3 \$9,881 14.05%

Chart 3. PL SL2 Impact Matrix

PL-1 SL2	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total	
Over 174 kW	0	0	0	1 -\$877 -2.59%	0	0	0	0	0	0	1 -\$877 -2.59%	
160 to 174 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
145 to 159 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
130 to 144 kW	0	0	0	0	1 -\$266 -0.91%	0	0	0	0	0	1 -\$266 -0.91%	
115 to 129 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
100 to 114 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
85 to 99 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
70 to 84 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
55 to 69 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
40 to 54 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
25 to 39 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
10 to 24 kW	0	0	0	0	0	0	0	0	1 -\$1,069 -11.48%	0	1 -\$1,069 -11.48%	
Totals	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	1 -\$877 -2.59%	1 -\$266 -0.91%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	1 -\$1,069 -11.48%	0 \$0 0.00%	3 -\$2,211 -3.05%

Chart 4. PL SL2 Unit Cost Analysis Matrix

PL-1 SL2	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total	
Over 174 kW	0	0	0	1 -\$38,958 -54.20%	0	0	0	0	0	0	1 -\$38,958 -54.20%	
160 to 174 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
145 to 159 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
130 to 144 kW	0	0	0	0	1 -\$33,336 -53.41%	0	0	0	0	0	1 -\$33,336 -53.41%	
115 to 129 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
100 to 114 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
85 to 99 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
70 to 84 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
55 to 69 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
40 to 54 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
25 to 39 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
10 to 24 kW	0	0	0	0	0	0	0	0	1 -\$4,793 -36.78%	0	1 -\$4,793 -36.78%	
Totals	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	1 -\$38,958 -54.20%	1 -\$33,336 -53.41%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	1 -\$4,793 -36.78%	0 \$0 0.00%	3 -\$77,087 -52.33%

Chart 5. PL SL3 Impact Matrix

PL-1 SL3	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 1,099 kW	0	0	0	0	0	2 \$1,989 0.20%	1 -\$1,236 -0.19%	1 \$1,439 0.18%	0	5 -\$16,404 -0.56%	9 -\$14,211 -0.26%
1,000 to 1,099 kW	0	0	0	0	0	1 \$2,920 1.13%	0	0	0	1 -\$2,147 -0.50%	2 \$773 0.11%
900 to 999 kW	0	0	0	0	0	0	0	0	0	1 -\$2,197 -0.53%	1 -\$2,197 -0.53%
800 to 899 kW	0	0	0	2 \$5,228 1.56%	0	0	0	0	0	1 -\$2,203 -0.56%	3 \$3,025 0.41%
700 to 799 kW	0	0	0	0	0	0	0	1 -\$207 -0.08%	2 -\$4,069 -0.73%	4 -\$5,811 -0.52%	
600 to 699 kW	0	0	0	0	1 \$190 0.15%	1 -\$2,716 -1.72%	0	0	2 -\$1,596 -0.33%	1 -\$1,181 -0.46%	5 -\$5,303 -0.51%
500 to 599 kW	0	0	0	0	2 \$4,281 1.67%	0	1 \$102 0.06%	1 \$838 0.43%	0	3 -\$4,209 -0.55%	7 \$1,012 0.07%
400 to 499 kW	0	0	0	1 \$709 0.73%	0	2 \$1,069 0.51%	0	3 -\$1,636 -0.34%	0	0	6 \$143 0.02%
300 to 399 kW	0	0	0	0	1 \$743 0.97%	0	0	2 -\$328 -0.14%	4 -\$3,158 -0.57%	2 -\$1,702 -0.53%	9 -\$4,446 -0.38%
200 to 299 kW	0	0	0	2 \$2,299 2.51%	1 -\$7 -0.01%	2 -\$76 -0.06%	5 \$303 0.08%	3 -\$1,852 -0.79%	7 -\$2,325 -0.35%	8 -\$5,084 -0.61%	28 -\$6,741 -0.28%
100 to 199 kW	0	0	0	0	2 \$613 0.89%	2 -\$453 -0.64%	6 -\$953 -0.37%	9 -\$2,267 -0.44%	8 -\$2,848 -0.64%	14 -\$5,358 -0.56%	41 -\$11,266 -0.49%
0 to 99 kW	0	0	0	3 -\$556 -1.17%	5 -\$375 -0.65%	5 -\$425 -0.55%	8 \$0 0.00%	10 -\$1,750 -0.73%	5 -\$806 -0.67%	7 -\$1,830 -0.92%	43 -\$5,742 -0.62%
Totals	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	8 \$7,680 1.34%	12 \$5,445 0.85%	15 \$2,309 0.12%	21 -\$1,783 -0.11%	30 -\$5,765 -0.19%	28 -\$14,803 -0.52%	44 -\$43,848 -0.56%	158 -\$50,765 -0.28%

Chart 6. PL SL3 Unit Cost Analysis Matrix

PL-1 SL3	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 1,099 kW	0	0	0	0	0	2 \$97,364 10.71%	1 \$53,847 9.26%	1 \$58,794 7.77%	0	5 \$124,248 4.46%	9 \$334,252 6.64%
1,000 to 1,099 kW	0	0	0	0	0	1 \$23,602 9.91%	0	0	0	1 \$21,551 5.33%	2 \$45,152 7.02%
900 to 999 kW	0	0	0	0	0	0	0	0	0	1 \$17,893 4.55%	1 \$17,893 4.55%
800 to 899 kW	0	0	0	2 \$49,945 17.20%	0	0	0	0	0	1 \$16,774 4.46%	3 \$66,719 10.01%
700 to 799 kW	0	0	0	0	0	0	0	1 \$18,045 7.26%	2 \$23,905 4.50%	4 \$55,878 5.28%	
600 to 699 kW	0	0	0	0	1 \$8,261 6.89%	1 \$9,315 6.37%	0	0	2 \$28,356 6.20%	1 \$14,243 5.85%	5 \$60,175 6.22%
500 to 599 kW	0	0	0	0	2 \$32,946 14.45%	0	1 \$12,129 7.75%	1 \$12,538 6.83%	0	3 \$33,181 4.54%	7 \$90,795 6.99%
400 to 499 kW	0	0	0	1 \$16,810 20.79%	0	2 \$15,717 8.07%	0	3 \$25,726 5.64%	0	0	6 \$58,253 7.96%
300 to 399 kW	0	0	0	0	1 \$8,905 12.95%	0	0	2 \$12,112 5.57%	4 \$25,415 4.83%	2 \$12,481 4.06%	9 \$58,913 5.26%
200 to 299 kW	0	0	0	2 \$11,393 13.79%	1 \$4,793 9.49%	2 \$10,187 8.76%	5 \$25,685 7.14%	3 \$9,633 4.33%	7 \$29,706 4.69%	8 \$32,552 4.07%	28 \$123,948 5.47%
100 to 199 kW	0	0	0	0	2 \$5,217 8.09%	2 \$3,807 5.70%	6 \$11,965 4.93%	9 \$24,247 4.98%	8 \$17,519 4.10%	14 \$32,874 3.57%	41 \$95,828 4.33%
0 to 99 kW	0	0	0	3 \$1,406 3.08%	5 \$594 1.05%	5 \$2,432 3.26%	8 \$11,474 6.36%	10 \$4,719 2.04%	5 \$2,698 2.30%	7 \$1,415 0.72%	43 \$24,738 2.74%
Totals	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	8 \$79,554 15.92%	12 \$60,717 10.32%	15 \$162,423 9.30%	21 \$115,099 7.57%	30 \$165,813 5.91%	28 \$127,598 4.74%	44 \$321,140 4.32%	158 \$1,032,344 5.97%

Chart 7. PL SL4 Impact Matrix

PL-1 SL4	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 1,099 kW	0	0	0	0	1 -\$9,173 -2.31%	3 \$11,467 1.07%	1 \$3,912 1.15%	1 -\$758 -0.19%	0	0	6 \$5,448 0.25%
1,000 to 1,099 kW	0	0	0	0	0	1 \$2,152 0.82%	0	0	1 -\$1,032 -0.26%	0	2 \$1,120 0.17%
900 to 999 kW	0	0	0	0	0	0	0	1 -\$507 -0.16%	1 -\$2,196 -0.66%	0	2 -\$2,703 -0.42%
800 to 899 kW	0	0	0	0	0	1 \$3,719 1.82%	1 \$1,914 0.83%	0	0	0	2 \$5,633 1.29%
700 to 799 kW	0	0	0	0	0	2 \$3,271 0.92%	0	0	0	0	2 \$3,271 0.92%
600 to 699 kW	0	0	1 -\$1,360 -1.13%	1 \$3,283 3.60%	1 \$2,279 1.72%	0	1 \$1,301 0.68%	0	0	0	4 \$5,503 1.03%
500 to 599 kW	0	0	0	0	1 \$1,589 1.37%	0	0	0	0	0	1 \$1,589 1.37%
400 to 499 kW	0	0	1 \$2,242 4.56%	0	0	2 \$3,300 1.42%	2 \$96 0.04%	0	0	0	5 \$5,638 1.05%
300 to 399 kW	0	0	1 \$833 1.27%	0	1 \$791 0.88%	1 \$813 0.88%	0	0	1 -\$1,121 -0.70%	1 -\$1,082 -0.72%	5 \$234 0.04%
200 to 299 kW	0	0	0	0	0	1 \$70 0.10%	0	0	0	1 -\$401 -0.34%	2 -\$330 -0.17%
100 to 199 kW	0	0	0	0	1 \$204 0.78%	0	1 \$87 0.16%	0	0	4 -\$1,976 -0.68%	6 -\$1,684 -0.45%
0 to 99 kW	0	0	0	0	1 -\$138 -2.73%	0	2 -\$287 -1.11%	1 -\$197 -2.63%	1 \$108 0.30%	1 -\$161 -1.41%	6 -\$675 -0.73%
Totals	0 \$0 0.00%	0 \$0 0.00%	3 \$1,715 0.73%	1 \$3,283 3.60%	6 -\$4,447 -0.58%	11 \$24,792 1.08%	8 \$7,022 0.64%	3 -\$1,462 -0.20%	4 -\$4,241 -0.46%	7 -\$3,619 -0.63%	43 \$23,044 0.34%

Chart 8. PL SL4 Unit Cost Analysis Matrix

PL-1 SL4	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 1,099 kW	0	0	0	0	1 \$4,904 1.28%	3 \$47,636 4.62%	1 \$13,435 4.07%	1 \$9,730 2.45%	0	0	6 \$75,706 3.54%
1,000 to 1,099 kW	0	0	0	0	0	1 \$11,657 4.59%	0	0	1 \$7,320 1.87%	0	2 \$18,977 2.94%
900 to 999 kW	0	0	0	0	0	0	0	1 \$8,381 2.72%	1 \$4,585 1.42%	0	2 \$12,966 2.05%
800 to 899 kW	0	0	0	0	0	1 \$10,182 5.14%	1 \$9,825 4.41%	0	0	0	2 \$20,007 4.76%
700 to 799 kW	0	0	0	0	0	2 \$14,923 4.33%	0	0	0	0	2 \$14,923 4.33%
600 to 699 kW	0	0	1 \$9,728 8.86%	1 \$9,557 11.26%	1 \$7,656 6.01%	0	1 \$6,838 3.68%	0	0	0	4 \$33,778 6.65%
500 to 599 kW	0	0	0	0	1 \$6,496 5.86%	0	0	0	0	0	1 \$6,496 5.86%
400 to 499 kW	0	0	1 \$6,744 15.09%	0	0	2 \$10,422 4.62%	2 \$7,313 2.96%	0	0	0	5 \$24,479 4.73%
300 to 399 kW	0	0	1 \$6,871 11.52%	0	1 \$4,684 5.42%	1 \$3,325 3.68%	0	0	1 \$1,358 0.86%	1 \$2,249 1.52%	5 \$18,486 3.41%
200 to 299 kW	0	0	0	0	0	1 \$3,078 4.34%	0	0	0	1 \$2,278 1.99%	2 \$5,357 2.89%
100 to 199 kW	0	0	0	0	1 \$612 2.36%	0	1 \$1,548 2.98%	0	0	4 \$1,169 0.40%	6 \$3,329 0.91%
0 to 99 kW	0	0	0	0	1 -\$725 -12.90%	0	2 -\$838 -3.17%	1 -\$779 -9.65%	1 \$1,143 3.32%	1 -\$640 -5.40%	6 -\$1,839 -2.13%
Totals	0 \$0 0.00%	0 \$0 0.00%	3 \$23,343 10.90%	1 \$9,557 11.26%	6 \$23,627 3.20%	11 \$101,222 4.57%	8 \$38,121 3.58%	3 \$17,332 2.43%	4 \$14,406 1.59%	7 \$5,056 0.90%	43 \$232,665 3.58%

Chart 9. PL SL5 Impact Matrix

PL-1 SL5	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 119 kW	0	0	4	20	47	54	24	9	1	1	160
			\$4,799	-\$1,056	\$26,044	\$31,155	\$25,546	\$5,953	\$44	\$222	\$92,706
			1.03%	-0.11%	1.01%	0.70%	0.83%	0.43%	0.08%	0.18%	0.71%
110 to 119 kW	0	0	0	2	6	5	3	0	0	1	17
				\$659	\$1,831	\$1,795	\$944			\$157	\$5,385
				1.49%	1.14%	1.12%	0.83%			0.29%	1.01%
100 to 109 kW	0	0	0	2	2	5	5	1	0	1	16
				\$571	-\$61	\$1,609	\$2,243	\$336		\$102	\$4,799
				1.42%	-0.13%	1.09%	1.32%	0.81%		0.19%	0.99%
90 to 99 kW	0	0	0	3	6	9	2	3	0	1	24
				\$1,205	\$1,847	\$3,595	\$677	\$290		\$158	\$7,772
				2.01%	1.35%	1.54%	1.13%	0.27%		0.36%	1.21%
80 to 89 kW	0	0	0	6	12	9	5	2	1	0	35
				\$2,030	\$5,266	\$2,125	\$806	\$624	\$234		\$11,086
				1.99%	2.14%	0.99%	0.56%	0.99%	0.67%		1.38%
70 to 79 kW	0	0	0	8	10	11	4	3	0	0	36
				\$2,063	\$3,346	\$3,212	\$1,083	\$866			\$10,570
				1.63%	1.96%	1.33%	1.08%	1.01%			1.46%
60 to 69 kW	0	0	0	8	23	12	12	3	1	1	60
				\$1,913	\$7,978	\$2,731	\$3,200	\$804	\$24	\$197	\$16,848
				1.84%	2.20%	1.21%	1.24%	1.12%	0.10%	0.65%	1.56%
50 to 59 kW	0	0	0	10	22	15	12	2	0	1	62
				\$2,547	\$7,928	\$4,426	\$3,135	\$460		\$218	\$18,713
				2.17%	2.70%	1.86%	1.46%	1.12%		0.82%	2.02%
40 to 49 kW	0	0	0	18	42	21	12	6	1	0	100
				\$5,934	\$11,091	\$5,568	\$3,118	\$1,169	\$166		\$27,046
				3.43%	2.42%	2.06%	1.66%	1.15%	0.90%		2.24%
30 to 39 kW	0	0	0	20	52	31	18	2	1	1	125
				\$5,647	\$14,482	\$7,959	\$3,682	\$484	\$209	\$196	\$32,659
				3.66%	3.17%	2.50%	1.68%	1.70%	1.31%		2.70%
20 to 29 kW	0	0	0	27	44	25	11	2	0	1	110
				\$6,521	\$10,898	\$5,881	\$2,640	\$331		\$197	\$26,468
				4.26%	3.83%	3.03%	2.83%	1.64%		1.63%	3.50%
10 to 19 kW	0	0	0	15	30	17	14	1	3	0	80
				\$3,105	\$7,009	\$3,899	\$3,160	\$202	\$611		\$17,985
				5.36%	5.51%	4.42%	3.90%	2.62%	3.82%		4.76%
Totals	0	0	4	139	296	214	122	34	8	8	825
	\$0	\$0	\$4,799	\$31,139	\$97,660	\$73,955	\$50,232	\$11,518	\$1,287	\$1,445	\$272,036
	0.00%	0.00%	1.03%	1.48%	1.84%	1.09%	1.06%	0.59%	0.79%	0.40%	1.25%

Chart 10. PL SL5 Unit Cost Analysis Matrix

PL-1 SL5	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 119 kW	0	0	4	20	47	54	24	9	1	1	160
			\$7,988	-\$8,831	\$6,668	\$11,858	\$18,272	\$1,571	-\$636	-\$504	\$36,387
			1.72%	-0.90%	0.26%	0.27%	0.59%	0.11%	-1.17%	-0.40%	0.28%
110 to 119 kW	0	0	0	2	6	5	3	0	0	1	17
				-\$639	-\$2,054	-\$1,159	-\$889			-\$581	-\$5,322
				-1.40%	-1.25%	-0.71%	-0.77%			-1.07%	-0.98%
100 to 109 kW	0	0	0	2	2	5	5	1	0	1	16
				-\$654	-\$1,503	-\$1,483	-\$1,012	-\$305		-\$632	-\$5,588
				-1.58%	-3.10%	-0.98%	-0.58%	-0.73%		-1.18%	-1.10%
90 to 99 kW	0	0	0	3	6	9	2	3	0	1	24
				-\$468	-\$1,809	-\$2,063	-\$651	-\$1,802		-\$575	-\$7,368
				-0.76%	-1.29%	-0.86%	-1.06%	-1.63%		-1.28%	-1.12%
80 to 89 kW	0	0	0	6	12	9	5	2	1	0	35
				-\$1,710	-\$1,988	-\$3,692	-\$2,582	-\$711	-\$452		-\$11,135
				-1.62%	-0.78%	-1.67%	-1.74%	-1.10%	-1.26%		-1.34%
70 to 79 kW	0	0	0	8	10	11	4	3	0	0	36
				-\$2,914	-\$3,007	-\$4,019	-\$1,701	-\$1,289			-\$12,930
				-2.22%	-1.70%	-1.61%	-1.64%	-1.47%			-1.73%
60 to 69 kW	0	0	0	8	23	12	12	3	1	1	60
				-\$3,186	-\$6,842	-\$5,199	-\$5,001	-\$1,276	-\$724	-\$547	-\$22,776
				-2.92%	-1.81%	-2.23%	-1.87%	-1.73%	-2.86%	-1.76%	-2.04%
50 to 59 kW	0	0	0	10	22	15	12	2	0	1	62
				-\$4,071	-\$6,657	-\$5,701	-\$5,174	-\$943		-\$510	-\$23,057
				-3.30%	-2.16%	-2.33%	-2.32%	-2.21%		-1.87%	-2.38%
40 to 49 kW	0	0	0	18	42	21	12	6	1	0	100
				-\$6,106	-\$17,480	-\$8,831	-\$5,260	-\$3,129	-\$554		-\$41,360
				-3.30%	-3.59%	-3.11%	-2.67%	-2.95%	-2.88%		-3.24%
30 to 39 kW	0	0	0	20	52	31	18	2	1	1	125
				-\$8,054	-\$21,424	-\$13,761	-\$9,095	-\$993	-\$522	-\$539	-\$54,388
				-4.80%	-4.34%	-4.05%	-3.92%	-3.32%	-3.13%	-3.38%	-4.20%
20 to 29 kW	0	0	0	27	44	25	11	2	0	1	110
				-\$12,303	-\$20,194	-\$11,941	-\$5,294	-\$1,137		-\$547	-\$51,415
				-7.15%	-6.40%	-5.64%	-5.23%	-5.26%		-4.25%	-6.16%
10 to 19 kW	0	0	0	15	30	17	14	1	3	0	80
				-\$7,704	-\$14,667	-\$8,412	-\$7,090	-\$527	-\$1,619		-\$40,019
				-11.20%	-9.86%	-8.41%	-7.77%	-6.23%	-8.88%		-9.18%
Totals	0	0	4	139	296	214	122	34	8	8	825
	\$0	\$0	\$7,988	-\$56,642	-\$90,957	-\$54,402	-\$25,477	-\$10,540	-\$4,507	-\$4,435	-\$238,971
	0.00%	0.00%	1.72%	-2.59%	-1.65%	-0.79%	-0.53%	-0.54%	-2.66%	-1.21%	-1.07%

Chart 11. PL-TOU SL1 Impact Matrix

PL-TOU SL1	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total	
Over 3,199 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
3,000 to 3,199 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,800 to 2,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,600 to 2,799 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,400 to 2,599 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,200 to 2,399 kW	0	1 -\$5,196 -2.90%	0	0	0	0	0	0	0	0	1 -\$5,196 -2.90%	
2,000 to 2,199 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
1,800 to 1,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
1,600 to 1,799 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
1,400 to 1,599 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
1,200 to 1,399 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
1,000 to 1,199 kW	0	0	0	0	0	1 -\$209 -0.09%	0	0	0	0	1 -\$209 -0.09%	
Totals	0 \$0 0.00%	1 -\$5,196 -2.90%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	1 -\$209 -0.09%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	2 -\$5,405 -1.34%

Chart 12. PL-TOU SL1 Unit Cost Analysis

PL-TOU SL1	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total	
Over 3,199 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
3,000 to 3,199 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,800 to 2,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,600 to 2,799 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,400 to 2,599 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,200 to 2,399 kW	0	1 \$84,747 95.25%	0	0	0	0	0	0	0	0	1 \$84,747 95.25%	
2,000 to 2,199 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
1,800 to 1,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
1,600 to 1,799 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
1,400 to 1,599 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
1,200 to 1,399 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
1,000 to 1,199 kW	0	0	0	0	0	1 \$49,298 28.27%	0	0	0	0	1 \$49,298 28.27%	
Totals	0 \$0 0.00%	1 \$84,747 95.25%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	1 \$49,298 28.27%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	2 \$134,045 50.90%

Chart 13. PL-TOU SL2 Impact Matrix

PL-TOU SL2	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 2,749 kW	0	0	0	0	0	1 -\$1,379 -0.19%	0	0	0	0	1 -\$1,379 -0.19%
2,500 to 2,749 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
2,250 to 2,499 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
2,000 to 2,249 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
1,750 to 1,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
1,500 to 1,749 kW	0	0	0	1 -\$3,096 -1.53%	0	0	0	0	0	0	1 -\$3,096 -1.53%
1,250 to 1,499 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
1,000 to 1,249 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
750 to 999 kW	0	2 -\$6,013 -5.05%	0	0	0	0	0	0	0	0	2 -\$6,013 -5.05%
500 to 749 kW	0	0	0	0	0	1 -\$1,179 -0.98%	1 -\$1,126 -0.68%	0	0	0	2 -\$2,305 -0.81%
250 to 499 kW	0	0	0	0	0	1 -\$2,030 -1.77%	0	0	0	0	1 -\$2,030 -1.77%
0 to 249 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
Totals	0 \$0 0.00%	2 -\$6,013 -5.05%	0 \$0 0.00%	1 -\$3,096 -1.53%	0 \$0 0.00%	3 -\$4,588 -0.48%	1 -\$1,126 -0.68%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	7 -\$14,823 -1.02%

Chart 14. PL-TOU SL2 Unit Cost Analysis Matrix

PL-TOU SL2	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 2,749 kW	0	0	0	0	0	1 \$57,543 8.64%	0	0	0	0	1 \$57,543 8.64%
2,500 to 2,749 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
2,250 to 2,499 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
2,000 to 2,249 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
1,750 to 1,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
1,500 to 1,749 kW	0	0	0	1 \$16,007 8.76%	0	0	0	0	0	0	1 \$16,007 8.76%
1,250 to 1,499 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
1,000 to 1,249 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
750 to 999 kW	0	2 \$11,092 10.88%	0	0	0	0	0	0	0	0	2 \$11,092 10.88%
500 to 749 kW	0	0	0	0	0	1 \$4,125 3.57%	1 \$7,120 4.55%	0	0	0	2 \$11,245 4.14%
250 to 499 kW	0	0	0	0	0	1 \$4,516 4.17%	0	0	0	0	1 \$4,516 4.17%
0 to 249 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
Totals	0 \$0 0.00%	2 \$11,092 10.88%	0 \$0 0.00%	1 \$16,007 8.76%	0 \$0 0.00%	3 \$66,184 7.44%	1 \$7,120 4.55%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	7 \$100,403 7.54%

Chart 15. PL-TOU SL3 Impact Matrix

PL-TOU SL3	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 2,749 kW	0	0	2 -\$22,500 -1.64%	2 -\$15,620 -1.20%	0	2 -\$7,441 -0.41%	0	0	0	0	6 -\$45,561 -1.02%
2,500 to 2,749 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
2,250 to 2,499 kW	0	0	0	0	0	1 -\$3,615 -0.50%	0	1 -\$1,803 -0.19%	0	0	2 -\$5,418 -0.33%
2,000 to 2,249 kW	0	0	0	0	0	0	1 -\$4,376 -0.62%	1 -\$1,445 -0.18%	0	0	2 -\$5,821 -0.39%
1,750 to 1,999 kW	0	0	1 -\$10,154 -3.22%	0	0	1 -\$3,215 -0.64%	0	0	0	0	2 -\$13,369 -1.64%
1,500 to 1,749 kW	0	1 -\$7,194 -4.11%	0	1 -\$5,306 -1.83%	0	0	1 -\$2,954 -0.74%	1 -\$1,656 -0.30%	0	1 -\$1,971 -0.30%	6 -\$20,802 -0.74%
1,250 to 1,499 kW	0	0	0	0	1 -\$3,563 -1.17%	0	2 -\$2,484 -0.28%	0	2 -\$1,978 -0.17%	0	5 -\$8,025 -0.34%
1,000 to 1,249 kW	0	0	0	0	1 -\$2,146 -0.86%	1 -\$2,560 -0.81%	1 -\$1,671 -0.46%	0	1 -\$868 -0.19%	2 -\$1,871 -0.17%	6 -\$9,116 -0.36%
750 to 999 kW	0	0	1 -\$2,975 -2.31%	1 -\$2,807 -2.45%	1 -\$3,280 -1.53%	0	2 -\$2,868 -0.49%	1 -\$1,360 -0.43%	2 -\$2,524 -0.36%	2 -\$2,524 -0.36%	8 -\$15,815 -0.77%
500 to 749 kW	0	0	3 -\$6,535 -2.63%	0	1 -\$876 -0.64%	4 -\$5,431 -0.70%	1 -\$451 -0.24%	2 -\$998 -0.23%	2 -\$797 -0.17%	0	13 -\$15,087 -0.67%
250 to 499 kW	0	0	1 -\$888 -2.45%	2 -\$1,565 -1.00%	4 -\$1,951 -0.67%	5 -\$2,800 -0.54%	2 -\$1,836 -0.73%	4 -\$1,855 -0.39%	0	5 -\$1,301 -0.14%	23 -\$12,196 -0.46%
0 to 249 kW	0	0	1 -\$216 -1.84%	1 -\$86 -1.02%	1 -\$397 -1.01%	3 -\$1,092 -0.54%	1 -\$198 -1.29%	0	4 -\$1,112 -0.44%	2 -\$401 -0.21%	13 -\$3,503 -0.48%
Totals	0 \$0 0.00%	1 -\$7,194 -4.11%	9 -\$43,270 -2.05%	7 -\$25,384 -1.36%	9 -\$12,214 -0.99%	18 -\$29,108 -0.55%	11 -\$15,539 -0.44%	10 -\$9,432 -0.26%	11 -\$7,279 -0.24%	10 -\$5,294 -0.18%	86 -\$154,713 -0.65%

Chart 16. PL-TOU SL3 Unit Cost Analysis Matrix

PL-TOU SL3	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 2,749 kW	0	0	2 \$93,489 7.45%	2 \$93,139 7.84%	0	2 \$122,263 7.26%	0	0	0	0	6 \$308,890 7.48%
2,500 to 2,749 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
2,250 to 2,499 kW	0	0	0	0	0	1 \$46,040 6.81%	0	1 \$44,068 4.99%	0	0	2 \$90,108 5.78%
2,000 to 2,249 kW	0	0	0	0	0	0	1 \$27,038 4.00%	1 \$44,075 5.83%	0	0	2 \$71,113 4.97%
1,750 to 1,999 kW	0	0	1 \$28,966 10.47%	0	0	1 \$45,808 10.12%	0	0	0	0	2 \$74,774 10.26%
1,500 to 1,749 kW	0	1 \$22,616 15.57%	0	1 \$31,175 12.27%	0	1 \$28,596 7.79%	1 \$30,193 5.88%	1 \$19,009 3.02%	0	1 \$14,536 2.03%	6 \$146,124 5.56%
1,250 to 1,499 kW	0	0	0	0	1 \$21,340 7.63%	0	2 \$46,808 5.58%	0	2 \$43,115 3.78%	0	5 \$111,262 4.92%
1,000 to 1,249 kW	0	0	0	0	1 \$20,055 8.86%	1 \$23,058 7.97%	1 \$7,950 2.27%	0	1 \$15,207 3.36%	2 \$26,789 2.47%	6 \$93,059 3.87%
750 to 999 kW	0	0	1 \$11,894 10.42%	1 \$4,627 4.31%	1 \$21,202 11.15%	0	2 \$24,640 4.42%	1 \$8,274 2.70%	2 \$18,529 2.75%	0	8 \$89,166 4.57%
500 to 749 kW	0	0	3 \$22,547 10.26%	0	1 \$10,390 8.26%	4 \$59,211 8.36%	1 \$3,111 1.68%	2 \$21,672 5.17%	2 \$14,204 3.15%	0	13 \$131,135 6.22%
250 to 499 kW	0	0	1 \$2,383 7.21%	2 \$13,759 9.71%	4 \$12,358 4.48%	5 \$37,361 7.81%	2 \$7,367 3.05%	4 \$15,574 3.44%	0	5 \$19,209 2.08%	23 \$108,010 4.24%
0 to 249 kW	0	0	1 -\$841 -6.79%	1 -\$476 -5.41%	1 \$2,791 7.73%	3 \$10,140 5.31%	1 -\$584 -3.71%	0	4 \$4,218 1.72%	2 \$2,970 1.55%	13 \$18,216 2.60%
Totals	0 \$0 0.00%	1 \$22,616 15.57%	9 \$158,437 8.29%	7 \$142,224 8.37%	9 \$88,134 7.77%	18 \$372,476 7.69%	11 \$146,522 4.34%	10 \$152,672 4.43%	11 \$95,273 3.21%	10 \$63,503 2.18%	86 \$1,241,858 5.53%

Chart 17. PL-TOU SL4 Impact Matrix

PL-TOU SL4	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total	
Over 2,749 kW	0	0	0	0	0	2 -\$5,932 -0.37%	0	0	0	0	2 -\$5,932 -0.37%	
2,500 to 2,749 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,250 to 2,499 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,000 to 2,249 kW	0	0	0	0	1 -\$1,530 -0.32%	1 -\$3,505 -0.64%	1 -\$2,997 -0.43%	0	0	0	3 -\$8,032 -0.47%	
1,750 to 1,999 kW	0	1 -\$1,956 -2.59%	0	0	0	1 -\$3,378 -0.67%	0	0	0	0	2 -\$5,334 -0.92%	
1,500 to 1,749 kW	0	0	0	0	0	1 -\$3,909 -1.01%	0	0	1 -\$1,925 -0.33%	0	2 -\$5,834 -1.00%	
1,250 to 1,499 kW	0	0	0	1 -\$6,010 -2.58%	0	1 -\$1,489 -0.36%	2 -\$1,375 -0.16%	0	0	0	4 -\$8,874 -1.58%	
1,000 to 1,249 kW	0	1 -\$5,016 -4.37%	1 -\$4,958 -3.53%	1 -\$2,797 -1.61%	1 -\$1,571 -0.64%	1	0	1 -\$2,160 -0.58%	0	0	5 -\$16,503 -2.93%	
750 to 999 kW	0	0	0	0	3 -\$2,444 -0.46%	1 -\$1,982 -0.81%	0	0	0	0	4 -\$4,426 -0.77%	
500 to 749 kW	0	0	0	2 -\$5,073 -2.01%	2 -\$2,696 -1.08%	1 -\$709 -0.46%	0	0	0	0	5 -\$8,478 -1.29%	
250 to 499 kW	0	0	0	2 -\$2,415 -2.06%	0	1 -\$272 -0.36%	1 -\$517 -0.44%	1 -\$648 -0.59%	0	0	5 -\$3,852 -0.91%	
0 to 249 kW	0	0	0	0	2 -\$915 -1.47%	1 -\$451 -0.72%	0	0	0	0	3 -\$1,366 -1.09%	
Totals	0 \$0 0.00%	2 -\$6,973 -3.66%	1 -\$4,958 -3.53%	6 -\$16,296 -2.10%	9 -\$9,156 -0.58%	10 -\$21,627 -0.54%	4 -\$4,890 -0.29%	2 -\$2,808 -0.58%	1 -\$1,925 -0.33%	0	35 \$0 0.00%	\$68,633 -0.73%

Chart 18. PL-TOU SL4 Unit Cost Analysis Matrix

PL-TOU SL4	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total	
Over 2,749 kW	0	0	0	0	0	2 -\$101,756 -5.96%	0	0	0	0	2 -\$101,756 -5.96%	
2,500 to 2,749 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,250 to 2,499 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,000 to 2,249 kW	0	0	0	0	1 -\$28,421 -5.63%	1 -\$33,952 -5.88%	1 -\$41,734 -5.73%	0	0	0	3 -\$104,107 -5.75%	
1,750 to 1,999 kW	0	1 -\$3,039 -3.97%	0	0	0	1 -\$33,491 -6.25%	0	0	0	0	2 -\$36,531 -5.97%	
1,500 to 1,749 kW	0	0	0	0	0	1 -\$23,776 -5.62%	0	0	1 -\$48,115 -7.69%	0	2 -\$71,891 -6.95%	
1,250 to 1,499 kW	0	0	0	1 -\$14,143 -5.86%	0	1 -\$26,956 -6.12%	2 -\$66,937 -7.16%	0	0	0	4 -\$108,036 -6.68%	
1,000 to 1,249 kW	0	1 -\$437 -0.40%	1 -\$4,733 -3.37%	1 -\$9,632 -5.35%	1 -\$15,000 -5.82%	1	0	1 -\$32,277 -8.03%	0	0	5 -\$62,079 -5.69%	
750 to 999 kW	0	0	0	0	3 -\$34,006 -6.01%	1 -\$17,937 -6.87%	0	0	0	0	4 -\$51,943 -6.28%	
500 to 749 kW	0	0	0	2 -\$14,603 -5.58%	2 -\$17,047 -6.45%	1 -\$12,101 -7.31%	0	0	0	0	5 -\$43,751 -6.33%	
250 to 499 kW	0	0	0	2 -\$8,376 -6.81%	0	1 -\$6,314 -7.67%	1 -\$8,856 -7.02%	1 -\$9,298 -7.80%	0	0	5 -\$32,844 -7.29%	
0 to 249 kW	0	0	0	0	2 -\$5,266 -7.91%	1 -\$4,834 -7.20%	0	0	0	0	3 -\$10,100 -7.55%	
Totals	0 \$0 0.00%	2 -\$3,476 -1.86%	1 -\$4,733 -3.37%	6 -\$46,754 -5.80%	9 -\$99,740 -6.01%	10 -\$261,117 -6.15%	4 -\$117,527 -6.57%	2 -\$41,575 -7.98%	1 -\$48,115 -7.69%	0	35 \$0 0.00%	\$623,037 -6.25%

Chart 19. PL-TOU SL5 Impact Matrix

PL-TOU SL5	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 1,649 kW	0	0	1 -\$12,933 -3.44%	1 -\$9,659 -2.09%	3 -\$15,344 -1.00%	6 -\$32,917 -0.93%	5 -\$15,971 -0.50%	5 -\$16,474 -0.44%	1 -\$1,663 -0.20%	0	22 -\$104,961 -0.77%
1,500 to 1,649 kW	0	0	0	0	0	2 -\$5,827 -0.66%	2 -\$3,538 -0.37%	4 -\$7,641 -0.35%	0	0	8 -\$17,006 -0.42%
1,350 to 1,499 kW	0	0	0	0	1 -\$2,776 -0.95%	4 -\$10,052 -0.63%	3 -\$4,502 -0.34%	3 -\$4,845 -0.31%	0	0	11 -\$22,175 -0.47%
1,200 to 1,349 kW	0	0	0	1 -\$7,825 -3.78%	2 -\$6,356 -1.15%	1 -\$1,605 -0.43%	6 -\$7,581 -0.31%	6 -\$10,896 -0.40%	0	0	16 -\$34,264 -0.55%
1,050 to 1,199 kW	0	0	2 -\$8,755 -3.13%	1 -\$1,914 -1.32%	0	5 -\$8,685 -0.56%	6 -\$9,900 -0.46%	2 -\$2,298 -0.30%	0	0	16 -\$31,551 -0.65%
900 to 1,049 kW	0	1 -\$2,947 -8.20%	0	0	1 -\$3,366 -1.55%	2 -\$2,422 -0.46%	8 -\$9,931 -0.40%	7 -\$7,525 -0.32%	0	0	19 -\$26,191 -0.47%
750 to 899 kW	0	0	0	2 -\$4,996 -1.87%	2 -\$5,604 -1.63%	6 -\$9,850 -0.73%	7 -\$7,307 -0.40%	10 -\$10,200 -0.36%	2 -\$1,503 -0.23%	0	29 -\$39,459 -0.54%
600 to 749 kW	0	1 -\$6,301 -5.93%	7 -\$20,122 -3.09%	7 -\$12,882 -1.56%	10 -\$15,940 -0.99%	14 -\$16,416 -0.39%	8 -\$6,675 -0.28%	3 -\$2,009 -0.28%	0	0	50 -\$80,345 -0.98%
450 to 599 kW	0	1 -\$705 -1.50%	3 -\$6,003 -2.96%	11 -\$18,573 -1.84%	16 -\$17,995 -0.97%	17 -\$18,259 -0.76%	13 -\$9,640 -0.46%	17 -\$9,050 -0.29%	6 -\$3,617 -0.30%	0	84 -\$83,842 -0.70%
300 to 449 kW	0	1 -\$2,919 -5.65%	5 -\$11,053 -3.27%	25 -\$25,839 -1.54%	24 -\$19,539 -0.99%	23 -\$14,636 -0.44%	22 -\$11,310 -0.28%	35 -\$12,680 -0.28%	13 -\$5,340 -0.29%	0	148 -\$103,316 -0.70%
150 to 299 kW	0	0	1 -\$732 -2.89%	32 -\$16,174 -1.22%	78 -\$34,542 -0.90%	59 -\$21,701 -0.62%	32 -\$10,254 -0.51%	26 -\$7,116 -0.33%	7 -\$1,653 -0.26%	0	235 -\$92,171 -0.68%
0 to 149 kW	0	0	4 -\$1,060 -1.99%	133 -\$16,889 -0.97%	205 -\$20,755 -0.63%	227 -\$20,706 -0.44%	114 -\$9,024 -0.35%	55 -\$5,868 -0.26%	9 -\$621 -0.26%	7 -\$216 -0.10%	754 -\$74,940 -0.52%
Totals	0 \$0 0.00%	4 -\$12,872 -5.34%	23 -\$60,657 -3.15%	213 -\$114,551 -1.50%	342 -\$142,216 -0.92%	366 -\$163,077 -0.65%	226 -\$105,634 -0.42%	173 -\$96,602 -0.34%	38 -\$14,397 -0.27%	7 -\$216 -0.10%	1,392 -\$710,222 -0.65%

Chart 20. PL-TOU SL5 Unit Cost Analysis Matrix

PL-TOU SL5	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 1,649 kW	0	0	1 \$9,247 2.62%	1 -\$2,360 -0.52%	3 -\$34,226 -2.20%	6 -\$66,797 -1.88%	5 -\$90,782 -2.76%	5 -\$127,753 -3.31%	1 -\$30,281 -3.46%	0	22 -\$342,951 -2.46%
1,500 to 1,649 kW	0	0	0	0	0	2 -\$12,417 -1.41%	2 -\$22,481 -2.33%	4 -\$68,907 -3.03%	0	0	8 -\$103,805 -2.52%
1,350 to 1,499 kW	0	0	0	0	1 -\$6,172 -2.09%	4 -\$33,325 -2.06%	3 -\$36,205 -2.69%	3 -\$50,540 -3.19%	0	0	11 -\$126,242 -2.61%
1,200 to 1,349 kW	0	0	0	1 -\$4,828 -2.37%	2 -\$11,624 -2.09%	1 -\$6,627 -1.75%	6 -\$76,545 -3.04%	6 -\$90,858 -3.26%	0	0	16 -\$190,483 -2.96%
1,050 to 1,199 kW	0	0	2 \$367 0.14%	1 -\$4,603 -3.12%	0	5 -\$26,526 -1.68%	6 -\$61,806 -2.81%	2 -\$24,703 -3.17%	0	0	16 -\$117,272 -2.36%
900 to 1,049 kW	0	1 \$1,662 5.31%	0	0	1 -\$6,125 -2.79%	2 -\$13,811 -2.56%	8 -\$65,229 -2.57%	7 -\$79,361 -3.29%	0	0	19 -\$162,864 -2.83%
750 to 899 kW	0	0	0	2 \$763 0.29%	2 -\$4,519 -1.31%	6 -\$30,315 -2.21%	7 -\$51,095 -2.75%	10 -\$101,803 -3.45%	2 -\$26,748 -3.95%	0	29 -\$213,717 -2.86%
600 to 749 kW	0	1 \$4,874 5.12%	7 \$2,100 0.33%	7 -\$5,561 -0.68%	10 -\$14,027 -0.87%	14 -\$54,531 -2.08%	8 -\$54,084 -3.06%	3 -\$26,185 -3.58%	0	0	50 -\$147,413 -1.78%
450 to 599 kW	0	1 \$1,519 3.40%	3 \$1,018 0.52%	11 -\$12,408 -1.23%	16 -\$36,183 -1.94%	17 -\$66,892 -2.72%	13 -\$69,469 -3.25%	17 -\$117,864 -4.12%	6 -\$52,048 -3.67%	0	84 -\$352,326 -2.89%
300 to 449 kW	0	1 \$1,066 2.23%	5 -\$4 0.00%	25 -\$29,622 -1.77%	24 -\$46,138 -2.30%	23 -\$61,977 -2.63%	22 -\$93,990 -3.57%	35 -\$182,208 -3.88%	13 -\$78,330 -4.13%	0	148 -\$491,203 -3.14%
150 to 299 kW	0	0	1 -\$946 -3.70%	32 -\$34,807 -2.59%	78 -\$111,162 -2.84%	59 -\$126,666 -3.53%	32 -\$91,212 -4.34%	26 -\$95,359 -4.28%	7 -\$30,907 -4.57%	0	235 -\$491,060 -3.54%
0 to 149 kW	0	0	4 -\$4,866 -8.54%	133 -\$145,128 -7.85%	205 -\$245,977 -6.94%	227 -\$324,635 -6.51%	114 -\$191,452 -6.98%	55 -\$110,570 -6.69%	9 -\$18,721 -7.29%	7 -\$16,667 -7.19%	754 -\$1,058,016 -6.91%
Totals	0 \$0 0.00%	4 \$9,121 4.17%	23 \$6,915 0.37%	213 -\$238,554 -3.07%	342 -\$516,152 -3.24%	366 -\$824,519 -3.18%	226 -\$904,350 -3.46%	173 -\$1,076,111 -3.69%	38 -\$237,036 -4.20%	7 -\$16,667 -7.19%	1,392 -\$3,797,352 -3.37%

Chart 1. LPL-TOU SL1 Impact Matrix

LPL-TOU SL1	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total	
Over 11,999 kW	0	0	0	0	0	0	0	1 \$880,796 6.62%	0	0	1 \$880,796 6.62%	
11,000 to 11,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
10,000 to 10,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
9,000 to 9,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
8,000 to 8,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
7,000 to 7,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
6,000 to 6,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
5,000 to 5,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
4,000 to 4,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
3,000 to 3,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,000 to 2,999 kW	0	0	1 \$9,070 3.69%	0	1 \$17,212 4.28%	0	0	0	0	0	2 \$26,282 4.06%	
1,000 to 1,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
Totals	0 \$0 0.00%	0 \$0 0.00%	1 \$9,070 3.69%	0 \$0 0.00%	1 \$17,212 4.28%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	1 \$880,796 6.62%	0 \$0 0.00%	0 \$0 0.00%	3 \$907,078 6.50%

Chart 2. LPL-TOU SL1 Unit Cost Analysis

LPL-TOU SL1	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total	
Over 11,999 kW	0	0	0	0	0	0	0	1 -\$192,491 -1.34%	0	0	1 -\$192,491 -1.34%	
11,000 to 11,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
10,000 to 10,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
9,000 to 9,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
8,000 to 8,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
7,000 to 7,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
6,000 to 6,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
5,000 to 5,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
4,000 to 4,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
3,000 to 3,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,000 to 2,999 kW	0	0	1 -\$10,765 -4.06%	0	1 -\$24,805 -5.59%	0	0	0	0	0	2 -\$35,570 -5.02%	
1,000 to 1,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
Totals	0 \$0 0.00%	0 \$0 0.00%	1 -\$10,765 -4.06%	0 \$0 0.00%	1 -\$24,805 -5.59%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	1 -\$192,491 -1.34%	0 \$0 0.00%	0 \$0 0.00%	3 -\$228,061 -1.51%

Chart 3. LPL-TOU SL2 Impact Matrix

LPL-TOU SL2	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 22,999 kW	0	0	0	0	0	0	1 \$363,726 6.17%	0	1 \$532,629 6.78%	2 \$3,373,030 7.33%	4 \$4,269,385 7.14%
21,000 to 22,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
19,000 to 20,999 kW	0	0	0	1 \$77,653 3.28%	0	0	0	0	0	0	1 \$77,653 3.28%
17,000 to 18,999 kW	0	0	0	0	0	0	0	0	0	1 \$418,506 6.91%	1 \$418,506 6.91%
15,000 to 16,999 kW	0	0	0	0	0	0	1 \$249,946 5.86%	0	1 \$337,524 6.89%	0	2 \$587,471 6.41%
13,000 to 14,999 kW	0	0	0	0	1 \$127,359 5.55%	0	0	0	1 \$315,196 6.58%	0	2 \$442,555 6.25%
11,000 to 12,999 kW	0	0	0	0	0	0	1 \$184,020 6.00%	0	0	0	1 \$184,020 6.00%
9,000 to 10,999 kW	0	0	0	0	0	1 \$92,167 4.48%	1 \$129,190 5.45%	1 \$151,165 5.45%	0	2 \$410,596 6.42%	5 \$783,118 5.76%
7,000 to 8,999 kW	0	0	0	0	0	0	0	0	1 \$141,776 6.06%	0	1 \$141,776 6.06%
5,000 to 6,999 kW	0	0	0	0	1 \$46,821 4.49%	0	1 \$60,594 4.36%	0	0	1 \$139,834 6.08%	3 \$247,249 5.22%
3,000 to 4,999 kW	0	0	0	0	0	1 \$36,799 3.72%	3 \$129,989 4.39%	2 \$117,464 4.69%	1 \$75,507 5.19%	0	7 \$359,759 4.55%
1,000 to 2,999 kW	0	0	3 \$27,301 3.91%	0	0	0	0	0	1 \$43,032 4.77%	0	4 \$70,334 4.40%
Totals	0 \$0 0.00%	0 \$0 0.00%	3 \$27,301 3.91%	1 \$77,653 3.28%	2 \$174,180 5.22%	2 \$128,966 4.24%	8 \$1,117,465 5.60%	3 \$268,630 5.09%	6 \$1,445,665 6.50%	6 \$4,341,966 7.14%	31 \$7,581,826 6.44%

Chart 4. LPL-TOU SL2 Unit Cost Analysis Matrix

LPL-TOU SL2	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 22,999 kW	0	0	0	0	0	0	1 -\$259,688 -3.98%	0	1 -\$528,816 -5.93%	2 -\$2,973,254 -5.68%	4 -\$3,761,758 -5.55%
21,000 to 22,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
19,000 to 20,999 kW	0	0	0	1 \$31,067 1.29%	0	0	0	0	0	0	1 \$31,067 1.29%
17,000 to 18,999 kW	0	0	0	0	0	0	0	0	0	1 -\$404,419 -5.88%	1 -\$404,419 -5.88%
15,000 to 16,999 kW	0	0	0	0	0	0	1 -\$169,327 -3.61%	0	1 -\$312,303 -5.63%	0	2 -\$481,630 -4.71%
13,000 to 14,999 kW	0	0	0	0	1 -\$21,922 -0.90%	0	0	0	1 -\$288,921 -5.36%	0	2 -\$310,843 -3.97%
11,000 to 12,999 kW	0	0	0	0	0	0	1 -\$228,682 -6.57%	0	0	0	1 -\$228,682 -6.57%
9,000 to 10,999 kW	0	0	0	0	0	1 -\$18,410 -0.85%	1 -\$128,084 -4.87%	1 -\$74,956 -2.50%	0	2 -\$425,023 -5.88%	5 -\$646,474 -4.30%
7,000 to 8,999 kW	0	0	0	0	0	0	0	0	1 -\$147,133 -5.60%	0	1 -\$147,133 -5.60%
5,000 to 6,999 kW	0	0	0	0	1 -\$82,778 -7.06%	0	1 -\$26,113 -1.77%	0	0	1 -\$126,301 -4.92%	3 -\$235,192 -4.51%
3,000 to 4,999 kW	0	0	0	0	0	1 -\$4,807 -0.47%	3 -\$156,516 -4.82%	2 -\$156,561 -5.63%	1 -\$91,612 -5.65%	0	7 -\$409,496 -4.51%
1,000 to 2,999 kW	0	0	3 -\$56,696 -7.24%	0	0	0	0	0	1 -\$62,071 -6.17%	0	4 -\$118,767 -6.64%
Totals	0 \$0 0.00%	0 \$0 0.00%	3 -\$56,696 -7.24%	1 \$31,067 1.29%	2 -\$104,701 -2.90%	2 -\$23,217 -0.73%	8 -\$968,410 -4.39%	3 -\$231,517 -4.01%	6 -\$1,430,855 -5.70%	6 -\$3,928,998 -5.69%	31 -\$6,713,327 -5.09%

Chart 5. LPL-TOU SL3 Impact Matrix

LPL-TOU SL3	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 10,999 kW	0	0	0	0	0	1 \$182,914 5.47%	0	0	0	0	1 \$182,914 5.47%
10,000 to 10,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
9,000 to 9,999 kW	0	0	0	0	0	0	0	0	1 \$215,430 5.52%	0	1 \$215,430 5.52%
8,000 to 8,999 kW	0	0	0	0	0	1 \$129,431 5.32%	0	0	0	0	1 \$129,431 5.32%
7,000 to 7,999 kW	0	0	0	0	0	0	0	1 \$154,347 5.46%	0	0	1 \$154,347 5.46%
6,000 to 6,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
5,000 to 5,999 kW	0	0	0	0	0	1 \$75,930 5.47%	0	1 \$101,974 5.46%	0	0	2 \$177,904 5.47%
4,000 to 4,999 kW	0	0	0	0	0	0	2 \$144,419 5.40%	1 \$95,923 5.49%	0	0	3 \$240,342 5.43%
3,000 to 3,999 kW	0	0	0	0	0	0	3 \$178,924 5.35%	2 \$126,327 5.51%	3 \$212,514 5.57%	1 \$104,950 5.62%	9 \$622,715 5.50%
2,000 to 2,999 kW	0	0	0	0	0	0	0	0	1 \$63,217 5.55%	4 \$229,664 5.62%	5 \$292,880 5.61%
1,000 to 1,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
0 to 999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
Totals	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	3 \$388,275 5.42%	5 \$323,343 5.37%	5 \$478,570 5.48%	5 \$491,161 5.55%	5 \$334,614 5.62%	23 \$2,015,963 5.49%

Chart 6. LPL-TOU SL3 Unit Cost Analysis Matrix

LPL-TOU SL3	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 10,999 kW	0	0	0	0	0	1 \$87,293 2.54%	0	0	0	0	1 \$87,293 2.54%
10,000 to 10,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
9,000 to 9,999 kW	0	0	0	0	0	0	0	0	1 -\$74,861 -1.79%	0	1 -\$74,861 -1.79%
8,000 to 8,999 kW	0	0	0	0	0	1 \$28,415 1.12%	0	0	0	0	1 \$28,415 1.12%
7,000 to 7,999 kW	0	0	0	0	0	0	0	1 \$10,160 0.34%	0	0	1 \$10,160 0.34%
6,000 to 6,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
5,000 to 5,999 kW	0	0	0	0	0	1 -\$8,511 -0.58%	0	1 -\$20,441 -1.03%	0	0	2 -\$28,953 -0.84%
4,000 to 4,999 kW	0	0	0	0	0	0	2 \$29,537 1.06%	1 -\$11,763 -0.63%	0	0	3 \$17,774 0.38%
3,000 to 3,999 kW	0	0	0	0	0	0	3 \$12,081 0.34%	2 -\$23,273 -0.95%	3 -\$40,804 -1.00%	1 -\$51,860 -2.56%	9 -\$103,856 -0.86%
2,000 to 2,999 kW	0	0	0	0	0	0	0	0	1 -\$20,377 -1.67%	4 -\$92,514 -2.10%	5 -\$112,891 -2.00%
1,000 to 1,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
0 to 999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
Totals	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	3 \$107,197 1.44%	5 \$41,618 0.66%	5 -\$45,318 -0.49%	5 -\$136,042 -1.43%	5 -\$144,374 -2.24%	23 -\$176,919 -0.45%

Chart 7. LPL-TOU SL4 Impact Matrix

LPL-TOU SL4	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total	
Over 5,299 kW	0	0	0	0	0	0	0	1 \$155,343 6.08%	0	1 \$422,676 6.35%	2 \$578,019 6.27%	
5,000 to 5,299 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
4,700 to 4,999 kW	0	0	0	0	0	0	0	1 \$92,817 6.29%	0	0	1 \$92,817 6.29%	
4,400 to 4,699 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
4,100 to 4,399 kW	0	0	0	0	0	0	1 \$64,878 6.15%	0	0	0	1 \$64,878 6.15%	
3,800 to 4,099 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
3,500 to 3,799 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
3,200 to 3,499 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,900 to 3,199 kW	0	0	0	0	0	0	0	1 \$57,437 6.26%	0	0	1 \$57,437 6.26%	
2,600 to 2,899 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,300 to 2,599 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,000 to 2,299 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
Totals	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	1 \$64,878 6.15%	3 \$305,597 6.18%	0 \$0 0.00%	1 \$422,676 6.35%	5 \$793,150 6.26%

Chart 8. LPL-TOU SL4 Unit Cost Analysis Matrix

LPL-TOU SL4	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total	
Over 5,299 kW	0	0	0	0	0	0	0	1 \$48,413 1.82%	0	1 \$30,669 0.43%	2 \$79,082 0.81%	
5,000 to 5,299 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
4,700 to 4,999 kW	0	0	0	0	0	0	0	1 \$40,721 2.66%	0	0	1 \$40,721 2.66%	
4,400 to 4,699 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
4,100 to 4,399 kW	0	0	0	0	0	0	1 \$31,315 2.88%	0	0	0	1 \$31,315 2.88%	
3,800 to 4,099 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
3,500 to 3,799 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
3,200 to 3,499 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,900 to 3,199 kW	0	0	0	0	0	0	0	1 \$26,073 2.75%	0	0	1 \$26,073 2.75%	
2,600 to 2,899 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,300 to 2,599 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
2,000 to 2,299 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%	
Totals	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	1 \$31,315 2.88%	3 \$115,207 2.24%	0 \$0 0.00%	1 \$30,669 0.43%	5 \$177,191 1.33%

Chart 9. LPL-TOU SL5 Impact Matrix

LPL-TOU SL5	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 7,499 kW	0	0	0	0	0	0	1 \$187,974 7.38%	0	0	0	1 \$187,974 7.38%
7,000 to 7,499 kW	0	0	0	0	0	0	0	0	1 \$178,020 7.63%	0	1 \$178,020 7.63%
6,500 to 6,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
6,000 to 6,499 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
5,500 to 5,999 kW	0	0	0	0	0	0	0	1 \$149,936 7.49%	0	0	1 \$149,936 7.49%
5,000 to 5,499 kW	0	0	0	0	0	0	1 \$116,162 7.25%	0	1 \$158,723 7.63%	0	2 \$274,885 7.46%
4,500 to 4,999 kW	0	0	0	0	0	0	0	0	0	1 \$144,160 7.70%	1 \$144,160 7.70%
4,000 to 4,499 kW	0	0	0	0	0	0	0	1 \$100,424 7.48%	0	0	1 \$100,424 7.48%
3,500 to 3,999 kW	0	0	0	0	0	0	2 \$159,881 7.41%	1 \$92,140 7.49%	1 \$116,618 7.59%	0	4 \$368,640 7.49%
3,000 to 3,499 kW	0	0	0	0	0	0	0	1 \$82,025 7.51%	0	0	1 \$82,025 7.51%
2,500 to 2,999 kW	0	0	0	0	0	0	0	0	1 \$94,473 7.61%	0	1 \$94,473 7.61%
2,000 to 2,499 kW	0	0	0	0	0	0	0	1 \$66,594 7.52%	0	1 \$72,806 7.67%	2 \$139,399 7.60%
Totals	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	4 \$464,017 7.36%	5 \$491,119 7.50%	4 \$537,834 7.62%	2 \$216,966 7.69%	15 \$1,709,936 7.52%

Chart 10. LPL-TOU SL5 Unit Cost Analysis Matrix

LPL-TOU SL5	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%	Total
Over 7,499 kW	0	0	0	0	0	0	1 \$61,172 2.29%	0	0	0	1 \$61,172 2.29%
7,000 to 7,499 kW	0	0	0	0	0	0	0	0	1 \$33,528 1.35%	0	1 \$33,528 1.35%
6,500 to 6,999 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
6,000 to 6,499 kW	0	0	0	0	0	0	0	0	0	0	0 \$0 0.00%
5,500 to 5,999 kW	0	0	0	0	0	0	0	1 \$33,794 1.60%	0	0	1 \$33,794 1.60%
5,000 to 5,499 kW	0	0	0	0	0	0	1 \$46,433 2.78%	0	1 \$11,679 0.52%	0	2 \$58,112 1.49%
4,500 to 4,999 kW	0	0	0	0	0	0	0	0	0	1 \$6,733 0.33%	1 \$6,733 0.33%
4,000 to 4,499 kW	0	0	0	0	0	0	0	1 \$23,035 1.62%	0	0	1 \$23,035 1.62%
3,500 to 3,999 kW	0	0	0	0	0	0	2 \$46,458 2.05%	1 \$6,964 0.53%	1 \$13,138 0.80%	0	4 \$66,560 1.27%
3,000 to 3,499 kW	0	0	0	0	0	0	0	1 \$18,402 1.59%	0	0	1 \$18,402 1.59%
2,500 to 2,999 kW	0	0	0	0	0	0	0	0	1 \$7,860 0.66%	0	1 \$7,860 0.66%
2,000 to 2,499 kW	0	0	0	0	0	0	0	1 \$10,626 1.13%	0	1 \$3,500 0.34%	2 \$14,126 0.72%
Totals	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	0 \$0 0.00%	4 \$154,064 2.33%	5 \$92,821 1.34%	4 \$66,205 0.88%	2 \$10,233 0.34%	15 \$323,322 1.34%