Residential Rate OIR
Rate Design and Bill Impact
Analysis Model

User Reference
Manual

DRAFT

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Residential Rate OIR
Rate Design and Bill Impact Analysis Model
User Reference Guide

Overview

The Residential Rate Rate Design and Bill Impact Analysis Model provides users with a tool that can be used to evaluate the residential rate and customer bill impacts of several rate structures when compared to rates set at Cost-of-Service levels. Specifically, the rate scenarios that may be evaluated with this tool include:

1) Customer Charges (Single or Split Demand-Based)
2) Minimum Charges
3) Flat Rates
4) Tiered Rates (Two Tiers or Multiple Tiers)
5) Time-Of-Use (TOU) Rates with and without Baseline Credits

Once rate scenarios have been run, several outputs are provided showing comparative rate and bill impacts as they relate to Cost-Based, Current, TOU, and various non-TOU rates. Information is also provided showing: 1) correlations between Usage and Income for customers in several geographic areas; and 2) estimated energy consumption changes resulting from a move from an Inclining Block Rate design to a Flat Rate design and from a Flat Rate design to TOU rates.

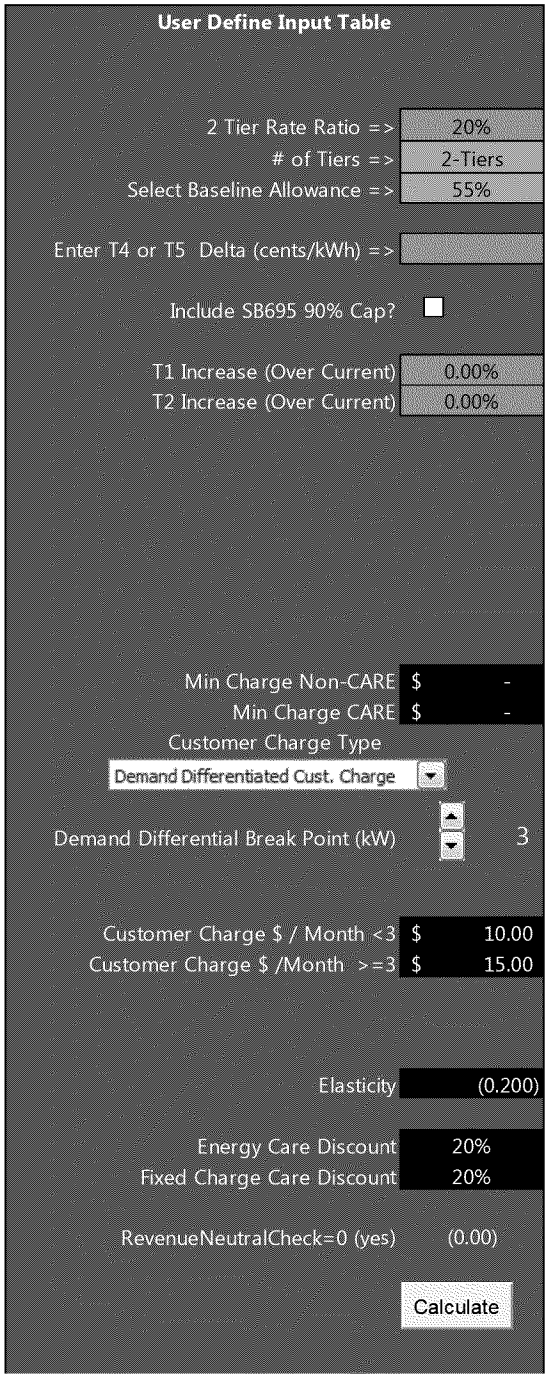
Using the Model

Description of Inputs and Running Instructions

"Summary" View – Manual inputs to the Model are made on the Summary page. The Summary page also contains summary tables showing resulting high level rate impacts based on the inputs.

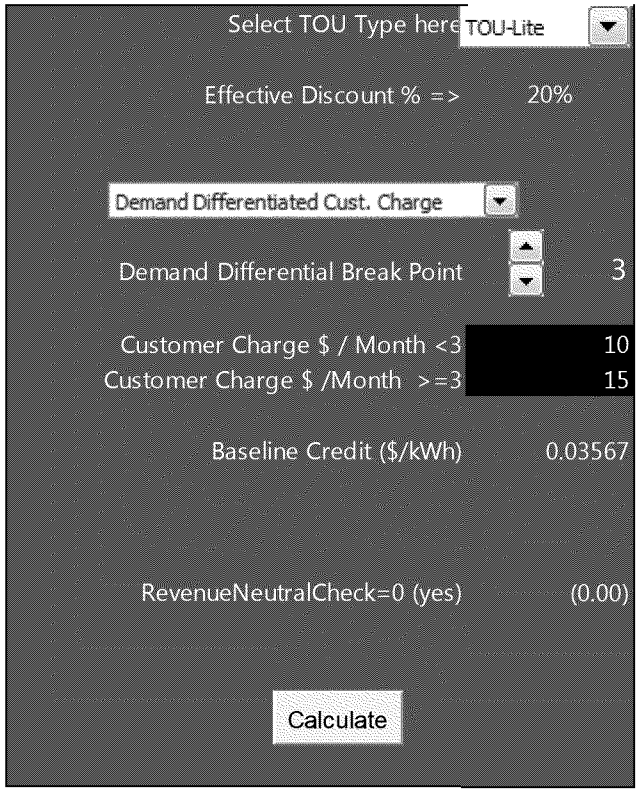
> **Inputs Table** – The Inputs Table is used to make all manual inputs to the Tool. Inputs are made to set user-specified conditions for various residential rate scenarios (see Figures 1a and 1b).
>
> **Note**: The rate and bill impacts provided in this Tool will only utilize appropriate inputs. For example, if a single-tier (i.e. Flat) rate design is designated, any specified tier differentials will be ignored.

Figure 1a
Non-TOU Rates Input Table*



* Sample input table based on Scenario "3"
rate design from the Scenario Results Document

Figure 1b
TOU Rates Input Table



Rate Design Inputs (Non-TOU and TOU)

- *2 Tier Rate Ratio* – The tier differential that will be applied to Tier-1 and Tier-2 rates in a two-tier rate design. For example, a 20 percent ratio would result in a Tier-2 rate that is 20 percent higher than the Tier-1 rate.
- *# of Tiers* – Dropdown box allows the user to choose a tiered rate design that incorporates from 1 up to 5 rate tiers.
- *Select Baseline Allowance* – The percentage of residential electricity use that occurs at or below the baseline allowance amount (i.e., Tier 1 usage). Dropdown box allows the user to choose either 53 or 55 percent (the current baseline allowance percentage).
- *Tier Delta (cents/kWh)* – The absolute cent-per-kWh differential that is applied to rate tiers, above 130% of baseline, when the number of tiers specified in the "# of Tiers" dropdown box is greater than three.
- *SB 695 90% Cap* – The user can apply a 90% cap on combined fixed charge and Tier 1 revenues by using this toggle.
- *Tier 1 Increase (Over Current)* – The percentage by which to increase the current Tier-1 rate. This input is used when the number of tiers specified in the "# of Tiers" dropdown box is greater than two.
- *Tier 2 Increase (Over Current)* – The percentage by which to increase the current Tier-2

rate. This input is used when the number of tiers specified in the "# of Tiers" dropdown box is greater than two.

- *Minimum Charge* – Use the Minimum Charge fields to specify a minimum bill charge amount for Non-CARE and CARE customers.
- *Customer Charge ($/Mo.)* – Fixed Monthly Customer Charge amount.
- *Demand Differential Break Point (kW)* – The user-defined kW threshold at which fixed monthly charges will be applied. Customers with demand levels below the threshold will pay the lower fixed monthly charge. This input is utilized when a Demand Differential Break Point is designated.
- *Customer Charge ($/Mo.)* < > – Use these input fields to specify the fixed monthly customer charge amounts for customers with demands above and below the Break Point (used for a split demand-based Customer Charge rate design).
- *Energy CARE Discount* – The rate discount percentage applied to the corresponding Non-CARE energy rate excluding exempt CARE charges such as DWRPC, CSI, and CARE Surcharges. For 4 and 5 Tier rates structures, the rate discount is based on the Non-CARE tier 3 rate.
- *Fixed CARE Discount* – The rate discount percentage applied to the fixed charges paid by customers qualifying for low income rate discounts.
- *Elasticity* – The user-defined percentage change in customer kWh consumption due to pricing changes (i.e., the percentage change in sales due to a 1 percent change in the average rate).

Additional TOU Rate Design Specific Inputs

- *Select TOU Type* – Dropdown box allows the user to select either a standard TOU design (i.e., fully aligned with the costs shown in Appendix G) or TOU-Lite[1] rate design.
- *TOU Rate Percentage Differential: On-Peak; Mid-Peak, Off-Peak* – (See Figure 3). There are two options for the TOU rate design (TOU, and TOU-Lite). When selecting the TOU option in the toggle, a TOU rate based on marginal cost is produced. If the TOU-Lite option is selected, the option to select the commodity ratio appears and the ratio can be inputted. For the TOU-Lite option, the percentage rate differential that is applied to each commodity rate in the three TOU periods[2]. For example, assuming a 1.50 Mid/Off peak ratio differential input for the Mid/Off-Peak ratio input, the Mid-Peak rate would be 50 percent higher than the Off-Peak Rate. An inputted ratio differential of 2.25 for the On/Off-Peak, the On-Peak rate would be 2.25 times higher than the Off-Peak rate.
- *Baseline Credit ($/kWh)* – A credit applied to bills calculated for customers utilizing TOU rates. The credit is applied on a per kWh basis for electric usage up to a customer's baseline allowance. For instance, assuming a monthly baseline allowance of 500 kWh, a customer with monthly use of 400 kWh would receive a credit equal to the specified per-kWh baseline credit times 400 kWh, a customer with monthly use of 500 kWh would receive a credit equal to the specified per-kWh baseline credit times 500 kWh, and a

[1] A TOU-Lite rate design typically has smaller differentials between the on-/mid-/off-peak rates compared to the standard TOU rate design.

[2] Application of a uniform percentage differential between each rate in the three TOU periods is a simplifying assumption. The actual ratios computed based on cost may not be significantly different.

customer with use in excess of 500 kWh would receive a credit limited to the specified per-kWh baseline credit times 500 kWh.

Running Instructions

Once the necessary inputs have been made to run a given rate scenario, rate calculations are accomplished as follows:

Step 1 - Calculate Non-TOU Rates – Click on the "Calculate" button located in the Non-TOU Inputs area on the Summary page.

Step 2 - Calculate TOU Rates - Click on the "Calculate" button located in the TOU Inputs area of the Summary page.

Step 3 - Update the Various Rate and Bill Impact Tables provided in the Tool – Click on the "Click here to calculate bill impact" button located on the Summary page to run the bill impacts module.

NOTE: use the green arrows located at the bottom of each page to navigate between pages/views.

Rate Summary Tables

Two rate summary tables are provided on the Summary page.

1) *Non-TOU Residential Rates Calculated Based on Inputs* (see Figure 2).

   Information includes:

   - Non-CARE and CARE sales by rate tier
   - Percentage of sales by rate tier
   - Current rates by tier
   - Estimated Non-TOU Rates by tier
   - Customer Charges
   - Split Demand-Based Customer Charges
   - Minimum charge

Figure 2

Estimated Residential Rate Calculated based on Inputs

Non-CARE	Tier	Forecast Sales (GWh)	% of Sales	June 2012 Rate	2-Tiers Rate
	1	10,212	53%	12.6	13.8
	2	2,101	11%	15.5	16.6
	3	3,284	17%	24.2	16.6
	4	2,143	11%	27.7	16.6
	5	1,541	8%	31.2	16.6
Customer Charge $ / Month <3				0.88	10.00
Customer Charge $ /Month >=3					15.00
Min Charge $/Mo.				-	0.00

CARE	Tier	Sales (GWh)	% of Sales	Rate	Rate
	1	4,890	62%	8.5	10.0
	2	876	11%	10.7	12.2
	3	1,188	15%	18.5	12.2
	4	638	8%	18.5	12.2
	5	319	4%	18.5	12.2
Customer Charge $ / Month <3				0.70	8.00
Customer Charge $ /Month >=3				-	12.00
Min Charge $/Mo.				-	0.00

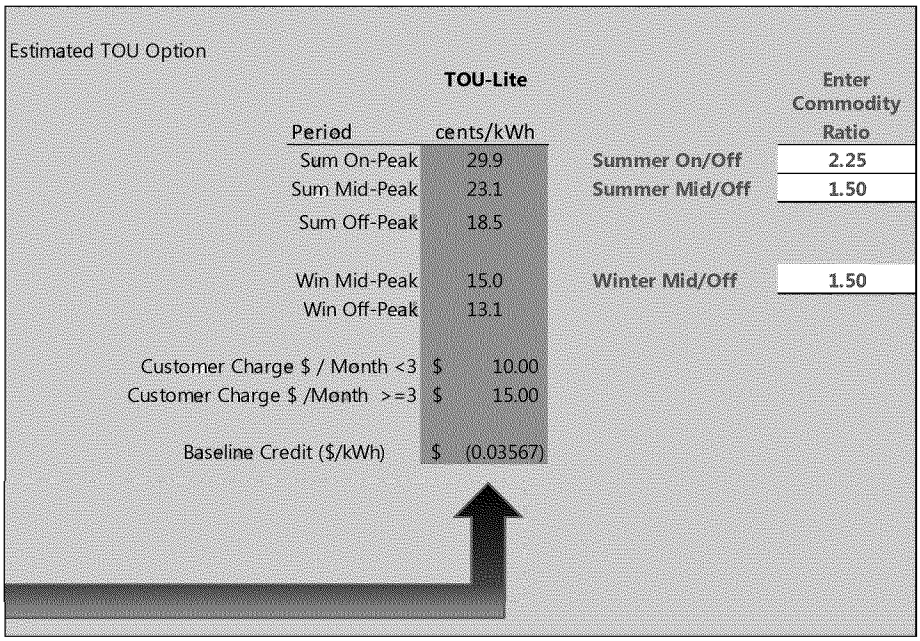
* Estimated rates for Scenario "3" in the Scenario Results Document

2) *TOU Residential Rates Calculated Based on Inputs* (see Figure 3).

Information Includes:

- Estimated Seasonal TOU rates
  - On-Peak
  - Mid-Peak
  - Off Peak
- Customer Charge
- Split Demand-Based Customer Charge
- Baseline credit ($/kWh)

Figure 3



Average Rate Impact Summary Tables

A summary table is provided in the "Summary" view showing: 1) average rate impacts by Baseline Region and 2) Rate Design Measures (see Figure 4).

1) *Bill Impact Summary by Zone*

Information includes:

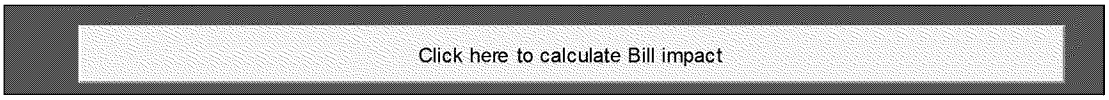
- Non-CARE and CARE average system-wide and geographical area average rate impacts:
  - Cost-Based Rates
  - Current Rates
  - Proposed Non-TOU Rates
  - Proposed TOU Rates

2) *Rate Design Measures Table* – The Rate Design Measures Table provides the following information as it relates to Current Rates, Non-TOU Rates and TOU Rates (see Figure 4):
- Total CARE Subsidy ($M)[3]
  - Residential CARE Subsidy (M$)
  - Non-Residential CARE Subsidy (M$)
- Effective CARE Discount Percentage
- Percentage of Fixed Cost Recovery[4]
- Percentage deviation of rates from cost[5]

[3] The Model does not re-calculate based on CARE revenue allocations.
[4] The percentage of total revenue that is recovered through fixed charges.
[5] Ratio of the sum of the absolute value of bill deviations from their cost-based levels to the Residential class revenue requirement.

- Bill Elasticity – Estimate of kWh and percentage change in sales due to the change in rate structure

Figure 4



Bill impact Summary (Cents / kWh) by Zone

NON-CARE				
Baseline Region	Cost Base Rate	June 2012 Rate	Proposed Non-TOU 2-Tiers Rate	Proposed TOU Rate
6	17.4	17.6	17.8	17.0
8	17.6	18.1	17.8	17.5
9	17.2	18.6	17.4	17.4
10	16.8	18.7	17.3	17.6
13	16.9	18.8	16.9	17.7
14	17.4	17.7	17.5	17.7
15	17.4	17.6	17.0	17.8
16	19.3	15.9	17.7	16.4
Non-CARE System	17.3	18.2	17.5	17.4

CARE				
Baseline Region	Cost Base Rate	June 2012 Rate	Proposed Non-TOU 2-Tiers Rate	Proposed TOU Rate
6	14.9	10.9	13.3	13.1
8	13.7	11.4	13.3	13.3
9	13.8	11.5	13.0	13.4
10	13.9	11.9	12.8	13.7
13	12.9	12.5	12.5	13.5
14	13.8	11.4	12.8	13.4
15	13.2	10.8	12.2	13.6
16	12.7	12.3	13.0	12.6
CARE System	13.8	11.6	12.9	13.4

Rate Design Measures	Current Rate Levels	Proposed Rate Levels Non-TOU	Proposed Rate Levels TOU
Total Estimated CARE Def. Rev. ($M) =>	$ 301	$ 262	$ 295
Residential CARE Subsidy ($M) =>	$ 76	$ 67	$ 75
Non Res. Estimated CARE Subsidy ($M) =>	$ 224	$ 195	$ 220
Effective CARE Discount % =>	25%	20%	20%
% of Fixed Costs=>	1%	15%	13%
Sum of Absolute Value Deviations from Cost	31.6%	13.4%	15.1%
Change in kWh Usage Due to Elasticity		-302.1 MWh	-318.5 MWh
Ratio of Δ in kWh To Total kWh		-1.111E-05	-1.171E-05

* Bill impact summary for Scenario "3" in the Scenario Results Document

Model Outputs

"Histogram" View – Bill impact information, in tabular and graphic form, is provided in the Histogram view. The information is segmented based on levels of percentage bill impacts that will

be experienced by customers. A dropdown box is used to show bill impacts specific to Non-CARE, CARE or both combined; TOU and non-TOU rate options; and by baseline region (see Appendix A).

Data Source: 2011 recorded usage for residential customer sample.

The information provided in the bill impact tables includes:

- Bill Percentage Change Groups
- Number of Customers in Each Group
- Percentage of Customers in Each Group
- Average Monthly kWh Use of Customers in Each Group
- Average Annual Load Factor of Customers in Each Group
- Average "On-Peak" kWh Consumption Percentage of Customers in Each Group
- Average Current Rates for Customers in Each Group
- Average Proposed Rates for Customers in Each Group
- Average Percentage Rate Change for Customers in Each Group
- Average Current Bills for Customers in Each Group
- Average Proposed Bills for Customers in Each Group
- Average Bill Change for Customers in Each Group
- Annual bill amount as a percentage of annual household income for current and proposed rates.

"Cost Study $" Page – This page shows the difference in monthly average bills and annual revenue recovery when cost of service is compared to current and optional rate designs (see Appendix C). The information is segmented based on average kWh usage levels.

The information shown in the tables on this page includes:

- Average Monthly Usage-Level Categories
  - Cost-Based Rates
  - Current Rates
  - Non-TOU Rates
  - TOU Rates
  - Current, Non-TOU and TOU Average Monthly Bill Differences when Compared to Cost-Based Rates
- Total Annual Revenue by Average Monthly Usage Levels
  - Cost-Based Rates
  - Current Rates
  - Non-TOU Rates
  - TOU Rates
  - Current, Non-TOU and TOU Total Annual Revenue Differences when Compared to Cost-Based Rates

"Cost Study Cents/kWh" Page – This page shows various rates and percentage rate changes

from Current Rates (see Appendix B). The information is presented in tabular and graphic form based on average kWh usage levels.

The information shown in the rate tables includes:

- Average Monthly Usage-Level Categories
- Average Cost-Based Rate by Usage Level
- Average Current Rates by Usage Level
- Average Non-TOU Rate by Usage Level
- Average TOU Rate by Usage Level
- Cost-Based Rate Percentage Change from Current Rates
- Proposed Non-TOU Rate Percentage Change from Current Rates
- Proposed TOU Rate Percentage Change from Current Rates

"Bill Impact Summary" Page – This page view provides summary bill impact results for Low, Medium, and High usage customers (see Appendix E). Average monthly bill comparisons are provided for each usage category based on cost, current rates, and proposed non-TOU and TOU rate options.

"Distribution of Bill Impacts" Tool – This tool allows the user to view the distribution of bill impacts for CARE and non-CARE customers by climate zone and across user-defined dollar and percentage ranges (see Appendix F).

Definitions

Annual Load Factor – the ratio of the average electric load to the peak load over a twelve-month period.

Correlation between Income and Usage– Correlation coefficients which are measures of a linear relation between annual usage and annual income (see Appendix D). These correlation coefficients were computed on our appropriately weighted residential customer sample data on which the model is based. A coefficient of 1 would mean that the two variables have a perfect linear relation and a coefficient of 0 would mean that they have no linear relation. The annual income data were derived from proprietary data obtained from Experian.

Cost-Based Rates – Rates based on costs that are largely consistent with 2012 General Rate Case (GRC) data. The revenue requirement used in calculating rates is consistent with the rate revenues produced by the current rates and the sample data. Cost-based rate drivers and associated marginal costs are provided in Appendix G.

Cost of Service – Customer class cost of service allocation that is aligned with marginal cost allocation principles.

Current Rates – Residential rate designs based on rates effective on June 1, 2012.

kWh – Kilowatt-hour. A measure of electricity usage.

Split Demand-Based Customer Charges – Fixed monthly customer charges that vary depending on customers' levels of electric (kW) demand (annual maximum).

Time-of-Use (TOU) Rates – Rates that vary depending on the time of day that the electricity is consumed. For SCE, the time-of-use periods are designated as seasonal (summer/winter) on-peak, mid-peak, and off-peak periods consistent with SCE's TOU-8 rate schedule.

Appendix A: "Histogram" View

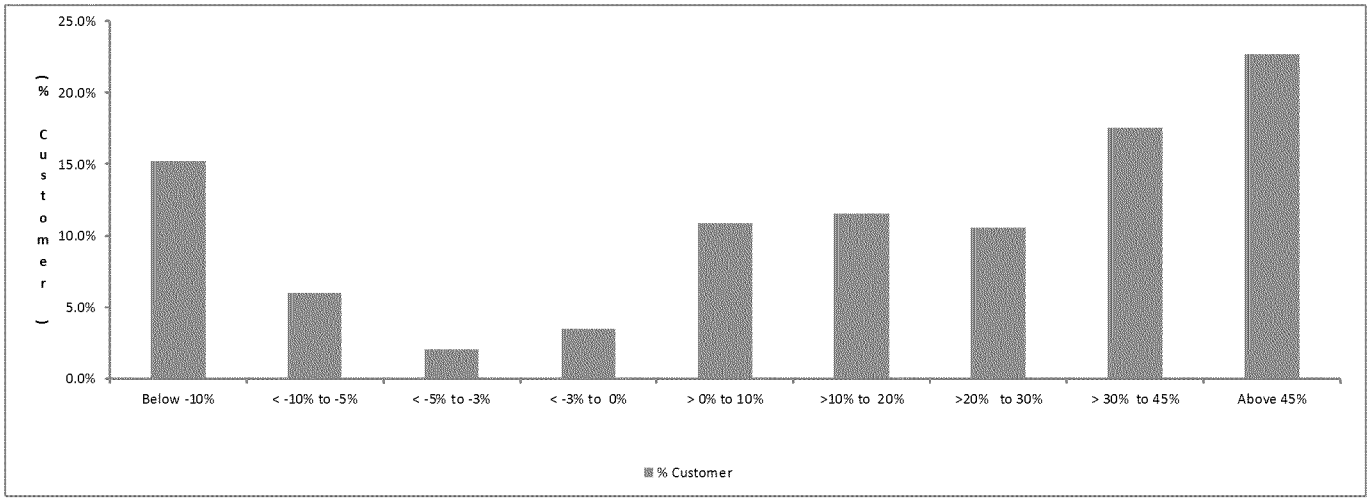
COMBINE

Current Vs. NON-TOU

CEC : - All

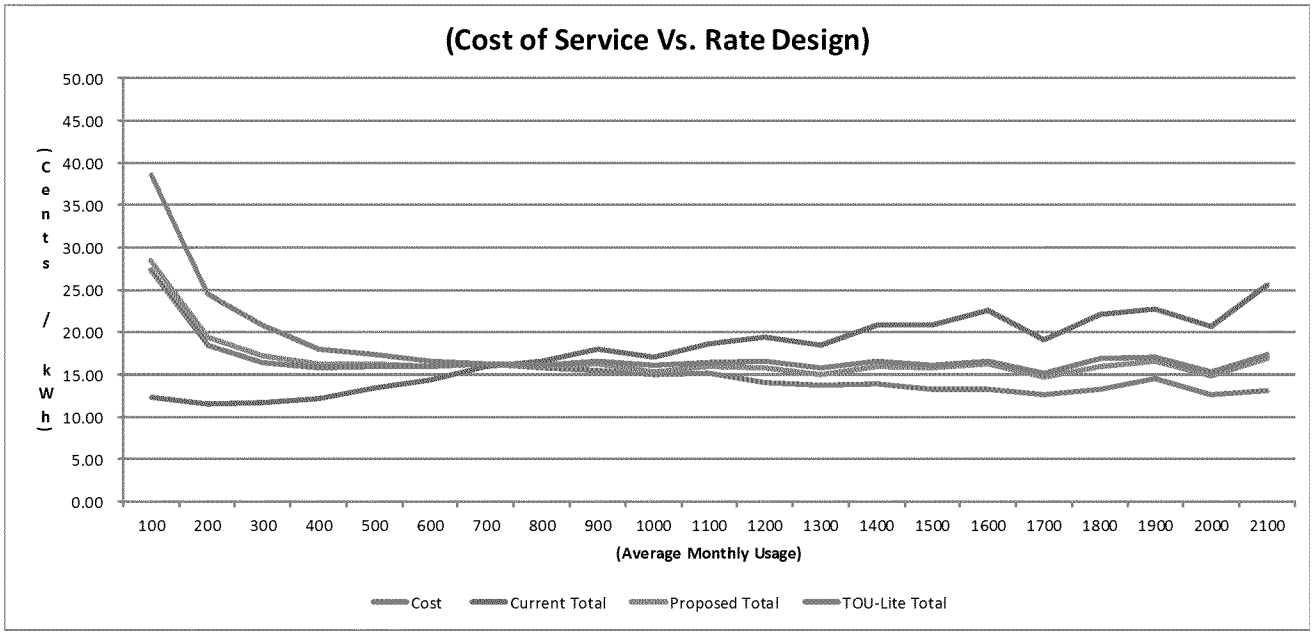
Range 1 | Range 2 | Range 3

Combined (CEC : - All June 2012 Rate Vs. Proposed 2-Tiers NON-TOU)



Impact	Customer		Average			Elasticity	Cents/kWh		%	Monthly $		Average	Average	
%	Number	% Customer	Monthly - kWh	Annual Load Factor	% On Peak	Average Monthly Δ kWh	June 2012 Rate	Proposed	Change	June 2012 Rate	Proposed	Monthly $ Change	Current Annual Bill as a % of Income	Proposed Annual Bill as a % of Income
Below -10%	648,518	15.3%	1,206	18.9%	7.5%	57	21.1	16.3	-22.8%	$254.12	$196.28	-$57.85	2.6%	2.0%
< -10% to -5%	252,556	5.9%	817	17.4%	8.2%	13	17.2	15.9	-7.5%	$140.28	$129.81	-$10.47	1.7%	1.6%
< -5% to -3%	86,594	2.0%	768	16.1%	7.9%	7	16.8	16.1	-4.0%	$128.73	$123.61	-$5.13	1.7%	1.6%
< -3% to 0%	149,087	3.5%	695	16.9%	8.0%	2	16.4	16.2	-1.4%	$114.33	$112.71	-$1.63	1.5%	1.5%
> 0% to 10%	462,921	10.9%	641	16.2%	7.1%	(7)	15.2	15.9	4.8%	$97.19	$101.86	$4.67	1.3%	1.3%
>10% to 20%	488,862	11.5%	548	14.6%	6.9%	(18)	13.8	15.8	14.6%	$75.45	$86.46	$11.01	1.1%	1.2%
>20% to 30%	447,670	10.5%	451	13.7%	7.1%	(25)	12.9	16.1	24.8%	$58.34	$72.80	$14.46	0.9%	1.1%
> 30% to 45%	745,486	17.6%	350	12.3%	6.5%	(28)	11.8	16.1	36.7%	$41.30	$56.46	$15.15	0.7%	1.0%
Above 45%	965,430	22.7%	210	9.3%	6.6%	(25)	10.9	17.3	59.6%	$22.76	$36.33	$13.57	0.4%	0.7%
Group Total	4,247,124	100.0%	563	15.2%	7.2%	4.5	16.3	16.2	-0.6%	$91.79	$91.20	-$0.59	1.3%	1.3%

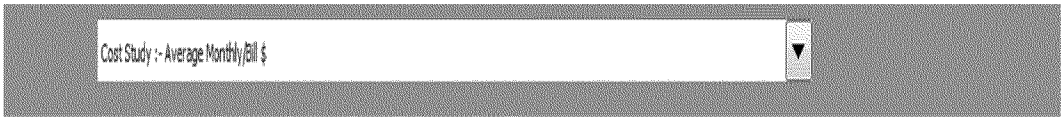
Appendix B: "Cost Study CentskWh" View



Cost of Service vs. Current and optional rate designs

Cost Study :- Average Cents/ kWh

					% Change from Cost		
Average Monthly Usage	Cost	Current Total	Proposed Total	TOU-Lite Total	Current Total	Proposed Total	TOU-Lite Total
100	38.52	12.38	28.33	27.33	-68%	-26%	-29%
200	24.40	11.57	19.37	18.44	-53%	-21%	-24%
300	20.86	11.60	17.14	16.33	-44%	-18%	-22%
400	18.00	12.08	16.29	15.78	-33%	-9%	-12%
500	17.41	13.34	16.30	15.95	-23%	-6%	-8%
600	16.55	14.29	15.98	15.92	-14%	-3%	-4%
700	16.27	15.88	16.32	16.32	-2%	0%	0%
800	15.76	16.50	15.96	16.14	5%	1%	2%
900	15.48	18.02	16.28	16.64	16%	5%	7%
1000	15.02	17.10	15.34	16.10	14%	2%	7%
1100	15.22	18.65	15.86	16.43	23%	4%	8%
1200	14.01	19.44	15.77	16.54	39%	13%	18%
1300	13.66	18.43	14.98	15.70	35%	10%	15%
1400	13.83	20.80	15.94	16.53	50%	15%	20%
1500	13.25	20.81	15.71	16.06	57%	19%	21%
1600	13.29	22.58	16.28	16.54	70%	22%	24%
1700	12.59	19.16	14.62	15.21	52%	16%	21%
1800	13.29	22.02	15.86	16.91	66%	19%	27%
1900	14.54	22.74	16.55	17.06	56%	14%	17%
2000	12.68	20.63	14.88	15.22	63%	17%	20%
2100	13.06	25.61	16.81	17.36	96%	29%	33%
2200	14.10	22.65	16.46	17.63	61%	17%	25%
2300	14.29	26.08	16.79	17.68	83%	17%	24%
2400	13.77	26.44	16.80	17.06	92%	22%	24%
2500	13.90	26.11	16.76	17.48	88%	21%	26%
2600	13.98	26.16	16.72	17.43	87%	20%	25%
2700	0.00	0.00	0.00	0.00	0%	0%	0%
2800	12.46	24.37	16.50	17.13	96%	32%	37%
2900	12.58	24.36	16.49	17.79	94%	31%	41%
3100	0.00	0.00	0.00	0.00	0%	0%	0%
3300	15.04	25.18	16.50	17.50	67%	10%	16%
3900	0.00	0.00	0.00	0.00	0%	0%	0%
4000	12.29	28.61	16.58	16.72	133%	35%	36%
Total	16.28	16.29	16.19	16.27	0%	-1%	0%



Appendix C: "Cost Study $" View

Cost of Service vs. Current and optional rate designs

Cost Study :- Average Monthly Bill $

					Difference from Cost		
Average Monthly Usage	Cost	Current Total	Proposed Total	TOU-Lite Total	Current Total	Proposed Total	TOU-Lite Total
100	$24.68	$7.93	$18.15	$17.51	($16.75)	($6.53)	($7.17)
200	$37.40	$17.74	$29.69	$28.26	($19.66)	($7.71)	($9.14)
300	$52.60	$29.25	$43.22	$41.18	($23.35)	($9.38)	($11.42)
400	$62.86	$42.20	$56.90	$55.11	($20.67)	($5.96)	($7.76)
500	$77.92	$59.68	$72.95	$71.38	($18.24)	($4.97)	($6.54)
600	$90.88	$78.46	$87.76	$87.40	($12.42)	($3.12)	($3.48)
700	$105.00	$102.48	$105.30	$105.29	($2.52)	$0.30	$0.29
800	$118.67	$124.21	$120.18	$121.52	$5.55	$1.51	$2.86
900	$130.85	$152.28	$137.60	$140.65	$21.43	$6.75	$9.80
1000	$142.28	$161.98	$145.37	$152.54	$19.69	$3.09	$10.26
1100	$158.07	$193.75	$164.72	$170.67	$35.68	$6.65	$12.61
1200	$161.27	$223.70	$181.46	$190.37	$62.43	$20.19	$29.11
1300	$171.01	$230.65	$187.44	$196.47	$59.63	$16.43	$25.46
1400	$186.58	$280.65	$214.96	$223.04	$94.07	$28.39	$36.47
1500	$192.01	$301.70	$227.74	$232.83	$109.69	$35.73	$40.82
1600	$205.00	$348.28	$250.99	$255.08	$143.28	$45.99	$50.07
1700	$208.29	$317.02	$241.92	$251.70	$108.73	$33.63	$43.41
1800	$235.81	$390.52	$281.29	$300.02	$154.71	$45.48	$64.21
1900	$267.66	$418.63	$304.62	$314.09	$150.97	$36.95	$46.43
2000	$246.66	$401.22	$289.31	$296.06	$154.55	$42.64	$49.40
2100	$265.73	$521.18	$342.18	$353.31	$255.45	$76.45	$87.58
2200	$302.72	$486.23	$353.44	$378.58	$183.51	$50.72	$75.86
2300	$319.67	$583.55	$375.53	$395.49	$263.88	$55.86	$75.82
2400	$320.93	$616.32	$391.52	$397.79	$295.39	$70.59	$76.85
2500	$336.65	$632.23	$405.80	$423.19	$295.58	$69.15	$86.54
2600	$355.33	$664.86	$424.87	$443.01	$309.54	$69.55	$87.69
2700	0.00	0.00	0.00	0.00	$0.00	$0.00	$0.00
2800	$343.55	$671.74	$454.86	$472.20	$328.18	$111.31	$128.64
2900	$358.88	$695.16	$470.49	$507.58	$336.28	$111.61	$148.70
3100	0.00	0.00	0.00	0.00	$0.00	$0.00	$0.00
3300	$481.25	$805.98	$527.99	$559.90	$324.72	$46.73	$78.65
3900	0.00	0.00	0.00	0.00	$0.00	$0.00	$0.00
4000	$783.25	$1,846.40	$1,069.62	$1,079.04	$1,053.14	$276.36	$285.79
Total	$91.74	$91.79	$91.20	$91.66	$0.06	($0.53)	($0.08)

Appendix D: Usage-Income Correlation*

Correlation Between Usage and Income

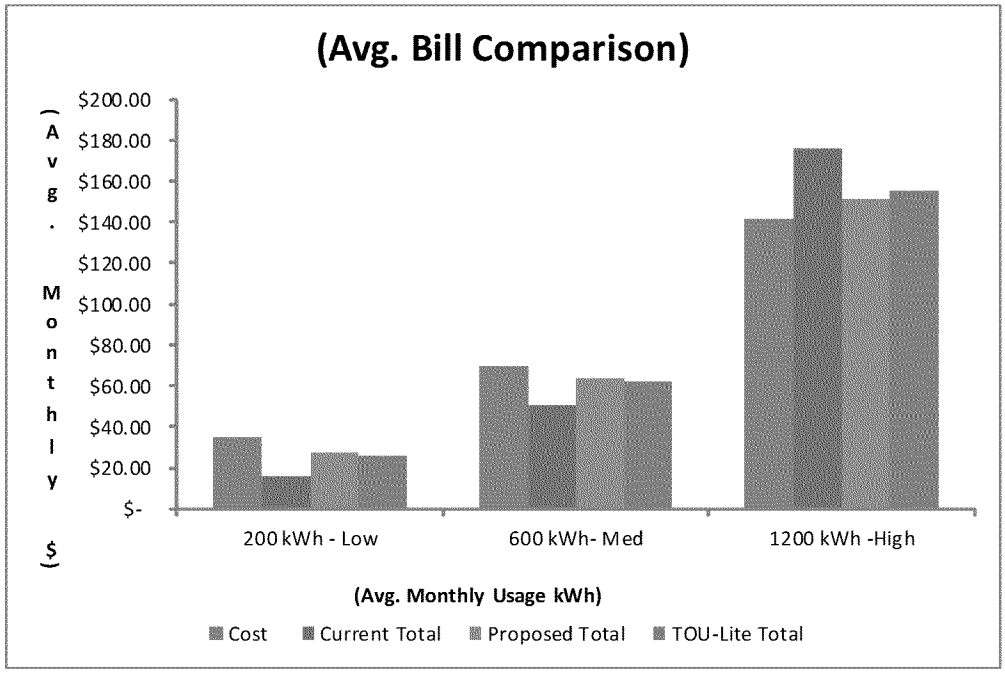
Climate	All Customers	Non-Care	Care
Mild	0.28	0.29	0.11
Moderate (Zones 9 & 10)	0.23	0.20	0.21

Warm (Zones 13, 14, 15)	0.32	0.40	0.13
SCE Territory	**0.23**	**0.23**	**0.13**

Zone	All Customers	Non-Care	Care
6	0.30	0.29	0.17
8	0.29	0.29	0.11
9	0.22	0.18	0.26
10	0.28	0.28	0.17
13	0.14	0.05	0.24
14	0.39	0.55	0.00
15	0.35	0.38	0.18
16	0.26	0.41	-0.29

*Note that the correlation analysis results are not produced by the bill calculator.

Appendix E:
Bill Impact Summary for Low/Med/High Usage Customers



Avg Monthly Bill Comparison :-

			Avg.Monthly Bill $		
Avg. Usage @	Population	Cost	Current Total	Proposed Total	TOU-Lite Total
200 kWh - Low	434,452.16	$ 34.53	$ 15.53	$ 27.09	$ 25.84
600 kWh- Med	2,307,675.88	$ 69.78	$ 50.76	$ 63.75	$ 62.26
1200 kWh -High	1,504,995.97	$ 141.67	$ 176.42	$ 151.54	$ 155.47
		$ 91.74	$ 91.79	$ 91.20	$ 91.66

Appendix F: Distribution of Bill Impacts

("$%Change" Page View)

CARE

Current Vs. TOU-Lite

CEC : - All

Y-axis Scale Range: Enter range increment in dollars $ 5

Y-axis Scale Starting Point $ (20)

X-axis Scale Range: Enter range increment in percent 5%

X-axis Scale Starting Point -5%

SCE - Residential OIR Bill impact analysis

Current Vs. TOU

CARE

CEC : - All

	LE -%5	-%5 to %0	%0 to %5	%5 to %10	%10 to %15	%15 to %20	%20 to %25	%25 to %30	GE %30
LE -$20	3.2%								
-$20 to -$15	0.7%								
-$15 to -$10	2.6%								
-$10 to -$5	1.3%	0.2%							
-$5 to $0	0.1%	3.4%							
$0 to $5			3.7%	2.4%	0.4%	0.1%	0.3%	0.2%	0.0%
$5 to $10			0.9%	4.6%	5.2%	1.8%	1.7%	0.9%	15.7%
$10 to $15				0.6%	1.4%	2.5%	2.7%	1.6%	20.1%
GE $15				0.1%	0.5%	1.1%	1.5%	2.4%	16.4%

Appendix G: Cost-Based-Rate Drivers

Cost Based Rate		
Component	Unit	**Rate**
Energy	$/kWh - Summer On Peak	0.09467
	Mid Peak	0.08117
	Off Peak	0.06691
	$/kWh - Winter Mid Peak	0.08484
	Off Peak	0.07310
TR Generation Capacity	$/kW- Summer On Peak	12.44
	Mid Peak	3.64
Distribution Facilities	$/kW - Max kW	5.96
Customer Charges	$ per day	
	Single	0.461
	Multi.	0.461

Notes: