Residential Rate Reform

Sempra Energy utility®

Q4 2016 Progress Report Presentation CPUC – San Francisco



Rate Reform Customer Journey





Consolidation of Tiers



Electric rates will be consolidated from four tiers to two tiers, and the differences between the tiers will be reduced -ultimately with a 25 percent differential between the two tiers.



CARE Adjustments

The effective CARE discount will transition from today's 41 percent to 35 percent by 2020.



Minimum Bill

Customers will have a minimum monthly bill of \$10, and \$5 for customers enrolled in the CARE program.



High Usage Charge

The High Usage Charge (HUC) is intended to encourage energy conservation for customers whose usage is above 400 percent of baseline - meaning double the average customer's usage in their climate zone.



Time-of-use Rates

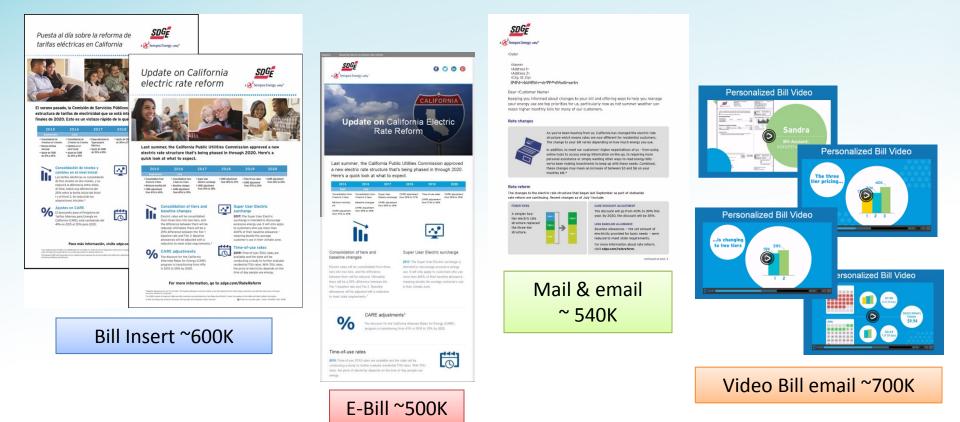
Residential customers will be automatically enrolled into "time-of-use" (TOU) rates. This means the price of electricity will depend on the time of day people use energy. TOU pilots will be conducted with customers in 2017-2018.

Marketing, Education & Outreach Tier Collapse



SDG&E was approved to collapse from three tiers to two tiers on July 1, 2016

Customers received information in July/Aug 2016 through bill inserts, radio traffic IDs, social media, video bill emails, letters, website and more



Marketing, Education & Outreach Community Engagement



Energy Solutions Partner (ESP) Network activities totaled 177

ESP Partner Results At-A-Glance – Q4 2016

- 118 events reaching 100,000+ people
- 18 presentations reaching 450+ people
- 33 social media postings with nearly 37,000 impressions
- 8 web-based activities reaching 12,500 people
- Engaging customers in My Account and tools to use for energy usage, goals and alerts, and mobile applications. Theme is "what uses energy does matter"
- Focused on low-income, families and seniors through Safety Partner initiative
 - Fire Department Safety & Emergency Prep events
 - Food Bank food distribution events
 - Health Clinic Immunization events



Marketing, Education & Outreach CBO Partner Activities



Energy Solutions Partner Network Highlights



I Like Page

Count your blessings this holiday season! California's energy rates are changing! How? Find out how you could potentially save on a Whenergy plan today. http://www.sdge.com/whenergy #espsdge



Whenergy

California utilities are switching to new energy pricing based on when you use energy. Use less electricity during peak hours and you can save.

SDGE.COM



🖕 Like Page

As the season change, so does your energy consumption. Make a plan to reduce your footprint with our partner, San Diego Gas & Electric. Schedule your free in-home gas safety check before the cold weather arrives. http://bit.ly/2cWRFvA #espsdge

Gas Appliance Check | San Diego Gas & Electric

Keep your natural gas appliances in safe working condition. Sign up for an appliance check-up online. It's a convenient way to schedule and manage your request. This service is free of charge.

SDGE.COM



Kalusugan + Kalakasan Center for Health &

October 17 at 2:51pm · 🚱

Trick out your smart phone with SDG&E's free mobile app! It gives you 24/7 access to bill payment, payment locations, outage maps and even a calculator for what appliances cost to use. http://bit.ly/2ciuY0D

#espsdge

SDG&E Mobile Applications | San Diego Gas & Electric

Our free app gives you more ways to connect with us. You'll get anytime, anywhere access to bill payment, payment locations, outage maps and even a calculator for what appliances cost to use. Download the app for your iOS or Android device.

SDGE.COM





43

Ramona Senior Center @RamonaSeniors · Nov 16 California's energy rates are changing! Find out how you could potentially save on a Whenergy plan today. sdge.com/whenergy #espsdge

...

5

High Usage Charge (HUC) MEO Overview



- HUC rate pending Glidepath PFM/Tier 3 AL
- Planning pre-HUC communications to launch April 2017
- Possible HUC implementation June 1, 2017
- Customer outreach to include:
 - General awareness: bill insert, bill onsert, website and social media
 - Targeted communications: direct mail & email, notation on Weekly Alert Email (WAE) & Bill Ready Notification Email (BRNE), bill presentment
 - Alerts: customer will be able to sign up for HUC alerts
 - Specialized, targeted campaigns: My Account for paper customers, Energy Savings Assistance (ESA) offer for CARE customers
 - Employee engagement: training to customer-facing teams, employee ambassadors

High Usage Charge (HUC) Potential Customer Impacts



HUC Overview

- At-risk customers = ~134,000 (350% to 399% of baseline - 2016)
- High-risk customers = ~91,000 (400% of baseline potential reachers - 2016)
- Top three months for highest opportunity of customer reach to HUC

Month	350% of Baseline	400% of Baseline
July 2016	58,430	38,447
August 2016	104,944	71,797
September 2016	65,312	43,757

 Roughly 50% of High-risk customers could be 2 month reachers

CARE Customers

9,107 customers in the 350% HUC population

3,468 customers in the 400% HUC population

About 50% are 1 month reachers (1,651)

Medical Baseline Customers

2,264 customers in the 350% HUC Population

1,512 customers in the 400% HUC Population

Roughly 65% are 1 month reachers (973)

Bill Presentment

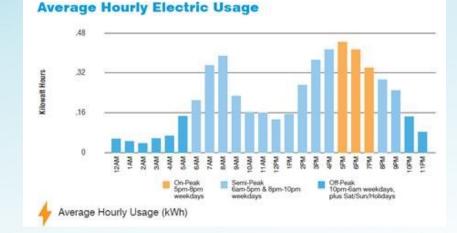


- Updated bill presentment requested as part of the **Residential Rate Reform** proceeding
- SDG&E proposed a "Refresh" of the bill specifically focused on creating better graphs, charts & tools for TOU customers
- Approval to move forward was received from the Commission in mid-February

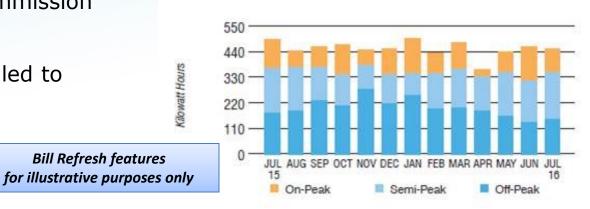
Bill Refresh features

 The new bill is scheduled to launch in Q1 of 2018

Your Electricity Dashboard



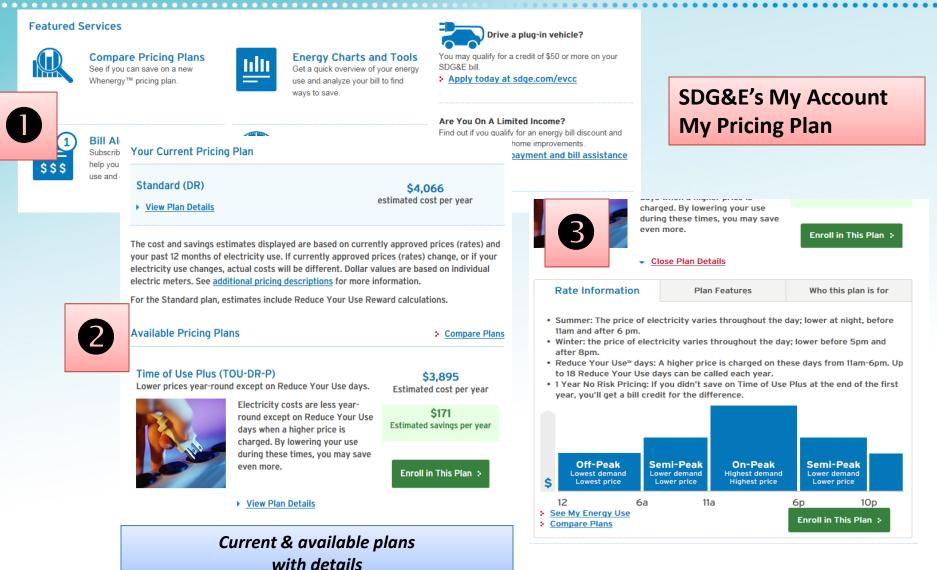
Electric Usage History (Total kWh used)



8

Bill Comparison My Pricing Plan – Compare Plans





Bill Comparison My Pricing Plan – Plan Features



		••••••		••••••	••••••	•••••	
Compare Plans		> <u>c</u>	ownload Pricing Pl	an Report (PDF)			
Choose Plans							
Standard (DR) (Current Plan)		Time of Use Plus (TOU-DR-P)		Standard (DR)	Time of Use Plus (TOU-DR-P)	Time of Use (TOU-DR)	
Time of Use (TOU-DR)		_		Your Current Plan	Enroll in This Plan ÷	Enroll in This Plan 🔅	
				\$4,066 Estimated cost per year	\$3,895 Estimated cost per year	\$4,129 Estimated cost per year	
Compare Plan Features		Compare Cost Es	timates by Month	N/A Estimated savings per year	\$171 Estimated savings per year	No Savings	
Standard (DR)	Time of Use Plus (TOU-DR-P)	Time of Use (TOU-DR)		1 Year Commitment ?	1 Year Commitment ?	1 Year Commitment ³	
Your Current Plan	Enroll in This Plan 🗧	Enroll in This Plan 🕃		1 Year No Risk Pricing N/A	1 Year No Risk Pricing ?	1 Year No Risk Pricing N/A	
\$4.0CC	\$3.895	64120		Reduce Your Use Rewards Days	Reduce Your Use Days	Reduce Your Use Rewards Days	
\$4,066 Estimated cost per year	\$3,895 Estimated cost per year	\$4,129 Estimated cost per year		Details	Details Electricity prices change	Details Electricity prices change	
N/A Estimated savings per year	\$171 Estimated savings per year	No Savings		The cost per kWh is based on electricity use levels or tiers. As you use more electricity, you will cross into the higher cost tiers.	based on the time of day. If you can lower your use during Reduce Your Use days, you could save even more.	based on the time of day. Summer: Electricity costs less before 11am and after 6pm. Winter: Electricity costs less	
1 Year Commitment 😮	1 Year Commitment ?	1 Year Commitment		Who This Plan Is For You use electricity throughout the day.	With 1 Year No Risk Pricing, if you didn't save on Time of Use Plus at the end of the first year, you'll get a bill credit for	before 5pm and after 8pm. Eligible for Reduce Your Use Rewards.	
1 Year No Risk Pricing N/A	r No Risk Pricing N/A 1 Year No Risk Pricing ? 1 Year No			Your electricity use changes from day to day.	the difference.	Who This Plan Is For	
Reduce Your Use Rewards Days	Reduce Your Use Days	Reduce Your Use Rewards Days		Save enough energy on a Reduce Your Use Rewards day and earn a credit on your bill.	Who This Plan Is For You use the most electricity before 11am and after 6pm during the summer. You use the most electricity	You use the most electricity before 11am and after 6pm during the summer. You use the most electricity before 5pm and after 8pm	
С	ompare Pricin	g Plans			before 5pm and after 8pm during the winter.	during the winter. Save enough energy on a Reduce Your Use Rewards	

Side-by-side comparison with option to enroll

day and earn a credit on your

bill.

You can take big electricity-

saving actions on Reduce

Your Use days.

Rate Design Qualitative Research



Research Objective

 To better understand the customer experience around energy rate plans and bring out the customer's voice in the rate plan design process

Background & Methodology

- Partnered with Daylight Design
- Research conducted December 2016 February 2017
 - Representation from across SDG&E service area
 - 15 in-home customer interviews, 90-minutes in length
 - Four focus groups

Segments of interest (but not limited to)

- Solar
- Environmentally-minded
- Low-income
- Home owners & renters
- Warmer climate zones

Results webinar with IOU's

To be scheduled

[TOU] would give me more control. I know that if I waited until after 5pm to do a certain thing the consequence would be good. On the other hand, the tier is this invisible barrier that I never know if I've even crossed.



Opt-In Time of Use Pilot Participants (Q4 2016)



Pilot	Dilot Group Nama	# of Customers	Drop (# of Active		
Group #	Pilot Group Name	Enrolled	Rate 1	Rate 2	Control	Participants
1	Hot	432		25 / 14		393
2	Cool, Non CARE	4,008	105 / 19	190 / 30	112 / 0	3,552
3	Cool, CARE	3,808	76 / 13	125 / 19	137 / 2	3,436
4	Moderate, Non CARE	3,946	87 / 37	192 / 52	111/1	3,466
5	Moderate, CARE	3,610	84 / 30	150 / 30	111/3	3,202
	Totals	15,804	352 / 99	682 / 145	471 / 6	14,049

1,755 drop-offs: 1,321 final, 184 ineligible, 250 opt-out

Opt-out reasons: concern of high-bill (48%), other (38%), can't shift (6%), confusing (4%), going ineligible (2%), not interested (2%)

Experimental Rate E1

- 3,703 customers assigned
- Jun 2016 Dec 2017
- 3 TOU Periods
 - [–] On Peak (4pm-9pm)
 - Off Peak
 - ⁻ Super Off Peak

Experimental Rate E2

............................

- 6,674 customers assigned
- Jun 2016 Dec 2017
- 2 TOU Periods
 - [–] On Peak (4pm-9pm)
 - Off Peak

Control Group

- 3,672 customers assigned
- Jun 2016 Dec 2017
- Remain on DR or DR-LI

Experimental Rate E3

- 66 customers assigned
- Hourly dynamic rate
 - [–] Prices can vary hourly
 - [–] Dynamic rate components
 - Net surplus energy credits
 - ⁻ Monthly service fee (\$10)

Opt-In Time of Use Pilot Customer Engagement

Wed Thu Fri Sat Sun Mon Tue 10/12 10/13 10/14 10/15 10/16 10/17 10/18

🗖 Off Peak 🔳 On Peak



Oct 4: TOU Peak Message (Rates 1 & 2)	Oct 4-6: Welcome Emails (Hour X -Rate 3)
Shifting to off-peak times can save you the most. When the temperature changes, so do energy costs—dramatically. Keeping your home confortable is a high expense and managing your Allo use can help. Sign up for free	Welcome Fmail - Centomer app allows you to enter in your personal code the first time and remembers if for you. Sett: Tursting: September 05, 2016 600 PM Tursting: September 05, 2016 600 PM Sett: Tour personal code the first time and remembers if for you. Your personal code the first time and remembers if for you. Your personal code 11111111 SEE: You R VisionWith Code
Whenergy Alerts to see where your energy use stands. And to know if you've exceeded your usage and cost goals.	Your Whenergy Hourt's details - <u>Out your's before forewant</u> Your Whenergy Hourt's pricing begins on MMDDPYYYY. SDGE
AVOID THE DEAK	Thank you for October 2017
4 pm. and 9 pm. 4 pm 9 pm • Set thermostat to 78* • Use fans instead of A/C • Replace A/C filters • Pre-cool before 11 am.	being a part of Whenergy HourX • You'll complete two surveys (Spring 2017 and end of 2017).
	Your 320 bit credit will be divided into three psymetre - late 712016, Symp 2017 and end 672017 and end 672017 mis based ony currentelisticate Fal 2016. Symp 2017 and end 672017 mis based ony complete data will be accurate on the study. After you complete data survey, a credit will be accurate on the study. After you complete data survey, a credit will be accurate on the study. After you complete data survey, a credit will be accurate on the study. After you complete data survey, a credit will be accurate on the study. After you complete data survey, a credit will be accurate on the study early, or do not complete the survey, you won't receive any further compensational credits.
More Whenergy saving ideas. • Block direct sunlight by closing window coverings and using solar shades • Pre-cool your home by running A/C before a distring on peak period	you'll help us improve Whenergy* HourX for everyone. Getting Your Daily Forecasted Pricing The hourly pricing on Whenergy HourX varies based on the forecasted energy Regardless of any fluctuation on your bill, you'll be covered by Pilet Bill Protection
Unplug appliances and other items not in constant use Save water and energy with our no-cost Water and Energy Savings Kit Use a swimming pool or spa cover and use a variable speed pool pump	You'll also receive an email that will alert you if the next day's demand for energy is
 Get out of the house during peak times. Visit a park, see a movie Grill dinner outside to avoid heating up your home and using more A/C Use the online energy management tools you'll find at sdge.com/MyEnergyTool 	forecasted to be high. During those high-demand hours, the price per kWh may increase sprificanty. The surcharge will be highlighted in the day-shead forecasted pricing chart. The surcharge will be highlighted in the day-shead forecasted price spring chart. The surcharge will be highlighted in the day-shead forecasted price spring chart. The surcharge will be highlighted in the day-shead forecasted price spring chart. The surcharge will be highlighted in the day-shead forecasted price spring chart. The surcharge will be highlighted in the day-shead forecasted price spring chart. The surcharge will be highlighted in the day-shead forecasted price spring chart. The surcharge will be highlighted in the day-shead forecasted price spring chart. The surcharge will be highlighted in the day-shead forecasted price spring chart. The surcharge will be highlighted in the day-shead forecasted price spring chart. The surcharge will be highlighted in the day-shead forecasted price spring chart. The surcharge will be highlighted in the day-shead forecasted price spring chart. The surcharge will be highlighted in the day-shead forecasted price spring chart. The surcharge will be highlighted in the day-shead forecasted price spring chart. The surcharge will be highlighted price spring chart. The surcharge willi
Questions? sdge.com/MyWhenergy1 or (800) 411-7343	to see the prices on the Whenergy HourX page. For your convenience, the SDG8E
Oct 17-20: Welcome to Weekly Alert Emails	Oct 28-Nov 1: Winter Rates Message Dec 1: Rebates Message
WAX 3.0 Free: SDotAf Isergh Hotfunden Free: Drundin, Donard 20, 2014 466 PM Fre: Drundin, D	Your winter Whenergy rates: Control Your Use E1 Save \$200 with a smart thermostal rebate - Learn more Sa winter seprects, your Whenergy rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate will charge to meet be energy demands of a different second. Your rate willow to meet be energy demands of a different second
Select: [XTERNAL] Energy Use At Home For West of 10/22/016 Public hearing to date wearing the ranges in this word, please log res bit / Account for your wearing can allotte.	Season. Your rate still has the same three time periods: On-Peak, Off-Peak, Use Be social - Join the con Whenerry tools like alrests and the SDG5E [®] app to help you avoid the peak. Use Winerry tools like alrests and the SDG5E [®] app to help you avoid the peak. Use Winerry tools like alrests and the SDG5E [®] app to help you avoid the peak. Use Winerry tools like alrests and the SDG5E [®] app to help you avoid the peak. Use Winerry tools like alrests and the SDG5E [®] app to help you avoid the peak. Use Winerry tools like alrests and the SDG5E [®] app to help you avoid the peak. Use Winerry tools like alrests and the SDG5E [®] app to help you avoid the peak. Use Winerry tools like alrests and the SDG5E [®] app to help you avoid the peak. Use Winerry tools like alrests and the SDG5E [®] app to help you avoid the peak. Use Winerry tools like alrests and the SDG5E [®] app to help you avoid the peak. Use Winerry tools like alrests and the SDG5E [®] app to help you avoid the peak. Use Winerry tools like alrests and the SDG5E [®] app to help you avoid the peak. Use Winerry tools like alrests and the SDG5E [®] app to help you avoid the peak. Use Winerry tools like alrests and the SDG5E [®] app to help you avoid the peak. Use Winerry tools like alrests and the SDG5E [®] app to help you avoid the peak. Use Winerry tools like alrests and the SDG5E [®] app tools app to
* & Sempra Longr on y	Monday browned grant
Your Home's Weekly Energy Use Summary Week of 10/12/2016	OUR \$200 THERMOSTAT
Bill to Date: 252.65 Projected Bill: 252.51 Access Humber XXXXX006 Card at Billing Protod: 27	Weekends and Holidays Data 2N eth 9N Cas
	Ways to Reduce Your Use Your Price Per Kilowatt Hour

Wash full loads in the dishwasher - this

actually uses less water and energy than washing dishes in the sink, especially if you let the dishes air dry.

Reduce pool filtering and automatic pool sweep time to a minimum, and schedule them for Off-Peak hours (before 4 p.m. and after 9 p.m.).

Thermostat

Baseline +30%

/MyWhenergy/ ber 1, 2016.*

To calculate your baseline, go to sdge.c Winter rates are effective as of Nov

For tips and tools to reduce your use and save on Whenergy, visit sdge.com/MyWhenergy1 or call (800) 411-7343

Buying a new thermostat right now could be a smart move. Not only will it automatically make your house comfortable, it can save you energy and money by helping you avoid the peak hours of 4 p.m. - 9 p.m.

Check out the smart thermostats and rebates today, just in time for winter. This rebate is available from Nov. 1 - Dec. 31, 2016 to Whenergy study participants.

Opt-In Time of Use Pilot Participant Survey



Survey Objective

- Measure degree of economic hardship cased by TOU rates relative to tiered rates
- Gauge level of customer understanding of and satisfaction with TOU rates
- Understand effectiveness of messaging & outreach used during the pilot

Survey Background & Methodology

- Conducted by Research Into Action (in partnership with Washington State University)
- Fielded October December 2016
- Participants could take survey online, in written booklet form, or over the phone
- SDG&E response of 85% or **12,484 pilot participants** completing the survey

Preliminary Results (Presented at CPUC workshop on February 22, 2017)

- After calculating an Economic Index Score, designed to measure degree of financial hardship, it was found that neither pilot TOU rate resulted in increased economic index scores for any of the segments
- The hotter the climate, the higher the average economic index score for the segment
- Most reviewed the welcome packet and found the information easy to understand
- Customers said they turned off lights and avoided doing laundry, cooking or running the dishwasher most often

Default TOU Pilot Time of Use Rates

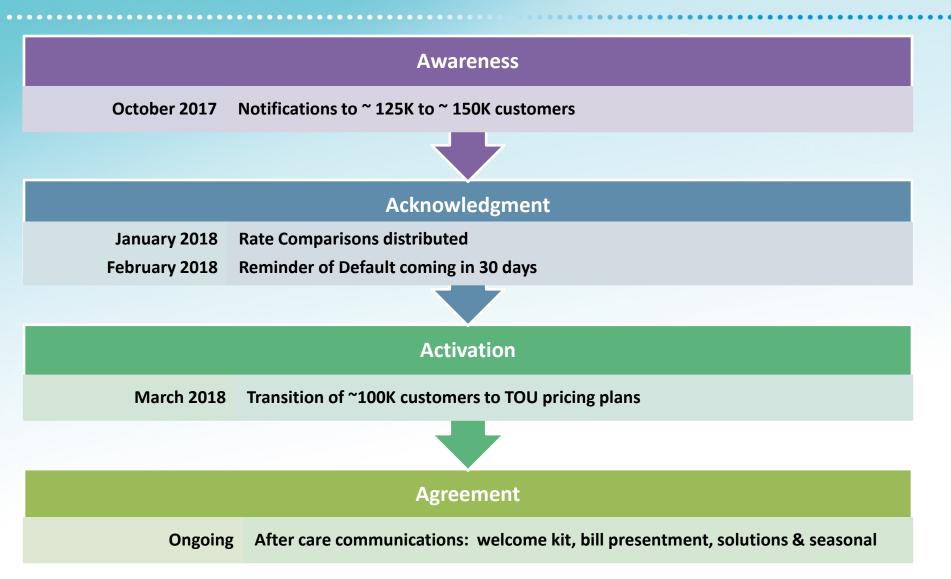


- Filed Default TOU Pilot Plan on December 16, 2016
- SDG&E will test two default tariffs; structurally the same as rates being tested in its TOU opt-in pilot



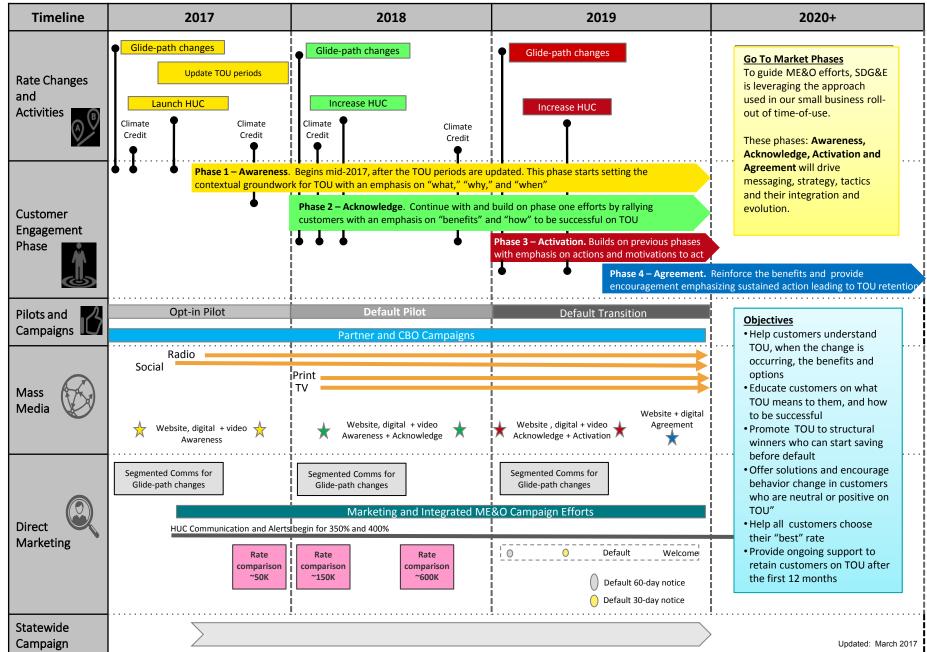
Default TOU Pilot Customer Outreach & Engagement





Residential Rate Reform Preliminary Go-to-Market Tactical Timeline





Next Steps & Other Key Proceedings

.



- Next steps:
 - **Rate Reform Glidepath:** Tier/HUC pricing reform
 - Customer Research on Rate Design Thinking: Results sharing
 - **TOU Default of Residential Customers:** Customer exclusions & MEO plans
- Other proceedings impacting Residential Rate Reform:
 - Time of Use OIR Decision: established guiding principals for designing, implementing and modifying TOU time periods
 - **SDG&E General Rate Case (GRC) Phase 2:** new TOU periods & rates
 - Fixed Cost Methodology/PG&E GRC Phase 2: joint fixed charged methodology
 - Upcoming: 2018 Rate Design Window: Finalize residential TOU default plans

Budget Expenditures



Aug - Dec											
RRMA: General Rate Reform (in 000's)	201	.5	Q1	- 2016	Q	2 - 2016	Q	3 - 2016	Q	4 - 2016	Total
Marketing, Education & Outreach	\$	-	\$	71	\$	417	\$	322	\$	(443)	\$ 367
Information Technology	\$	-	\$	51	\$	130	\$	81	\$	(215)	\$ 47
Other	\$	-	\$	-	\$	5	\$	9	\$	19	\$ 33
General Rate Reform Total	\$	-	\$	122	\$	552	\$	412	\$	(639)	\$ 447
Aug - Dec											
RRMA: Time-Of-Use Pilots (in 000's)	201	.5	Q1	- 2016	Q	2 - 2016	Q	3 - 2016	Q	4 - 2016	Total
Planning & Design	\$	-	\$	-	\$	-	\$	550	\$	(483)	\$ 67
Measurement & Evaluation	\$	-	\$	-	\$	11	\$	-			\$ 11
Customer Insight	\$	-	\$	-	\$	46	\$	-	\$	66	\$ 112
Recruitment	\$	-	\$	-	\$	395	\$	64	\$	4	\$ 463
Customer Support	\$	-	\$	-	\$	-	\$	314	\$	44	\$ 358
Outreach and Education	\$	-	\$	-	\$	-	\$	-	\$	271	\$ 271
Technology	\$	-	\$	-	\$	-	\$	-	\$	78	\$ 78
TOU Pilot Total	\$	-	\$	-	\$	452	\$	928	\$	(20)	\$ 1,360
Total to RRMA	\$	-	\$	122	\$	1,004	\$	1,340	\$	(659)	\$ 1,807
Aug - Dec											
Non-RRMA (in 000's)	201	.5	Q1	- 2016	Q	2 - 2016	Q	3 - 2016	Q	4 - 2016	Total
Marketing, Education & Outreach	\$	251	\$	-	\$		\$	-	\$	148	\$ 399
Information Technology	\$	436	\$	526	\$	731	\$	648	\$	1,105	\$ 3,446
Non-RRMA Total	\$	687	\$	526	\$	731	\$	648	\$	1,253	\$ 3,845
Grand Total (RRMA + Non-RRMA)	\$	687	\$	648	\$	1,735	\$	1,988	\$	594	\$ 5,652

Rate Reform Costs: Aug 2015 – December 2016*

Guidelines and charge numbers have been established to ensure that the costs charged to the RRMA are appropriate and incremental and that they are tracked accordingly. All costs that are charged to the RRMA are reviewed and verified on a quarterly basis, at minimum.

* Any required corrections/adjustments are reported herein and supersede information provided in prior reports and may reflect year-to-date adjustments. 19

Questions?



Kelly Prasser

Customer & Employee Engagement kprasser@semprautilities.com





....................

WHEN you use energy really does matter. Learn more at SDGE.com/Whenergy