SDGE

A Sempra Energy utility

San Diego Gas & Electric

Residential Rate OIR:

Rate Design and Bill Impact Analysis Model

User Guide

November 28th, 2012

Table of Contents

Residential Rate OIR:
Rate Design and Bill Impact Analysis Model

User Guide

SDGE
A Sempra Energy utility

Overview

The Electric Rate Design Model provides the user with a tool that allows them to design and evaluate different residential rate structures.

The model has the following assumptions:

- All rate and customer bill impacts are compared to San Diego Gas & Electric's (SDG&E) current rates and illustrative cost-based rate[1] structure.
- Revenue neutral with respect to current rates[2]
- Current authorized revenue allocations
- Determinants consistent with those in SDG&E's pending General Rate Case (GRC) Phase II.

The resulting rates are presented as Total Rates, but the analysis focuses on the cost drivers and rate design structures of three rate components; Distribution, Commodity, and Total Rate Adjustment Component (TRAC). All other rate components are equal to current authorized[3]. The rate design options follow the cost based structure of the identified rate components as discussed below. However, TRAC is a rate component strictly responsible for meeting AB1X and SB695 legislative compliance and has no "cost-based" structure. In addition the user may select alternative structures for California Alternate Rates for Energy (CARE) to providing assistance to low income customers.

[1] Developed in SDG&E GRC Phase II Application 11-10-002
[2] Effective September 1st, 2012 per Advice Letter 2396-E
[3] Other components include; Transmission, Public Purpose Program (PPP) Charges, Nuclear Decommissioning (ND) Charge, Ongoing Competition Transition Charges (CTC) and Reliability Services (RS).

Specifically, the user is able to choose the following:

1. **Distribution:**
    a. Customer Cost Recovery
        i. Variation of Basic Service Fee (BSF)[4] and/or recovery through energy rates[5]
    b. Demand Cost Recovery
        i. Non-Coincident Demand (NCD)[6], Fixed Charge Demand Adder[7], and/or recovery through energy rates

2. **Commodity:**
    a. Capacity Cost Recovery
        i. Variation of On-Peak Demand[8] and/or recovery though energy rates

    b. Energy Cost Recovery
        i. Time-of-Use (TOU) rates[9] or flat rate by season[10]

3. **TRAC:**
    a. Tier Structure through which through which subsidies ensuring compliance with AB1X/SB695 are applied and recovered for SDG&E.

4. **California Alternate Rates for Energy (CARE)[11]**
    a. CARE rates and discount

This guide goes into detail to show the user how to select different rate options of cost recovery and includes screenshot examples for each of the components mentioned above. Included throughout the presentation are four rate design scenarios. At the end of each section the guide describes what selections need to be made for each scenario. Section V of the guide has complete step-by-step instructions for each of the four scenarios and the r esulting output. The goal is for any user to be able to design and evaluate residential rate structures using the model by following the instructions and examples in this guide.

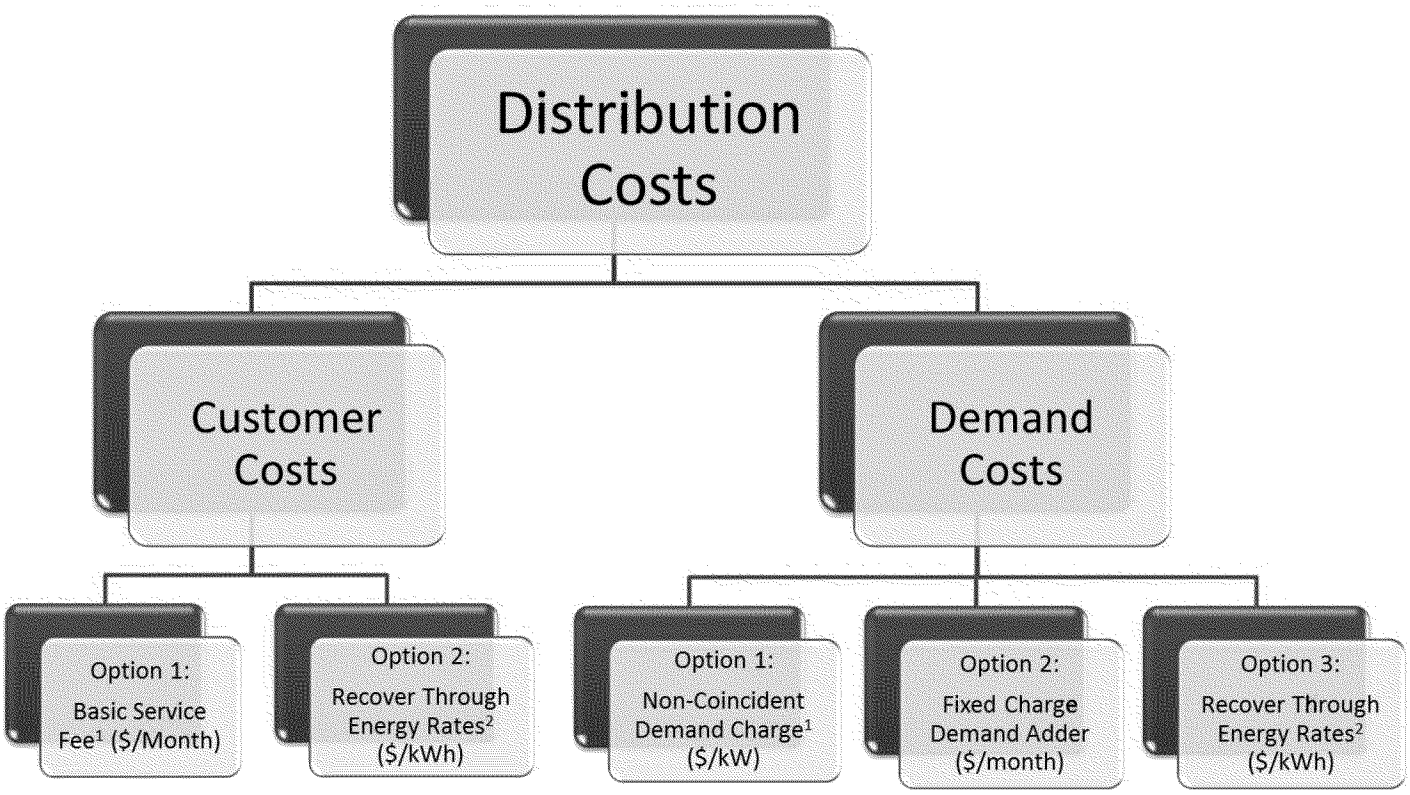
[4] Customer pays a fixed $/month
[5] Customer pays for cost recovery through a cent/kWh energy charge.
[6] Customer pays a dollar amount per NCD-kW; maximum demand during the billing period regardless of TOU period.
[7] Customer pays fixed $/month added to Basic Service Fee to recover distribution demand costs.
[8] Customer pays a dollar amount per Peak-kW; maximum demand measured during the peak period.
[9] Different rate levels depending upon the time period in which energy is used.
[10] Customer pays a flat commodity rate (cents/kWh) only different between summer and winter.
[11] Alternative mechanism for providing assistance for low-income customers.

The Four scenarios are identified as:

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Customer Charge	$20/month	$10/month	$5/month	$5/month
Demand Differentiated Basic Service Fee (BSF) Adder	N/A	N/A	2 BSF levels: $5/month for customers with max annual demand <3kW; $10/month for 3kW or above	2 BSF levels: $5/month for customers with max annual demand <3kW; $10/month for 3kW or above
TOU	None - Flat	150% OP/OF	None - Flat	150% OP/OF
Tiers	None	None	2 tiers with 20% differential	None
CARE	20% Discount	20% Discount	20% Discount	20% Discount

Step-by-step instructions with example output are located in the Appendix for each scenario.

I. Distribution Costs



[1] Cost-Based Structure
[2] Current Structure

The above chart illustrates the two parts of identified distribution costs, Customer and Demand, and the rate design options available, noting the cost-based recovery structure. Any Distribution Customer Costs not collected in the Basic Service Fee (BSF) will be collected through a flat energy rate as an equal cent per kWh. Similarly, any Distribution Demand Costs not recovered in a Non-Coincident Demand Charge or Fixed Charge Demand Adder will be collected as an equal cent per kWh.

A. Distribution Customer costs – there are 2 non-exclusive rate design options available for cost recovery:

1. **Basic Service Fee** – All customers pay a dollar per month charge.
    a. For cost based recovery of distribution customer costs. This can be partial or full recovery of distribution customer costs.
    b. When no BSF is selected, the minimum bill option occurs as the default.
2. **Recover through energy rates** – All Distribution Customer Costs are collected as an equal cent per kWh ($/kWh).
    a. As stated above, depending on the Basic Service Fee level, this could be partial or full recovery of distribution customer costs.
    b. If this option is selected, instructions will appear to enter a minimum bill $ per day. A minimum bill cannot be entered if a basic service fee is selected.

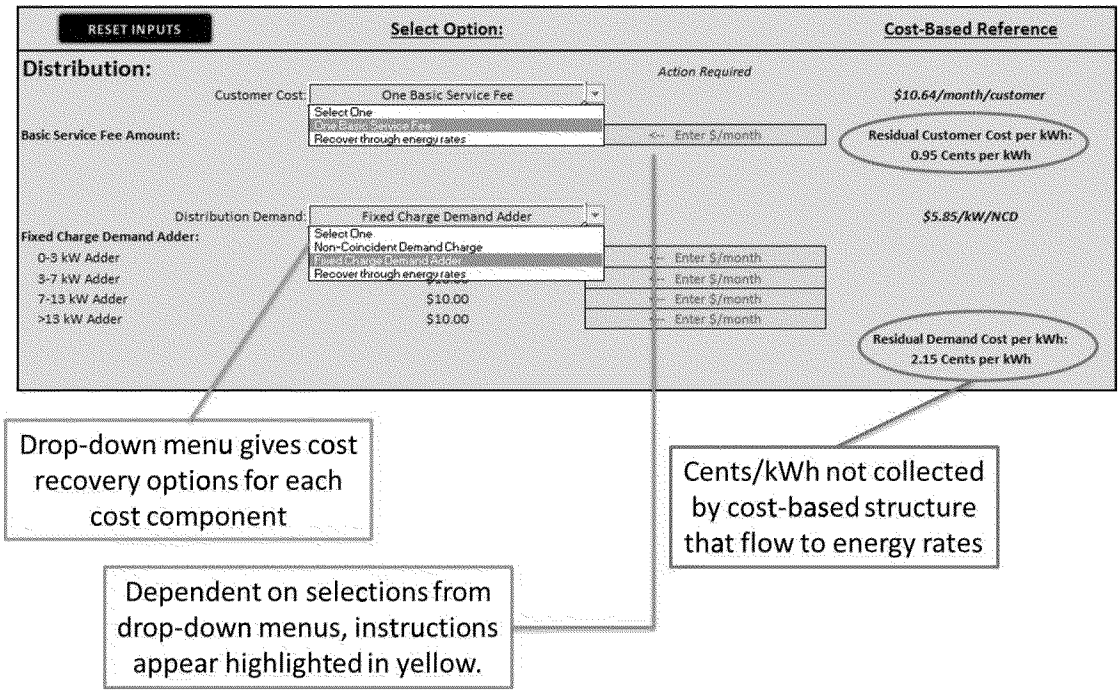
B. Distribution Demand costs – there are 3 rate design options available; Options 1 and 2 are mutually exclusive but both are non-exclusive with option 3:

1. **Non-Coincident Demand Charge** – For cost based recovery of distribution demand costs.
    a. Charge based on the customer's maximum annual demand at any time during the day ($/kW).

2. **Fixed Charge Demand Adder** – Hybrid option for cost based recovery of distribution demand costs only available if a Basic Service Fee is selected for Distribution Customer Cost recovery.
    a. A fixed dollar per month dependent on the customer's maximum annual demand. Up to 4 levels can be designated (0-3 kW, 3-7 kW, 7-13 kW, and over 13 kW). This adder is presented in the Basic Service Fee.

3. **Recovery through energy rates** - All Distribution Demand Costs are collected as an equal cent per kWh ($/kWh).
    a. As stated above, depending on NCD and Fixed Charge Demand Adder, this could be partial or full recovery of distribution customer costs.

The below image is a screenshot from the model of the distribution portion of the inputs described above.



C. Distribution Rate Design Scenario Examples – Instructions for Distribution portion only.

Scenario One: $20 Basic Service Fee

1. Select "Basic Service Fee" from Customer Cost dropdown menu
2. Enter $20 for Basic Service Fee Amount
3. Select "Recover through energy rates" for Distribution Demand

Scenario Two: $10 Basic Service Fee

1. Select "Basic Service Fee" from Customer Cost dropdown menu
2. Enter $10 for Basic Service Fee Amount
3. Select "Recover through energy rates" for Distribution Demand

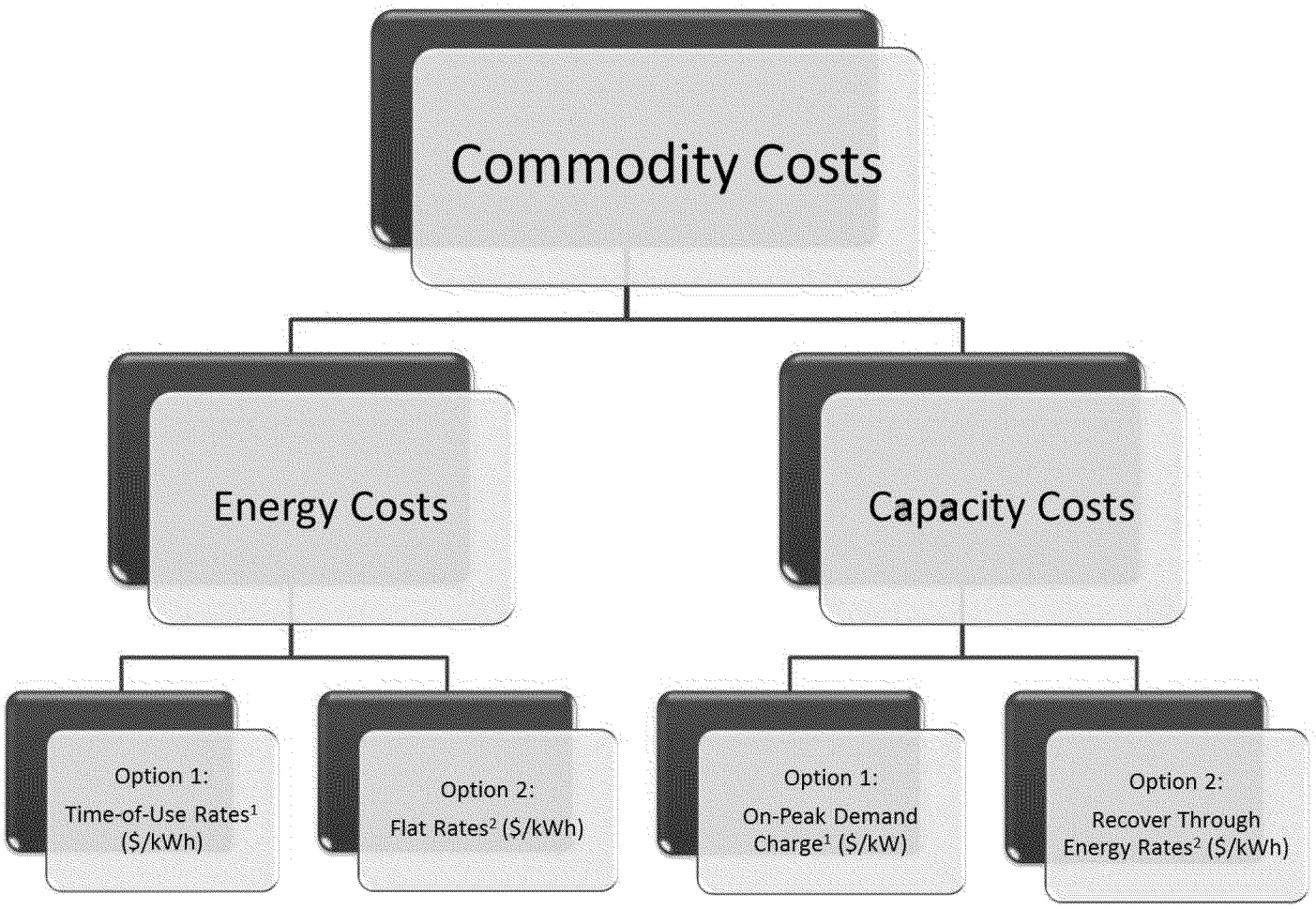
Scenario Three: $5 Basic Service Fee, Fixed Charge Demand Adder $5 below 3 kW and $10 above 3 kW

1. Select "Basic Service Fee" from Customer Cost dropdown menu
2. Enter $5 for Basic Service Fee Amount
3. Select "Fixed Charge Demand Adder" for Distribution Demand
4. Enter $5 for 0-3 kW Adder
5. Enter $10 for 3-7 kW Adder, 7-13 kW Adder and >13 kW Adder

Scenario Four: $5 Basic Service Fee, Fixed Charge Demand Adder $5 below 3 kW and $10 above 3 kW

Same as Scenario Three Distribution portion above.

II. Commodity Costs



[1] Cost-Based Structure
[2] Current Structure

The above chart illustrates the two parts of identified commodity costs; Energy and Capacity, and the rate design options available, noting the cost-based recovery structure. First the user selects commodity capacity rate design for cost recovery. If recovery through energy rates is chosen, then all capacity costs will be collected in summer commodity energy rates. Any Commodity Capacity Costs not collected in an On-Peak Demand charge are collected through summer energy rates.

A. Commodity Capacity costs – there are 2 non-exclusive rate design options available:

1. **On-Peak Demand Charge** – Charge based on the customer's maximum demand measured during the peak period. [12]

2. **Recover through energy rates** – All Commodity Capacity Costs are collected as a summer energy rate dependent upon the rate structure selected below. For example, if a Flat Energy rate is chosen, the capacity costs will be an equal cent per kWh for summer energy. If Time-of-Use energy is chosen then the commodity capacity costs will be recovered in summer energy usage dependent upon on-peak/off-peak ratio desired.

B. Commodity Energy costs – there are 2 mutually-exclusive rate design options available:

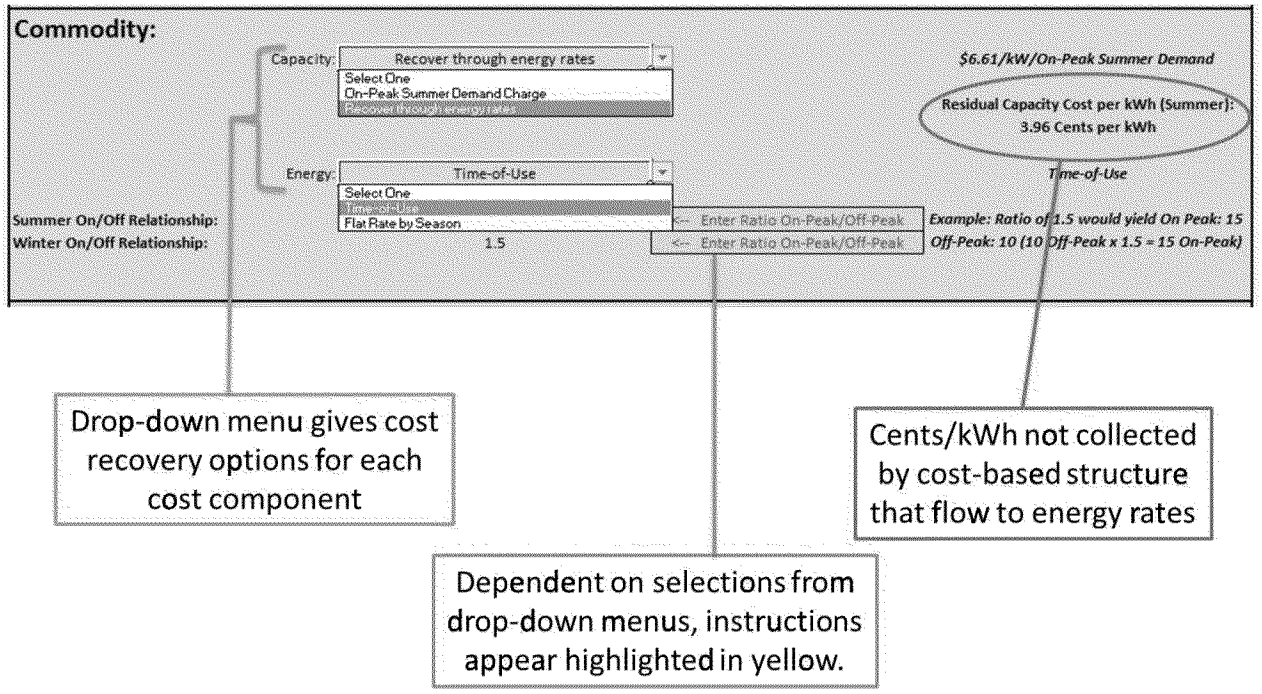
1. **Time-of-Use Rates** – Energy costs are recovered per kWh with different rates by time of use (On-Peak, Semi-Peak, and Off-Peak) and season[13].
    a. The user is able to select the ratio of On-Peak to Off-Peak rates by season. For example, a ratio of 2 means the On-Peak commodity rate is double the Off-Peak commodity rate. An error message will appear if the ratios do not meet the criteria of an on-peak rate higher than semi-peak rate and an off-peak rate lower than a semi-peak rate.

2. **Flat Rate by Season** – Energy costs are recovered per kWh, differing only between summer and winter.

[12] Currently residential commodity capacity is summer only.
[13] SDG&E Residential Time-of-Use periods:

	Summer (May-Oct)	Winter (Nov-April)
On-Peak	11am-6pm	5pm-8pm
Semi-Peak	6am-11am & 6pm-10pm	6am-5pm & 8pm-10pm
Off-Peak	Other hours + Holidays and Weekends	Other hours + Holidays and Weekends

The below image is a screenshot from the model of the commodity portion of the inputs described above.



C. Commodity Rate Design Scenario Examples – Instructions for Commodity portion only.

Scenario One: Flat Energy Rate

1. Select "Recover through energy rates" from Capacity dropdown menu
2. Select Flat Rate by Season from Energy dropdown menu

Scenario Two: Time of Use Energy Rate with 150% On-Peak to Off-Peak relationship

1. Select "Recover through energy rates" from Capacity dropdown menu
2. Select "Time-of-Use" from Energy dropdown menu
3. Enter 1.5 for Summer On/Off Relationship and 1.5 for Winter On/Off Relationship

Scenario Three: Flat Energy Rate

Same as Scenario One Commodity portion above.

Scenario Four: Time of Use Energy Rate with 150% On-Peak to Off-Peak relationship

Same as Scenario Two Commodity portion above.

III. Total Rate Adjustment Component (TRAC)

The TRAC component is the mechanisms that differentiates SDG&E's residential tiered rates and ensures regulatory compliance with AB1X/SB695 . Tier 1 and Tier 2 TRAC credits ensure total Tier 1 and Tier 2 rates meet the constraints under AX1X/SB695. These credits are then recovered through charges applied to upper tier TRAC rates. In the event Time-of-Use commodity energy is selected, tiers will be reflected as baseline adjustments. If a flat commodity energy rates are selected, tiers will be reflected in the total rate , consistent with the current rate structure . The user first selects how many Tiers are desired from the drop down menu highlighted in yellow, in Column C. If 2, 3 or 4 Tiers are chosen then additional instructions with appear, as explained below.

A. Number of Tiers – there are 4 mutually exclusive rate design options available:

1. **Flat** - No tier differentials. This would not be in compliance with AB1X/SB695 and require legislative change.

2. **2 Tiers** – Reflects a baseline/non-baseline option with the two tiers differentiated by a consistent percent increase of Tier 2 rates over Tier 1 rates. This would change both Tier 1 and Tier 2 rates thus it would not be in compliance with AB1X/SB695 and require legislative change.

3. **3 Tiers –** Three tiers with Tier 1 and Tier 2 in compliance with AB1X/SB695, unless otherwise specified (see below). Tier 3 would apply to usage greater than 130% of Baseline.

4. **4 Tiers** – Four tiers with Tier 1 and Tier 2 in compliance with AB1X/SB695, unless otherwise specified (see below). Tiers 3 and 4 would be responsible for the subsidy amounts given to usage up to 130% of Baseline allowances.

B. Tier 3 and 4 Differential – Option if 4 Tiers are selected

Instructions will appear to enter a cent(s) per kWh differential between Tiers 3 and 4. This option is only available if 4 Tiers are selected.

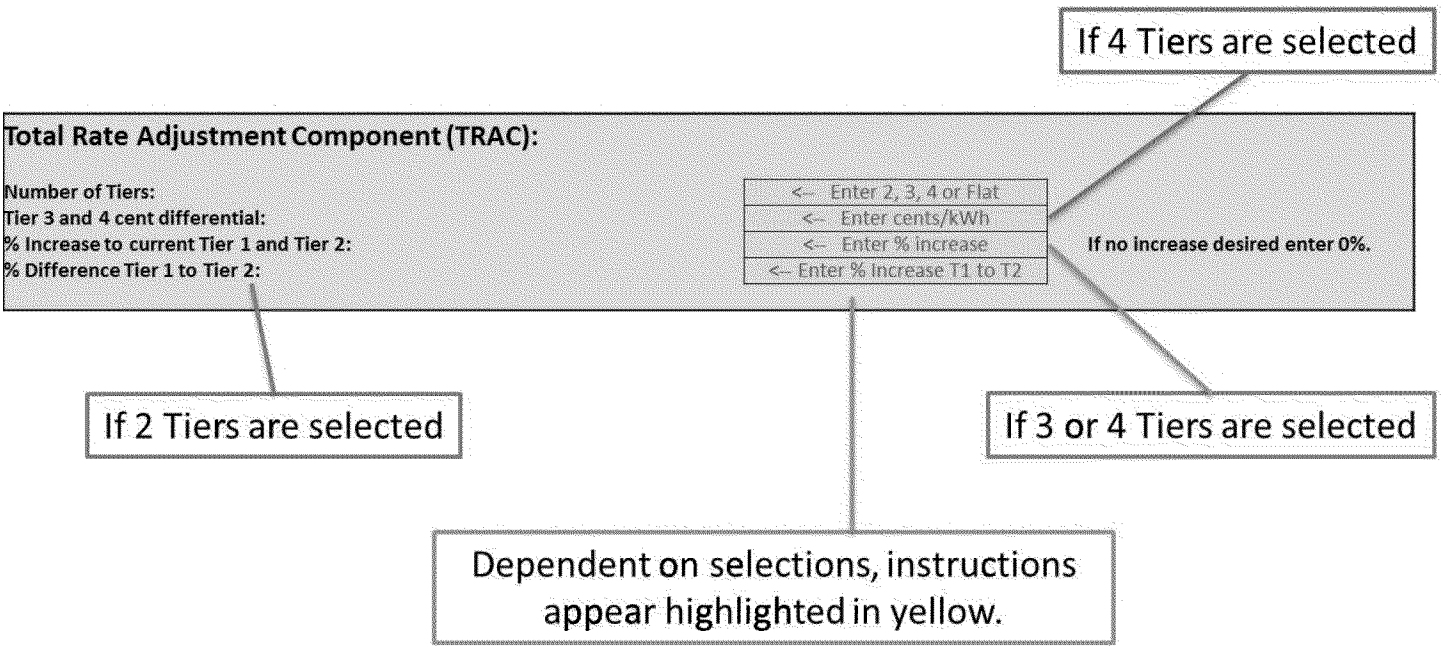
C. Percent increase to current Tier 1 and Tier 2 rates – Option if 3 or 4 Tiers are selected

Instructions will appear to enter a percent increase to Tiers 1 and 2. For example if 3% is selected, the current Tier 1 and Tier 2 rates will be increased by 3%. This option is only available if 3 or 4 Tiers are selected.

D. Percent difference between Tier 1 and Tier 2 rates – Option if 2 Tiers are selected

Instructions will appear to enter a percent differential between Tiers 1 and 2. For example if 20% is selected, Tier 2 rates will be 20% greater than Tier 1 rates. This option is only available if 2 Tiers are selected.

The below image is a screenshot from the model of the TRAC portion of the inputs described above.



E. TRAC Rate Design Scenario Examples – Instructions for TRAC portion only.

Scenario One: No Tiers (Flat)

1. Enter "Flat" for Number of Tiers

Scenario Two: No Tiers (Flat)

Same as Scenario One Commodity portion above.

Scenario Three: 2-Tiers with 20% differential

1. Enter 2 for Number of Tiers
2. Enter 20% for % Difference Tier 1 to Tier 2

Scenario Four: No Tiers (Flat)

Same as Scenario One Commodity portion above.

IV. California Alternate Rates for Energy (CARE)

The following are alternative options for providing additional assistance for low income customers. Currently, in addition to the benefits of a 20 % line item discount , exemption from the Department of W ater Resources Bond Charge, an exemption from the CARE surcharge , CARE customers also receive rate design benefits which result in a reference rate lower than the non-CARE rate prior to these other benefits.

A. CARE Discount (% off total bill) – Select percent line-item discount for CARE customers.

CARE customers receive a percent off their total electric bill. Currently, the discount is 20%. The user can enter any percentage.

B. CARE Tier 1 and Tier 2 Rates equal to non-CARE rates – Available for any number of Tiers selected.

CARE customers currently receive lower rates than non-CARE customers. Enter Yes to set CARE and non-CARE Tier 1 and Tier 2 rates equal or No to maintain the current relationship.

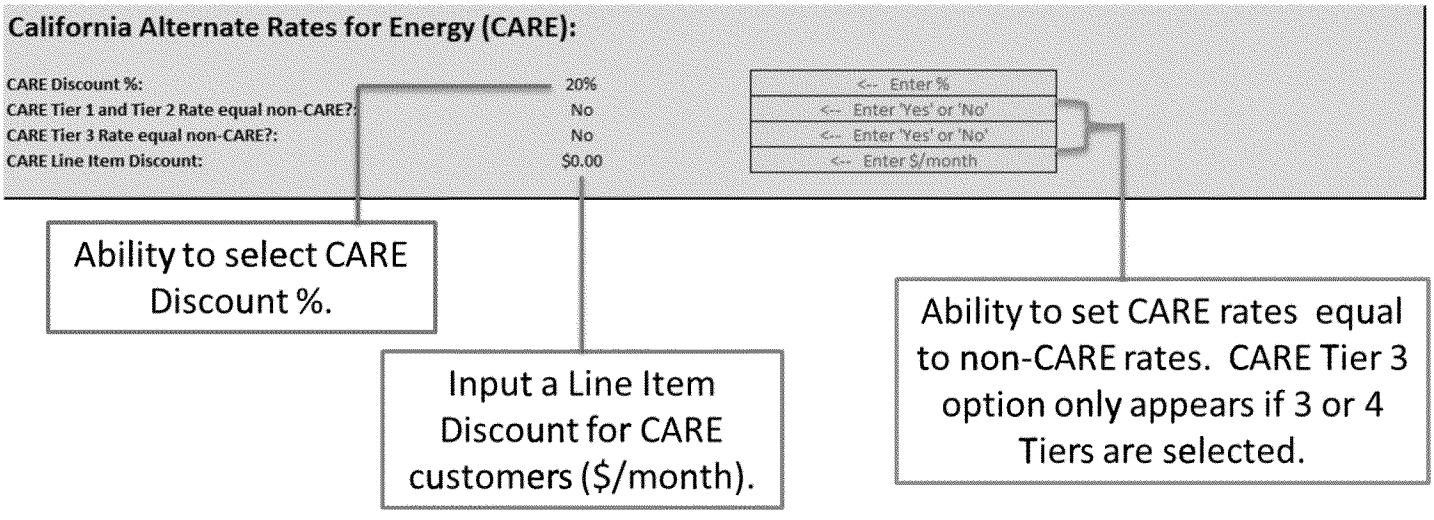
C. CARE Tier 3 Rate equal to non-CARE rate – Available only if 3 or 4 Tiers are selected.

CARE customers currently receive lower rates than non-CARE customers. Enter Yes to set CARE and non-CARE Tier 3 rates equal or No to maintain the current relationship.

D. CARE Discount ($/month) – Select dollar discount per month for CARE customers.

Enter a dollar amount to be taken off of a CARE customer's monthly bill. This can be in place of a percent total bill discount or added to a percent total bill discount.

The below image is a screenshot from the model of the CARE portion of the inputs described above.



E. CARE Rate Design Scenario Examples – Instructions for CARE portion only.

Scenario One: 20% Discount

1. Enter 20% for "CARE Discount %"
2. Enter "No" for CARE Tier 1 and Tier 2 Rates equal non-CARE?
3. Enter $0 for CARE Line Item Discount

Scenario Two: No Tiers (Flat)

Same as Scenario One Commodity portion above.

Scenario Three: 2-Tiers with 20% differential

Same as Scenario One Commodity portion above.

Scenario Four: No Tiers (Flat)

Same as Scenario One Commodity portion above.

V. Appendix: Scenario Instructions and Output

1. Scenario One: Basic Service Fee (Dist.)

Distribution

Step 1: Distribution Customer Costs: $20 per month Basic Service Fee

Customer Cost dropdown menu – select "Basic Service Fee". Instructions appear to enter a $/month next to Basic Service Fee Amount; enter $20.

Step 2: Distribution Demand Costs: Recovered through energy rates

Distribution Demand dropdown menu – select "Recover through energy rates"

Commodity

Step 3: Commodity Demand Costs: Recovered through energy rates

Capacity dropdown menu – select "Recover through energy rates"

Step 4: Commodity Energy Costs: Flat rates by season

Energy dropdown menu – select "Flat Rate by Season"

TRAC

Step 5: TRAC: Flat (no tiers)

Next to Number of Tiers type "Flat"

CARE

Step 6: CARE: 20% Discount; Not set equal to non-CARE rates, and $0 line item discount

Next to CARE Discount %: enter 20%, next to CARE Tier 1 and Tier 2 Rate equal non-CARE?: Enter No, and next to CARE Line Item Discount: enter $0.

Execute

Step 7: Click "Calculate Selected Rate Structure" – The box below should be highlighted in green and read "Revenue Neutrality Confirmed".

Total Rate Comparison – Scenario One

Total Rate comparison of non-CARE and CARE rates with Current Structured Rates (9/1/2012 rates), Cost-Based Rates (per SDG&E GRC Phase II 2012 Costs), and the Resulting Rates from the inputs selected shown side-by-side. The cost-based rates and current rates do not change with any selections to the inputs.

Resulting Rates (non-CARE)	
	Total Rate
SCHEDULE DR	
Basic Service Fee	20.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
Baseline Energy	0.16896
101% to 130% of Baseline	0.16896
131% to 200% of Baseline	0.16896
Above 200% of Baseline	0.16896
Winter Energy	
Baseline Energy	0.13254
101% to 130% of Baseline	0.13254
131% to 200% of Baseline	0.13254
Above 200% of Baseline	0.13254
Minimum Bill	0.00

Cost-Based Rates (non-CARE)	
	Total Rate
SCHEDULE DR	
Basic Service Fee	10.64
Non-Coincident Demand	5.85
On Peak Demand	
Summer	6.61
Winter	0.00
Summer Energy	
On Peak	0.11831
Semi Peak	0.10127
Off Peak	0.08318
Winter Energy	
On Peak	0.11336
Semi Peak	0.10279
Off Peak	0.08813

Current Structued Rates (non-CARE)	
	Total Rate
SCHEDULE DR	
Basic Service Fee	0.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
Baseline Energy	0.14334
101% to 130% of Baseline	0.16580
131% to 200% of Baseline	0.27982
Above 200% of Baseline	0.29982
Winter Energy	
Baseline Energy	0.14334
101% to 130% of Baseline	0.16580
131% to 200% of Baseline	0.26239
Above 200% of Baseline	0.28239
Minimum Bill	0.17

Resulting Rates (CARE)	
	Total Rate
SCHEDULE DR-LI	
Basic Service Fee	20.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
Baseline Energy	0.15015
101% to 130% of Baseline	0.15015
131% to 200% of Baseline	0.15015
Above 200% of Baseline	0.15015
Winter Energy	
Baseline Energy	0.11778
101% to 130% of Baseline	0.11778
131% to 200% of Baseline	0.11778
Above 200% of Baseline	0.11778
Minimum Bill	0.00

Cost-Based Rates (CARE)	
	Total Rate
SCHEDULE DR-LI	
Basic Service Fee	10.64
Non-Coincident Demand	5.85
On Peak Demand	
Summer	6.61
Winter	0.00
Summer Energy	
On Peak	0.11318
Semi Peak	0.09614
Off Peak	0.07805
Winter Energy	
On Peak	0.10823
Semi Peak	0.09766
Off Peak	0.08300

Current Structued Rates (CARE)	
	Total Rate
SCHEDULE DR-LI	
Basic Service Fee	0.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
Baseline Energy	0.12738
101% to 130% of Baseline	0.14815
131% to 200% of Baseline	0.22236
Above 200% of Baseline	0.22236
Winter Energy	
Baseline Energy	0.12738
101% to 130% of Baseline	0.14815
131% to 200% of Baseline	0.20811
Above 200% of Baseline	0.20811
Minimum Bill	0.17

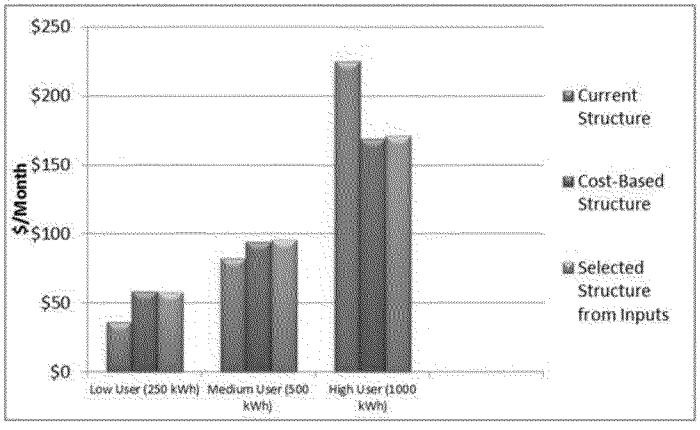
Illustrative Monthly Bill Comparison – Scenario One

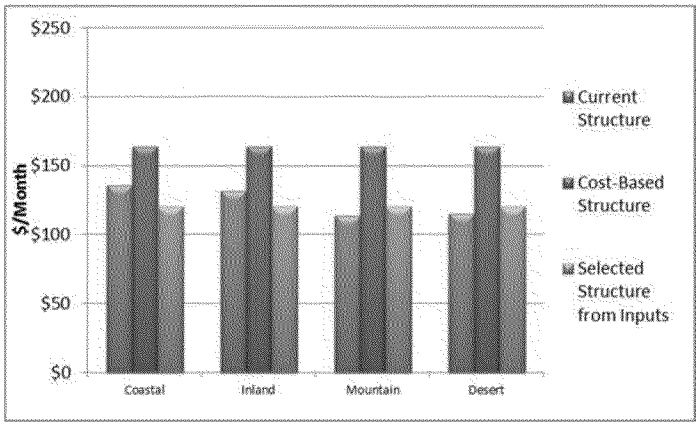
The use can design two side-by-side graphs to compare example monthly bill impacts, choosing from the following options:

- CARE or non-CARE
- Type of Service: Basic or All-Electric Service
- Usage Level : Low (250 kWh), Medium (500 kWh) or High (1,000 kWh)
- Climate Zone: Coastal, Inland, Mountain or Desert

Graph One is looking at a Basic service, Inland non-CARE customer, between differing usage levels. Graph Two is looking at an All-Electric service, High level (1,000 kWh) CARE customer, between differing climate zones.

GRAPH ONE *Create your own graph*		GRAPH TWO *Create your own graph*	
Choose to view graph by Usage Level or by Climate Zone (x-axis):	Usage Level	Choose to view graph by Usage Level or by Climate Zone (x-axis):	Climate Zone
Choose non-CARE or CARE:	Non-CARE	Choose non-CARE or CARE:	CARE
Choose Basic or All-Electric Service:	Basic	Choose Basic or All-Electric Service:	All-Electric
Choose Usage Level:	Select One <-- Not Applicable	Choose Usage Level:	High
Choose Climate Zone:	Inland	Choose Climate Zone:	Select One <-- Not Applicable





2. Scenario Two: Time-of-Use Energy (Comm.) + BSF (Dist.)

Distribution

Step 1: Distribution Customer Costs: $10 per month Basic Service Fee

Customer Cost dropdown menu – select "Basic Service Fee". Instructions appear to enter a $/month next to Basic Service Fee Amount; enter $10.

Step 2: Distribution Demand Costs: Recovered through energy rates

Distribution Demand dropdown menu – select "Recover through energy rates"

Commodity

Step 3: Commodity Demand Costs: Recovered through energy rates

Capacity dropdown menu – select "Recover through energy rates"

Step 4: Commodity Energy Costs: Time-of-Use with 150% On-Peak/Off-Peak ratio

Energy dropdown menu – select "Time-of-Use". Instructions appear to enter On-Peak /Off-Peak ratio; enter 1.5 for both summer and winter

TRAC

Step 5: TRAC: Flat (no tiers)

Next to Number of Tiers type "Flat"

CARE

Step 6: CARE: 20% Discount; Not set equal to non-CARE rates, and $0 line item discount

Next to CARE Discount %: enter 20%, next to CARE Tier 1 and Tier 2 Rate equal non-CARE?: Enter No, and next to CARE Line Item Discount: enter $0.

Execute

Step 7: Click "Calculate Selected Rate Structure" – The box below should be highlighted in green and read "Revenue Neutrality Confirmed".

Total Rate Comparison -Two:

Resulting Rates (non-CARE)	Total Rate
SCHEDULE DR	
Basic Service Fee	10.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
On Peak	0.20957
Semi Peak	0.18919
Off Peak	0.16976
Winter Energy	
On Peak	0.17265
Semi Peak	0.16323
Off Peak	0.14919
Minimum Bill	0.00
Tier 1 Discount $/kWh	0 Summer 0 Winter
Tier 2 Discount $/kWh	0 Summer 0 Winter

Cost-Based Rates (non-CARE)	Total Rate
SCHEDULE DR	
Basic Service Fee	10.64
Non-Coincident Demand	5.85
On Peak Demand	
Summer	6.61
Winter	0.00
Summer Energy	
On Peak	0.11831
Semi Peak	0.10127
Off Peak	0.08318
Winter Energy	
On Peak	0.11336
Semi Peak	0.10279
Off Peak	0.08813

Current Structued Rates (non-CARE)	Total Rate
SCHEDULE DR	
Basic Service Fee	0.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
Baseline Energy	0.14334
101% to 130% of Baseline	0.16580
131% to 200% of Baseline	0.27982
Above 200% of Baseline	0.29982
Winter Energy	
Baseline Energy	0.14334
101% to 130% of Baseline	0.16580
131% to 200% of Baseline	0.26239
Above 200% of Baseline	0.28239
Minimum Bill	0.17

Resulting Rates (CARE)	Total Rate
SCHEDULE DR-LI	
Basic Service Fee	10.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
On Peak	0.18851
Semi Peak	0.16813
Off Peak	0.14869
Winter Energy	
On Peak	0.15563
Semi Peak	0.14621
Off Peak	0.13217
Minimum Bill	0.00
Tier 1 Discount $/kWh	0 Summer 0 Winter
Tier 2 Discount $/kWh	0 Summer 0 Winter

Cost-Based Rates (CARE)	Total Rate
SCHEDULE DR-LI	
Basic Service Fee	10.64
Non-Coincident Demand	5.85
On Peak Demand	
Summer	6.61
Winter	0.00
Summer Energy	
On Peak	0.11318
Semi Peak	0.09614
Off Peak	0.07805
Winter Energy	
On Peak	0.10823
Semi Peak	0.09766
Off Peak	0.08300

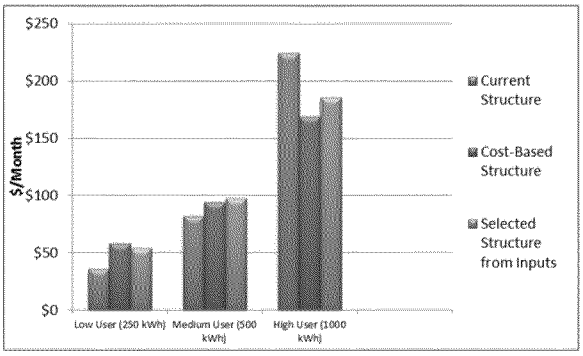
Current Structued Rates (CARE)	Total Rate
SCHEDULE DR-LI	
Basic Service Fee	0.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
Baseline Energy	0.12738
101% to 130% of Baseline	0.14815
131% to 200% of Baseline	0.22236
Above 200% of Baseline	0.22236
Winter Energy	
Baseline Energy	0.12738
101% to 130% of Baseline	0.14815
131% to 200% of Baseline	0.20811
Above 200% of Baseline	0.20811
Minimum Bill	0.17

Illustrative Monthly Bill Comparison -Two:

GRAPH ONE

Create your own graph

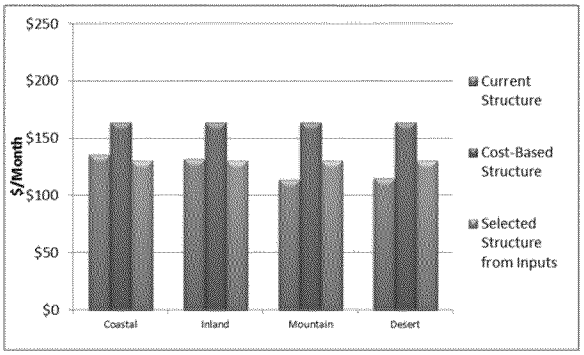
Choose to view graph by Usage Level or by Climate Zone (x-axis):	Usage Level
Choose non-CARE or CARE:	Non-CARE
Choose Basic or All-Electric Service:	Basic
Choose Usage Level:	Select One <-- Not Applicable
Choose Climate Zone:	Inland



GRAPH TWO

Create your own graph

Choose to view graph by Usage Level or by Climate Zone (x-axis):	Climate Zone
Choose non-CARE or CARE:	CARE
Choose Basic or All-Electric Service:	All-Electric
Choose Usage Level:	High
Choose Climate Zone:	Select One <-- Not Applicable



3. Scenario Three: BSF w/ Fixed Charge Demand Adder (Dist.) + Tiers (TRAC)

Distribution

Step 1: Distribution Customer Costs: $5 per month Basic Service Fee

Customer Cost dropdown menu – select "Basic Service Fee". Instructions appear to enter a $/month next to Basic Service Fee Amount; enter $5.

Step 2: Distribution Demand Costs: Fixed Charge Demand Adder

Distribution Demand dropdown menu – select "Fixed Charge Demand Adder". Instructions appear to enter a $/month next to demand (kW) levels. Enter $5 for 0-3 kW and enter $10 for 3-7 kW, 7-13 kW and >13 kW.

Commodity

Step 3: Commodity Demand Costs: Recovered through energy rates

Capacity dropdown menu – select "Recover through energy rates"

Step 4: Commodity Energy Costs: Flat rates by season

Energy dropdown menu – select "Flat Rate by Season"

TRAC

Step 5: TRAC: Flat (no tiers)

Next to Number of Tiers enter 2. Instructions appear to enter % Difference between Tier 1 and Tier 2; enter 20%

CARE

Step 6: CARE: 20% Discount; Not set equal to non-CARE rates, and $0 line item discount

Next to CARE Discount %: enter 20%, next to CARE Tier 1 and Tier 2 Rate equal non-CARE?: Enter No, and next to CARE Line Item Discount: enter $0.

Execute

Step 7: Click "Calculate Selected Rate Structure" – The box below should be highlighted in green and read "Revenue Neutrality Confirmed".

Total Rate Comparison - Three:

Resulting Rates (non-CARE)	Total Rate
SCHEDULE DR	
Basic Service Fee	
0-3 kW	10.00
3-7 kW	15.00
7-13 kW	15.00
>13 kW	15.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
Baseline Energy	0.16875
101% to 130% of Baseline	0.20251
131% to 200% of Baseline	0.20251
Above 200% of Baseline	0.20251
Winter Energy	
Baseline Energy	0.13233
101% to 130% of Baseline	0.15880
131% to 200% of Baseline	0.15880
Above 200% of Baseline	0.15880
Minimum Bill	0.00

Cost-Based Rates (non-CARE)	Total Rate
SCHEDULE DR	
Basic Service Fee	10.64
Non-Coincident Demand	5.85
On Peak Demand	
Summer	6.61
Winter	0.00
Summer Energy	
On Peak	0.11831
Semi Peak	0.10127
Off Peak	0.08318
Winter Energy	
On Peak	0.11336
Semi Peak	0.10279
Off Peak	0.08813

Current Structued Rates (non-CARE)	Total Rate
SCHEDULE DR	
Basic Service Fee	0.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
Baseline Energy	0.14334
101% to 130% of Baseline	0.16580
131% to 200% of Baseline	0.27982
Above 200% of Baseline	0.29982
Winter Energy	
Baseline Energy	0.14334
101% to 130% of Baseline	0.16580
131% to 200% of Baseline	0.26239
Above 200% of Baseline	0.28239
Minimum Bill	0.17

Resulting Rates (CARE)	Total Rate
SCHEDULE DR-LI	
Basic Service Fee	
0-3 kW	10.00
3-7 kW	15.00
7-13 kW	15.00
>13 kW	15.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
Baseline Energy	0.14997
101% to 130% of Baseline	0.17996
131% to 200% of Baseline	0.17996
Above 200% of Baseline	0.17996
Winter Energy	
Baseline Energy	0.11760
101% to 130% of Baseline	0.14112
131% to 200% of Baseline	0.14112
Above 200% of Baseline	0.14112
Minimum Bill	0.00

Cost-Based Rates (CARE)	Total Rate
SCHEDULE DR-LI	
Basic Service Fee	10.64
Non-Coincident Demand	5.85
On Peak Demand	
Summer	6.61
Winter	0.00
Summer Energy	
On Peak	0.11318
Semi Peak	0.09614
Off Peak	0.07805
Winter Energy	
On Peak	0.10823
Semi Peak	0.09766
Off Peak	0.08300

Current Structued Rates (CARE)	Total Rate
SCHEDULE DR-LI	
Basic Service Fee	0.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
Baseline Energy	0.12738
101% to 130% of Baseline	0.14815
131% to 200% of Baseline	0.22236
Above 200% of Baseline	0.22236
Winter Energy	
Baseline Energy	0.12738
101% to 130% of Baseline	0.14815
131% to 200% of Baseline	0.20811
Above 200% of Baseline	0.20811
Minimum Bill	0.17

Illustrative Monthly Bill Comparison -Three:

GRAPH ONE

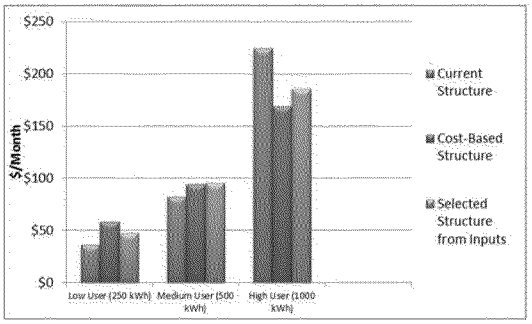
Create your own graph

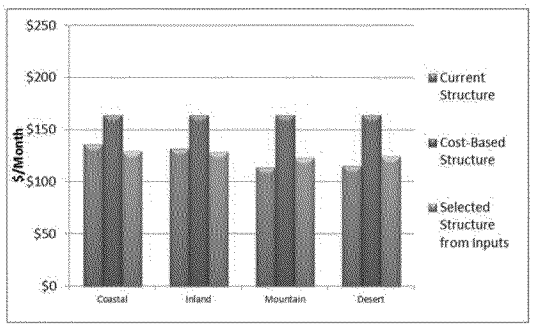
Choose to view graph by Usage Level or by Climate Zone (x-axis):	Usage Level
Choose non-CARE or CARE:	Non-CARE
Choose Basic or All-Electric Service:	Basic
Choose Usage Level:	Select One <-- Not Applicable
Choose Climate Zone:	Inland

GRAPH TWO

Create your own graph

Choose to view graph by Usage Level or by Climate Zone (x-axis):	Climate Zone
Choose non-CARE or CARE:	CARE
Choose Basic or All-Electric Service:	All-Electric
Choose Usage Level:	High
Choose Climate Zone:	Select One <-- Not Applicable





4. Scenario Four: BSF w/ Fixed Charge Demand Adder (Dist.) + TOU Energy (Comm.)

Distribution

Step 1: Distribution Customer Costs: $5 per month Basic Service Fee

Customer Cost dropdown menu – select "Basic Service Fee". Instructions appear to enter a $/month next to Basic Service Fee Amount; enter $5.

Step 2: Distribution Demand Costs: Fixed Charge Demand Adder

Distribution Demand dropdown menu – select "Fixed Charge Demand Adder". Instructions appear to enter a $/month next to demand (kW) levels. Enter $5 for 0-3 kW and enter $10 for 3-7 kW, 7-13 kW and >13 kW.

Commodity

Step 3: Commodity Demand Costs: Recovered through energy rates

Capacity dropdown menu – select "Recover through energy rates"

Step 4: Commodity Energy Costs: Time-of-Use with 150% On-Peak/Off-Peak ratio

Energy dropdown menu – select "Time-of-Use". Instructions appear to enter On-Peak /Off-Peak ratio; enter 1.5 for both summer and winter

TRAC

Step 5: TRAC: Flat (no tiers)

Next to Number of Tiers type "Flat"

CARE

Step 6: CARE: 20% Discount; Not set equal to non-CARE rates, and $0 line item discount

Next to CARE Discount %: enter 20%, next to CARE Tier 1 and Tier 2 Rate equal non-CARE?: Enter No, and next to CARE Line Item Discount: enter $0.

Execute

Step 7: Click "Calculate Selected Rate Structure" – The box below should be highlighted in green and read "Revenue Neutrality Confirmed".

Total Rate Comparison - Four:

Resulting Rates (non-CARE)	Total Rate
SCHEDULE DR	
Basic Service Fee	
0-3 kW	10.00
3-7 kW	15.00
7-13 kW	15.00
>13 kW	15.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
On Peak	0.20247
Semi Peak	0.18209
Off Peak	0.16265
Winter Energy	
On Peak	0.16554
Semi Peak	0.15612
Off Peak	0.14208
Minimum Bill	0.00
Tier 1 Discount $/kWh	0 Summer 0 Winter
Tier 2 Discount $/kWh	0 Summer 0 Winter

Cost-Based Rates (non-CARE)	Total Rate
SCHEDULE DR	
Basic Service Fee	10.64
Non-Coincident Demand	5.85
On Peak Demand	
Summer	6.61
Winter	0.00
Summer Energy	
On Peak	0.11831
Semi Peak	0.10127
Off Peak	0.08318
Winter Energy	
On Peak	0.11336
Semi Peak	0.10279
Off Peak	0.08813

Current Structued Rates (non-CARE)	Total Rate
SCHEDULE DR	
Basic Service Fee	0.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
Baseline Energy	0.14334
101% to 130% of Baseline	0.16580
131% to 200% of Baseline	0.27982
Above 200% of Baseline	0.29982
Winter Energy	
Baseline Energy	0.14334
101% to 130% of Baseline	0.16580
131% to 200% of Baseline	0.26239
Above 200% of Baseline	0.28239
Minimum Bill	0.17

Resulting Rates (CARE)	Total Rate
SCHEDULE DR-LI	
Basic Service Fee	
0-3 kW	10.00
3-7 kW	15.00
7-13 kW	15.00
>13 kW	15.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
On Peak	0.18219
Semi Peak	0.16181
Off Peak	0.14238
Winter Energy	
On Peak	0.14932
Semi Peak	0.13990
Off Peak	0.12585
Minimum Bill	0.00
Tier 1 Discount $/kWh	0 Summer 0 Winter
Tier 2 Discount $/kWh	0 Summer 0 Winter

Cost-Based Rates (CARE)	Total Rate
SCHEDULE DR-LI	
Basic Service Fee	10.64
Non-Coincident Demand	5.85
On Peak Demand	
Summer	6.61
Winter	0.00
Summer Energy	
On Peak	0.11318
Semi Peak	0.09614
Off Peak	0.07805
Winter Energy	
On Peak	0.10823
Semi Peak	0.09766
Off Peak	0.08300

Current Structued Rates (CARE)	Total Rate
SCHEDULE DR-LI	
Basic Service Fee	0.00
Non-Coincident Demand	0.00
On Peak Demand	
Summer	0.00
Winter	0.00
Summer Energy	
Baseline Energy	0.12738
101% to 130% of Baseline	0.14815
131% to 200% of Baseline	0.22236
Above 200% of Baseline	0.22236
Winter Energy	
Baseline Energy	0.12738
101% to 130% of Baseline	0.14815
131% to 200% of Baseline	0.20811
Above 200% of Baseline	0.20811
Minimum Bill	0.17

Illustrative Monthly Bill Comparison - Four:

GRAPH ONE

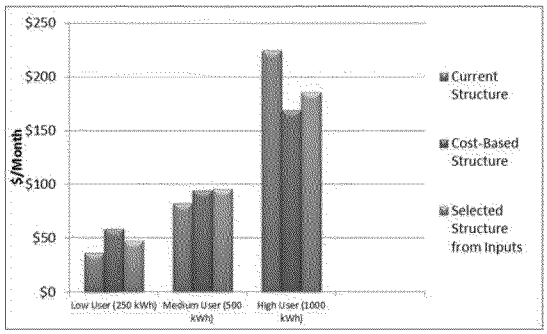
Create your own graph

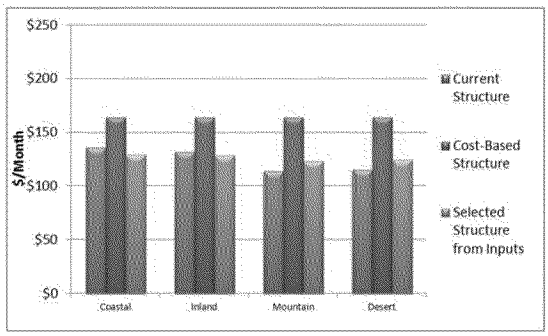
Choose to view graph by Usage Level or by Climate Zone (x-axis):	Usage Level
Choose non-CARE or CARE:	Non-CARE
Choose Basic or All-Electric Service:	Basic
Choose Usage Level:	Select One <-- Not Applicable
Choose Climate Zone:	Inland

GRAPH TWO

Create your own graph

Choose to view graph by Usage Level or by Climate Zone (x-axis):	Climate Zone
Choose non-CARE or CARE:	CARE
Choose Basic or All-Electric Service:	All-Electric
Choose Usage Level:	High
Choose Climate Zone:	Select One <-- Not Applicable





NOTES