

Residential Rate OIR

SCE Rate Design Scenario Results

Using the Bill Calculator Model

December 5 & 6, 2012

DRAFT

This package contains sample output from SCE's Residential Rate OIR Rate Design and Bill Impact Analysis Model. The input assumptions used in the model runs are based on the four scenarios provided in the table below.

	Summary Scenario I	y of Rate Design Scenario II	Scenarios Scenario III	Scenario IV
Customer Charge	\$20/month	\$10/month	\$5/month	\$5/month
ΤΟυ	None	On-peak/Part- peak price = Part- peak/Off-peak price = 1.50	None	On-peak/Part- peak price = Part- peak/Off-peak price = 1.50
Tiers	Flat, Volumetric	None	Two Tiers with 20% differential	None
Demand Differentiated Fixed Charge			Fixed charge with \$10/month for 3kW or above annual peak demand, \$5/month otherwise	Fixed charge with \$10/month for 3kW or above annual peak demand, \$5/month otherwise
CARE Discount	20%	20%	20%	20%
Revenue Requirement	Approxii	mately same as June 2	2012 residential rate r	evenues.

Scenario - I Customer Charge: \$20/month Flat Volumetric Rate

Result-1: Summary of Rates

		Forecast	% of	June 2012	Flat
Non-CARE	Tier	Sales (GWh)	Sales	Rate	Rate
	1	10,212	53%	12.6	14.1
	2	2,101	11%	15.5	14.1
	3	3,284	17%	24.2	14.1
	4	2,143	11%	27.7	14.1
	5	1,541	8%	31.2	14.1
Flat custom	er Charg	e \$ / Month		0.88	20.00
					0.00
Min Charge \$/Mo.				-	0.00
			% of		
CARE_	Tier	Sales (GWh)	Sales	Rate	
CARE_	1	4,890	Sales 62%	8.5	10.2
CARE_	1 2	4,890 876	Sales 62% 11%	8.5 10.7	10.2 10.2
CARE_	1 2 3	4,890 876 1,188	Sales 62% 11% 15%	8.5 10.7 18.5	10.2 10.2 10.2
CARE_	1 2 3 4	4,890 876 1,188 638	Sales 62% 11% 15% 8%	8.5 10.7 18.5 18.5	10.2 10.2 10.2 10.2
CARE_	1 2 3	4,890 876 1,188	Sales 62% 11% 15%	8.5 10.7 18.5	Rate 10.2 10.2 10.2 10.2 10.2 10.2
	1 2 3 4 5	4,890 876 1,188 638	Sales 62% 11% 15% 8%	8.5 10.7 18.5 18.5	10.2 10.2 10.2 10.2 10.2 10.2
	1 2 3 4 5	4,890 876 1,188 638 319	Sales 62% 11% 15% 8%	8.5 10.7 18.5 18.5 18.5	10.2 10.2 10.2 10.2

Scenario - I Customer Charge: \$20/month Flat Volumetric Rate

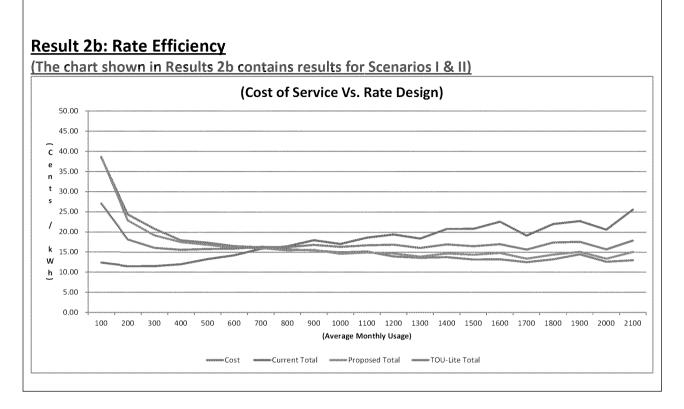
Result-2a: Average Rate Impact Summary

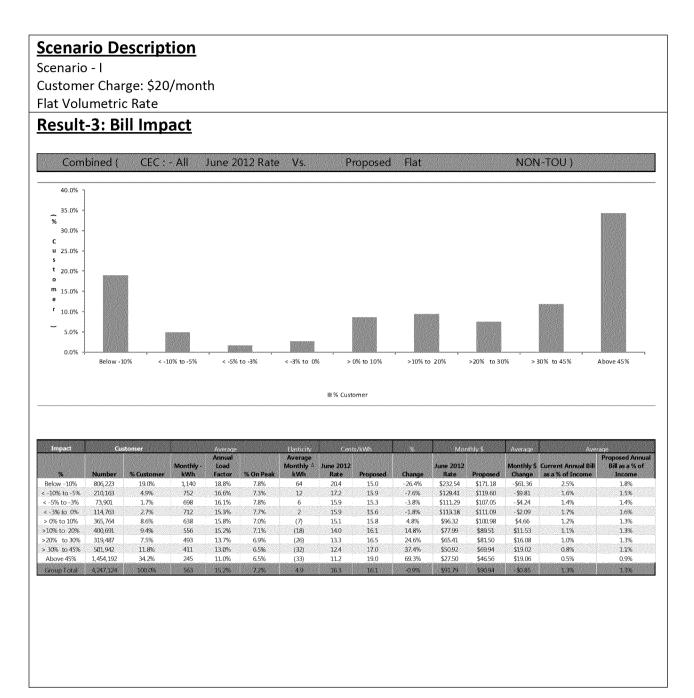
(Summary results Table 2a contains results for Scenarios I & II where customer charges reflects values of \$20/mo and \$10/mo for Scenarios I & II respectively)

	Bill impact Summary (Cents / kWh) by Zone								
NON-CARE									
Baseline	Cost Base	June 2012	Proposed Non-TOU	Proposed TOU					
Region	Rate	Rate	Flat Rate	Rate					
6	17.4	17.6	18.0	17.2					
8	17.6	18.1	17.7	17.5					
9	17.2	18.6	17.2	17.6					
10	16.8	18.7	16.8	17.8					
13	16.9	18.8	16.4	18.0					
14	17.4	17.7	17.4	17.8					
15	17.4	17.6	16.8	18.0					
16	19.3	15.9	18.3	16.4					
Non-CARE System	17.3	18.2	17.4	17.6					

	CARE							
Baseline	Cost Base	June 2012	Proposed Non-TOU	Proposed TOU				
Region	Rate	Rate	Flat Rate	Rate				
6	14.9	10.9	14.0	13.2				
8	13.7	11.4	13.9	13.4				
9	13.8	11.5	13.2	13.5				
10	13.9	11.9	12.7	13.8				
13	12.9	12.5	12.2	13.7				
14	13.8	11.4	13.0	13.4				
15	13.2	10.8	12.2	13.8				
16	12.7	12.3	13.2	12.8				
CARE System	13.8	11.6	13.1	13.5				

Rate Design Measures	Current R	ate Levels	Pro	posed Rate Levels Non-TOU	Propo	osed Rate Levels TOU
Total Estimated CARE Def. Rev. (\$M) =>	\$	301	\$	267	\$	294
Residential CARE Subsidy (\$M) =>	\$	76	\$	68	\$	75
Non Res. Estimated CARE Subsidy (\$M) =>	\$	224	\$	199	\$	219
Effective CARE Discount % =>		25%		20%		20%
% of Fixed Costs=>		1%		20%		9%
Sum of Absolute Value Deviations from Cost		31.6%		11.1%		17.1%
Change in kWh Usage Due to Elasticity				-373.1 MWh		-352.0 MWh
Ratio of ∆ in kWh to Total kWh				-1.372E-05		-1.294E-05





Scenario - II Customer Charge: \$10/month Flat TOU with on-peak/part-peak price = part-peak/off-peak price = 1.5

Result-1: Summary of Rates

	тс)U-Lite		Enter Commodit
Period	cen	its/kWh		Ratio
Sum On-Peak		30.7	Summer On/Off	2.25
Sum Mid-Peak		23.9	Summer Mid/Off	1.50
Sum Off-Peak		19.4		
Win Mid-Peak		15.8	Winter Mid/Off	1.50
Win Off-Peak		14.0		
Flat customer Charge \$ / Month		10.00		
	\$			
Baseline Credit (\$/kWh)	\$	(0.03567)		

Scenario - II

Customer Charge: \$10/month

Flat TOU with on-peak/part-peak price = part-peak/off-peak price = 1.5

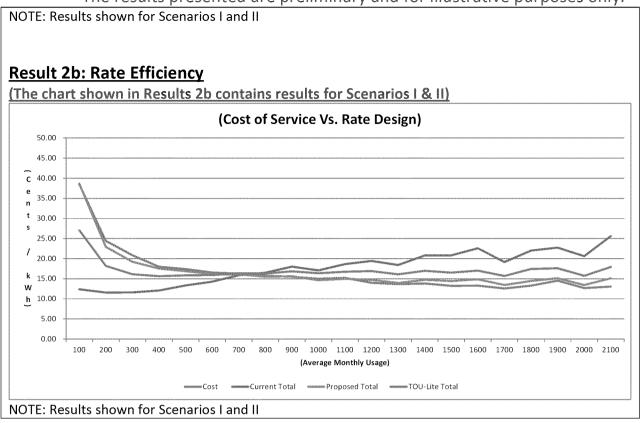
Result-2a: Average Rate Impact Summary

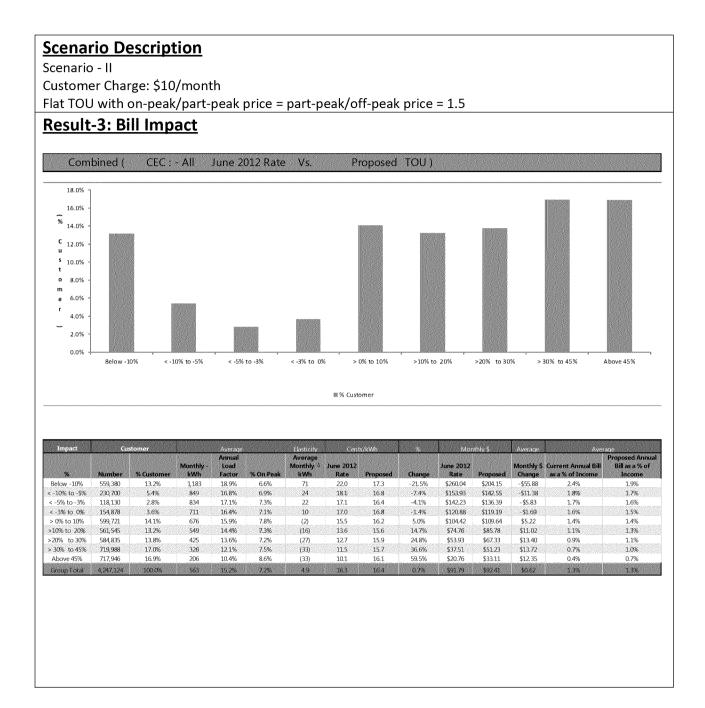
(Summary results Table 2a contains results for Scenarios I & II where customer charges reflects values of \$20/mo and \$10/mo for Scenarios I & II respectively)

Bill impact Summary (Cents / kWh) by Zone NON-CARE								
Region	Rate	Rate	Flat Rate	Rate				
6	17.4	17.6	18.0	17.2				
8	17.6	18.1	17.7	17.5				
9	17.2	18.6	17.2	17.6				
10	16.8	18.7	16.8	17.8				
13	16.9	18.8	16.4	18.0				
14	17.4	17.7	17.4	17.8				
15	17.4	17.6	16.8	18.0				
16	19.3	15.9	18.3	16.4				
Non-CARE System	17.3	18.2	17.4	17.6				

	CARE							
Baseline	Cost Base	June 2012	Proposed Non-TOU	Proposed TOU				
Region	Rate	Rate	Flat Rate	Rate				
6	14.9	10.9	14.0	13.2				
8	13.7	11.4	13.9	13.4				
9	13.8	11.5	13.2	13.5				
10	13.9	11.9	12.7	13.8				
13	12.9	12.5	12.2	13.7				
14	13.8	11.4	13.0	13.4				
15	13.2	10.8	12.2	13.8				
16	12.7	12.3	13.2	12.8				
CARE System	13.8	11.6	13.1	13.5				

Rate Design Measures	Current	Rate Levels	Pro	posed Rate Levels Non-TOU	Propo	osed Rate Levels TOU
Total Estimated CARE Def. Rev. (\$M) =>	\$	301	\$	267	\$	294
Residential CARE Subsidy (\$M) =>	\$	76	\$	68	\$	75
Non Res. Estimated CARE Subsidy (\$M) =>	\$	224	\$	199	\$	219
Effective CARE Discount % =>		25%		20%		20%
% of Fixed Costs=>		1%		20%		9%
Sum of Absolute Value Deviations from Cost		31.6%		11.1%		17.1%
Change in kWh Usage Due to Elasticity				-373.1 MWh		-352.0 MWh
Ratio of Δ in kWh to Total kWh				-1.372E-05		-1.294E-05





rio - III					
mer Charge: \$5/ı					
ers with 20% dif					
			nnual peak den	hand, \$5/month other	wise
It-1: Summa	ry of R	<u>ates</u>			
	Estima	ted Residential Ra	ite Calculated b	based on Inputs	
		Forecast	% of	June 2012	2-Tier
Non-CARE	Tier	Sales (GWh)	Sales	Rate	Rate
non eine_	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
	-1 A			0.00	10.00
		/ Month <3		0.88	10.00
		/Month >=3			15.00 0.00
IVIII I	Charge \$	y WIO.		-	0.00
			% of		
CARE	Tier	Sales (GWh)	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 C	Charge \$	/ Month <3		0.70	8.00
Customer Cl	harge \$ /	/Month >=3		-	12.00
	Charge §				0.00
	9				AND STREET STREET STREET STREET

Scenario - III

Customer Charge: \$5/month

Two Tiers with 20% differential

Fixed charge with \$10/month for 3kW or above annual peak demand, \$5/month otherwise

Result-2a: Average Rate Impact Summary

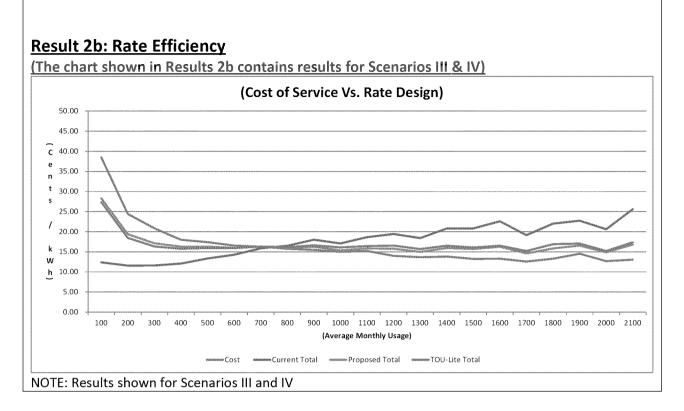
(Summary results Table 2a contains results for Scenarios III & IV)

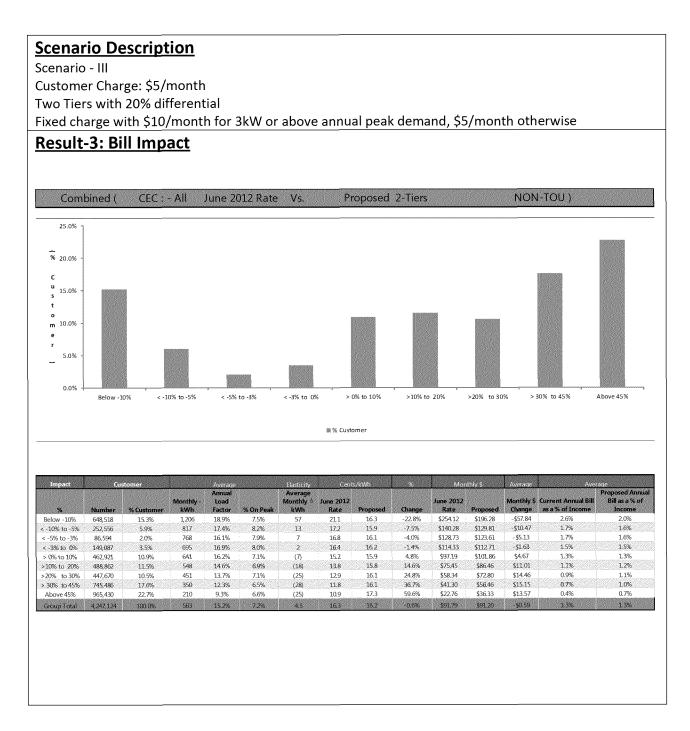
Bill impact Summary (Cents / kWh) by Zone

	NON-CARE							
Baseline	Cost Base	June 2012	Proposed Non-TOU	Proposed TOU				
Region	Rate	Rate	2-Tiers Rate	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	Cost Base	June 2012	Proposed Non-TOU	Proposed TOU			
Region	Rate	Rate	2-Tiers Rate	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	Curror	nt Rate Levels	Pr	oposed Rate Levels Non-TOU	Prop	oosed 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%
Elasticity of Demand Change in kWh Usage				-302.1 MWh		-318.5 MWh
Ratio of Elasticity Δ in kWh Over Total kWh				-1.111E-05		-1.171E-05





<u>cenario Description</u>				
cenario - IV				
ustomer Charge: \$5/mon	th			
OU				
ixed charge with \$10/mor	th for 3kW or above	annual peak dei	mand, \$5/month other	wise
Result-1: Summary o	f Rates			
Estimated TOU Option				
		TOU-Lite		Enter Commodity
	Period	cents/kWh		Ratio
	Sum On-Peak	29.9	Summer On/Off	2.25
	Sum Mid-Peak	23.1	Summer Mid/Off	1.50
	Sum Off-Peak	18.5		
	Win Mid-Peak	15.0	Winter Mid/Off	1.50
	Win Off-Peak	13.1		
Customer	Charge \$ / Mont h <3	\$ 10.00		
Customer Cl	harge \$ /Month >=3	\$ 15.00		
Baseli	ne Credit (\$/kWh)	\$ (0.03567)		

Scenario - IV

Customer Charge: \$5/month

TOU

Fixed charge with \$10/month for 3kW or above annual peak demand, \$5/month otherwise

Result-2a: Average Rate Impact Summary

(Summary results Table 2a contains results for Scenarios III & IV)

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Ratio of Elasticity Δ in kWh Over Total kWh				-1.111E-05		-1.171E-05

