

# PG&E/ PCE CCA Residential Time-of-Use Rate Transition

April 2019



Together, Building  
a Better California

## Why TOU Transition?

In an effort to make rates more understandable to residential customers, more cost-based, and to encourage customers to shift usage to times of day that support a cleaner more reliable grid, the CPUC directed Pacific Gas & Electric Company, Southern California Edison & San Diego Gas & Electric to begin Residential Rate Reform.

- **Simplifying the rate structure**
- **Optimization of new energy efficiency technologies**
- **Promotion of energy conservation**
- **More accurate cost allocation**

Source: CPUC RRR TOU Decision 17-12-023:

<http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M201/K231/201231862.PDF> (Pg 10)

# TOU Residential Full Transition – Environmental Benefits

## Greenhouse Gases (GHG):

- Estimated savings of 5,000-10,000 tons of CO<sub>2</sub> per year across PG&E territory due to load shifting resulting from the new TOU rate plan
  - Range dependent on number of CCAs following PG&E 4pm-9pm peak period
  - Equivalent to removing about 1 – 2 thousand gas-powered cars from the road
- Greater benefits expected with peak period conservation (versus load shifting) and/or a higher volume of renewables



GHG estimate based on calculations performed in 2018 according to the methodology agreed upon by the CPUC, PG&E, and the other CA IOUs. GHG equivalency based on <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>.



# Time-of-Use Transition Phase I (Pilot)

## Background:

- In **April 2018**, PG&E transitioned **~114k** customers to the new TOU Rate (Everyday, 4-9pm)
- Customers received a combination of 90, 60 and 30 Day communications
- 3 CCAs participated: MCE, Sonoma Clean Power & Silicon Valley Clean Energy

## Highlights:

- Customer retention has been high through 11 months (over **99,746** customers remain on rate)
- Based on qualitative and quantitative studies, customer awareness has been high (**68%** aware they were part of a transition)
- Self-serve rate change selection was high (**60%** on-line/web)
- Preliminary Load Impacts show an overall reduction of **4.2%** of total peak load per customer per hour

*CCA & bundled customer overall performance was similar*



# Residential TOU Transition Phase 1 (Pilot) Overview

## EVERY DAY

MORNING TO MID-DAY:  
LOWER PRICE (OFF-PEAK)

5 a.m. to 4 p.m. \$

LATE AFTERNOON TO EVENING:  
HIGHER PRICE (PEAK)

4 p.m. to 9 p.m. \$\$

LATE NIGHT:  
LOWER PRICE (OFF-PEAK)

9 p.m. to 5 a.m. \$

| Summer                       | T&D Only  | Generation Only | Total     |
|------------------------------|-----------|-----------------|-----------|
| Peak (4-9pm Every Day)       | \$0.20425 | \$0.17059       | \$0.37484 |
| Off-Peak (9pm-4pm Every Day) | \$0.20425 | \$0.10715       | \$0.31140 |
| Winter                       | T&D Only  | Generation Only | Total     |
| Peak (4-9pm Every Day)       | \$0.17362 | \$0.11413       | \$0.28775 |
| Off-Peak (9pm-4pm Every Day) | \$0.17362 | \$0.09680       | \$0.27042 |

**Baseline Credit: [\$0.08001] Applied to Baseline Usage Only**

**\*PG&E bundled pricing ETOU-C – effective 3/1/19**

# Residential TOU Transition Phase 1 (Pilot) Targets

CCA Transition customers responded well to the transition from start through post-summer months



- Satisfaction with rate plan remains stable at **6.5/10**
- Continued high levels of awareness and understanding
- **53%** of CCA customers say they are taking actions to shift or reduce usage
- Some slight differences in actions taken to shift/reduce – likely due to climate zones

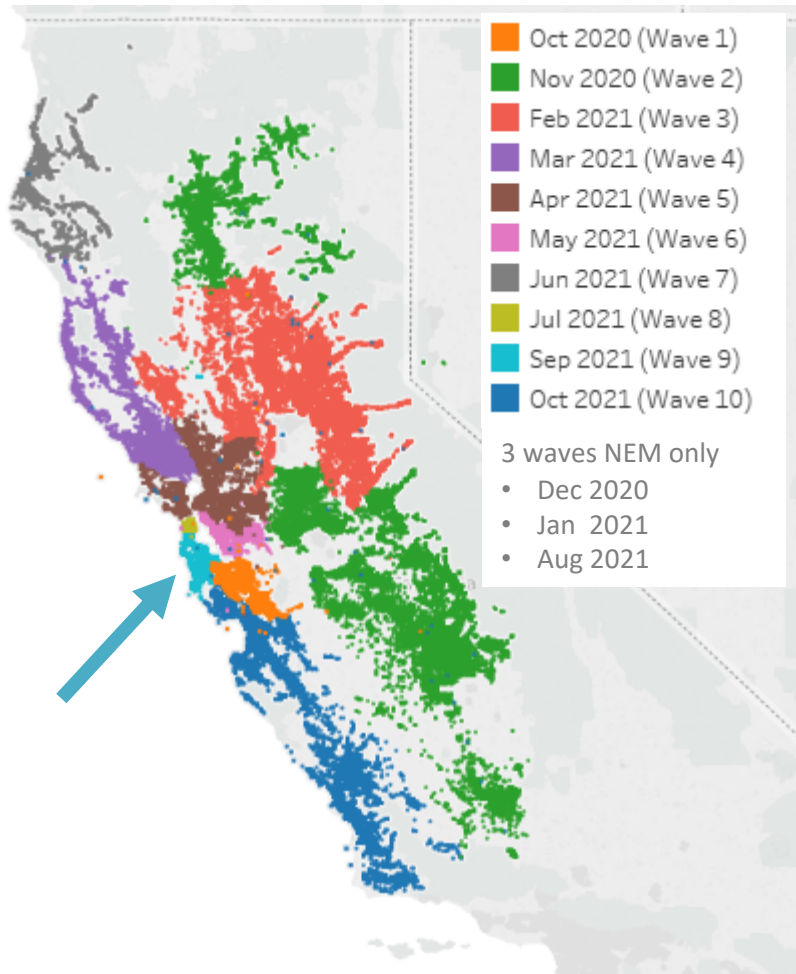


# Residential TOU Full Transition Overview

- Beginning in **October 2020**, PG&E will begin transitioning all **eligible E1 Tiered** rate plan customers to “*Time-of-Use Peak Pricing 4pm-9pm Every Day*” (ETOU-C) rate plan.
- ETOU-C rate plan will become the **default rate plan for new customers** around April 2020.
- Customers will have the **ability to elect** to remain on their current rate plan or choose another rate plan.
- Up to **12 months of bill protection** will be provided to all PG&E charges for transitioned customers.
- Customers will be provided with a **minimum of 2 notifications prior to the transition** including: information on the New Time-of-Use rate plan, how to remain on their current rate and bill protection.



# Residential TOU Full Rollout Plan (13 month rollout)



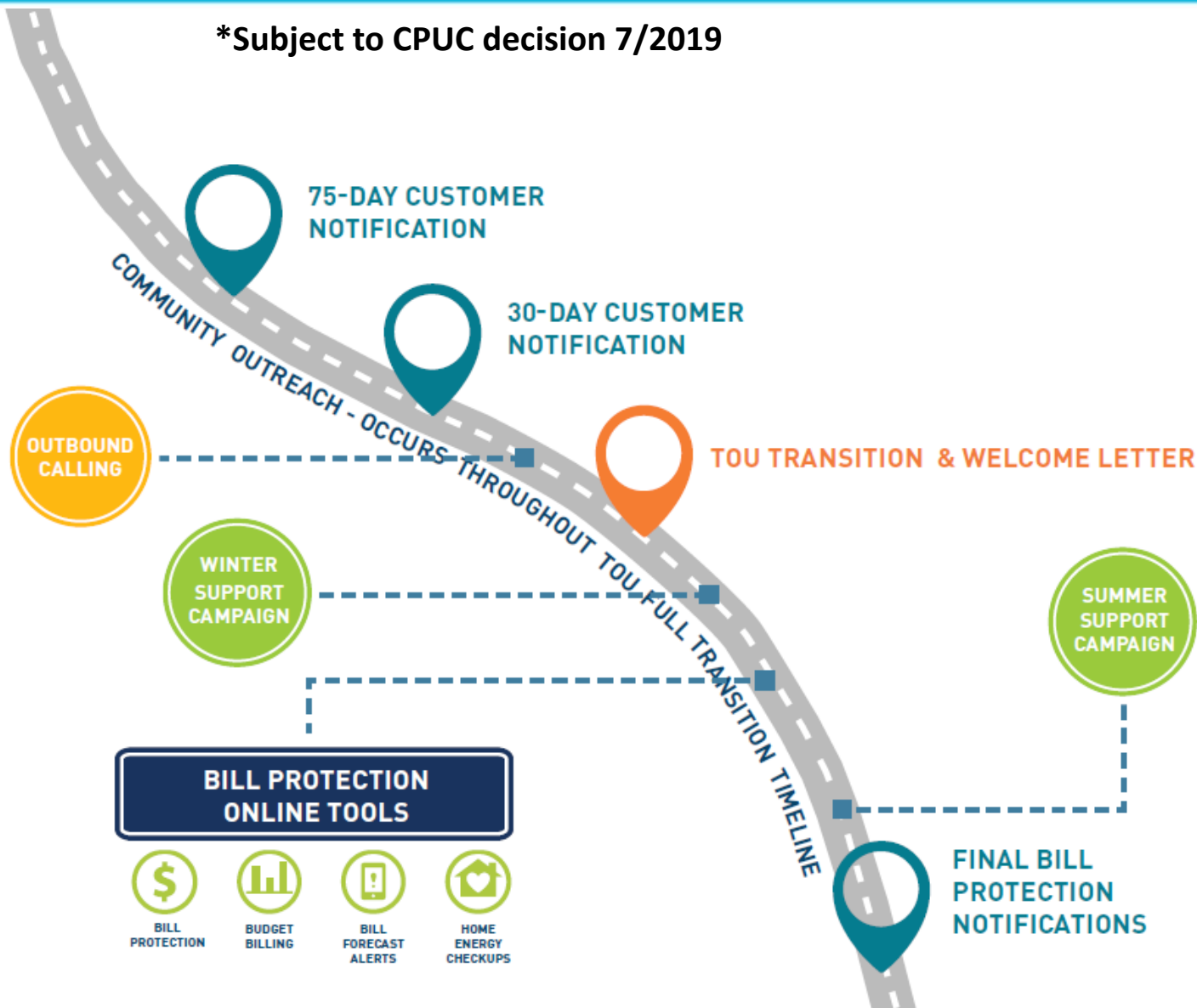
| Service Provider Territory   |                                       | Totals         |
|--|---------------------------------------|----------------|
| Counties   | Included                              |                |
| <b>Oct 2020 (Wave 1)</b>   |                                       | <b>394,836</b> |
| Santa Clara  | San Jose Clean Energy (SJCE)          | 227,998        |
|  | Silicon Valley Clean Energy (SVCE)    | 166,838        |
| <b>Nov 2020 (Wave 2)</b>   |                                       | <b>200,876</b> |
| Fresno, San Joaquin, Kern, Tuolumne, Shasta, Madera, Merced, Tehama, Plumas, Stanislaus, Mariposa, Kings, Tulare, Lassen | PG&E Bundled                          | 200,876        |
| <b>Feb 2021 (Wave 3)</b>   |                                       | <b>181,459</b> |
| Placer, El Dorado, Yolo, Butte, Nevada, Calaveras, Lake, Amador, Sutter, Yuba, Glenn, Colusa, Sacramento, Sierra, Alpine | PG&E Bundled                          | 118,183        |
|  | Pioneer Community Energy (PIO)        | 43,125         |
|  | Valley Clean Energy (VCE)             | 20,151         |
| <b>Mar 2021 (Wave 4)</b>   |                                       | <b>136,031</b> |
| Sonoma, Mendocino  | Sonoma Clean Power                    | 136,031        |
| <b>Apr 2021 (Wave 5)</b>   |                                       | <b>409,382</b> |
| Contra Costa, Solano, Marin, Napa  | MCE                                   | 307,341        |
|  | PG&E Bundled                          | 102,041        |
| <b>May 2021 (Wave 6)</b>   |                                       | <b>398,624</b> |
| Alameda  | East Bay Community Energy (EBCE)      | 369,913        |
|  | PG&E Bundled                          | 28,711         |
| <b>Jun 2021 (Wave 7)</b>   |                                       | <b>38,695</b>  |
| Humboldt, Trinity, Siskiyou  | Redwood Coast Energy Authority (RCEA) | 37,842         |
|  | PG&E Bundled                          | 853            |
| <b>Jul 2021 (Wave 8)</b>   |                                       | <b>261,529</b> |
| San Francisco  | CleanPowerSF (CPSF)                   | 261,529        |
| <b>Sept 2021 (Wave 9)</b>  |                                       | <b>200,182</b> |
| San Mateo  | Peninsula Clean Energy (PCE)          | 200,182        |
| <b>Oct 2021 (Wave 10)</b>  |                                       | <b>262,936</b> |
| Monterey, Santa Cruz, San Luis Obispo, Santa Barbara, San Benito   | Monterey Bay Community Power (MBCP)   | 169,088        |
|  | PG&E Bundled                          | 91,578         |
|  | King City Community Power             | 2,270          |

Note: Customer counts are approximate and reflect PG&E's proposed exclusion criteria. Also, assuming NEM customers transition on their true-up date, each wave would have an additional ~10K NEM customers. This table assumes all customers within each CCA territory are enrolled with the CCA service provider.



# Residential Draft Transition Notifications Roadmap

**\*Subject to CPUC decision 7/2019**





# Residential TOU Full Transition Overview – Generation only Bill Protection Analysis

## Estimated Impact to PCE Customers

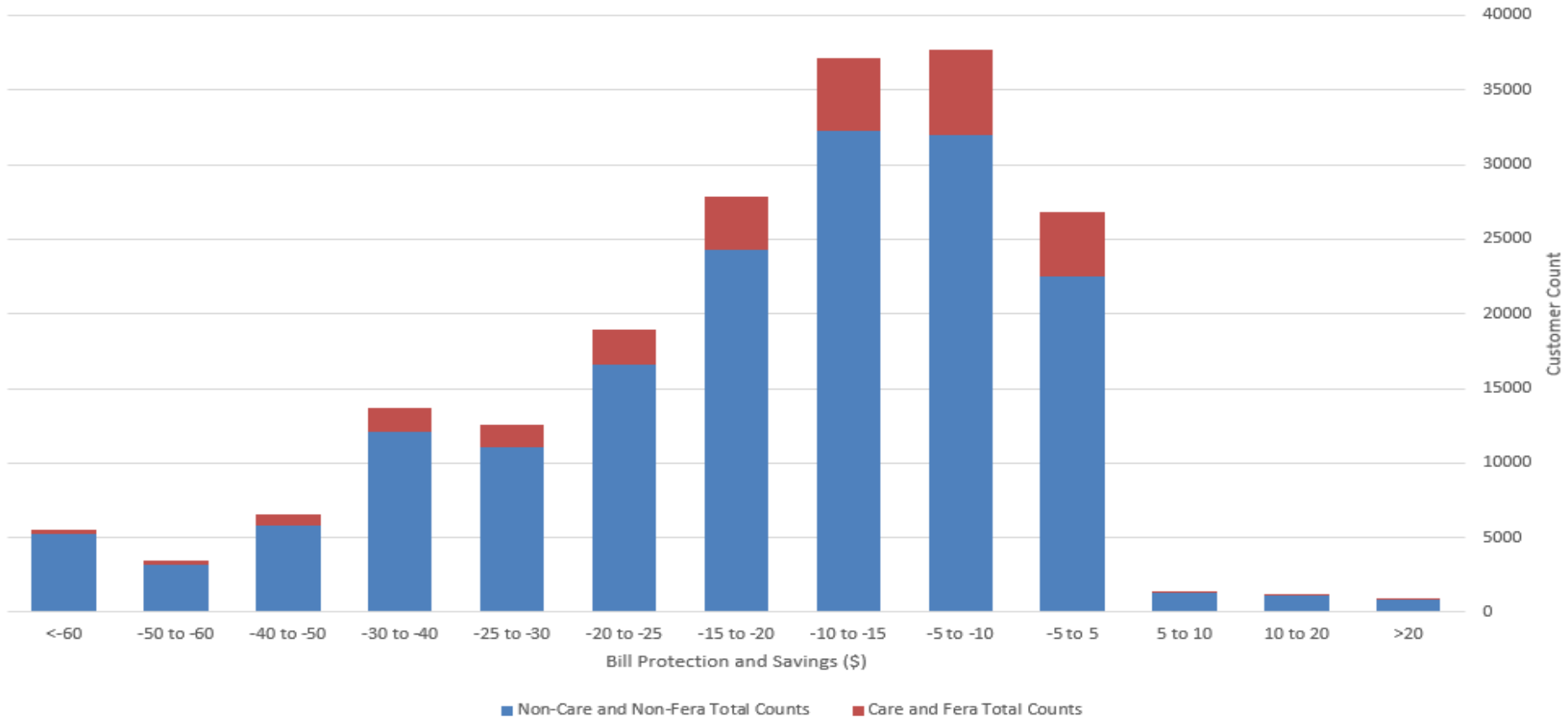
|   | TOU MORE expensive<br>than Tiered Rate | TOU LESS expensive than<br>Tiered Rate |
|---|--|--|
| Estimated Annual Generation<br>Bill Difference (\$) | \$65,581                               | \$3,557,749                            |
| Number of Customers<br>Impacted                     | 8,202                                  | 185,346                                |
| Annual Bill Impact/Customer                         | \$8.00                                 | \$19.20                                |

**\*Estimates are calculated with PG&E generation pricing**



# Residential TOU Full Transition Overview – Generation only Bill Protection Analysis

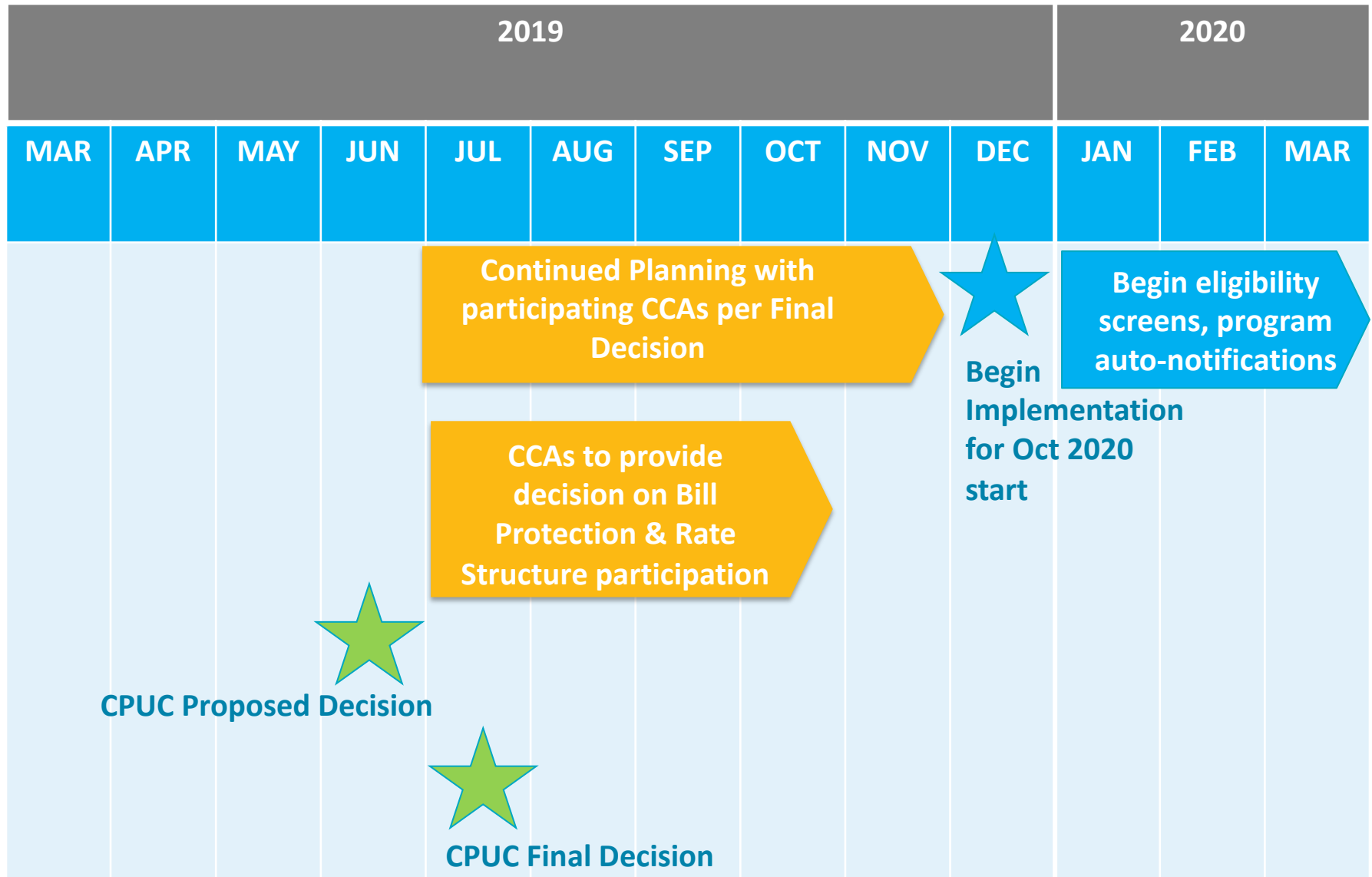
PCE Total Count of Bill Protection and Savings



Overall: PG&E & CCA customers in PCE territory are structural beneficiaries

- 34% neutral (65,932) – Neutral means impacted less than +/- \$10 per year impact
- .01% non-benefitters (2,126)-\$10 or more per year impact
- 65% benefitters (125,617)-(\$10) or more per year impact

# CCA/PG&E Joint Planning Timeline



# TOU Residential Full Transition – Why Participate?

- **Support Statewide policy**
  - Align on policies for a cleaner, more reliable energy grid
  - Contribute to greenhouse gas reductions
- **Enhance Customer Experience**
  - Streamlined and consistent experience for PCE's and PG&E's mutual customers
  - Reduced customer confusion

# Appendix

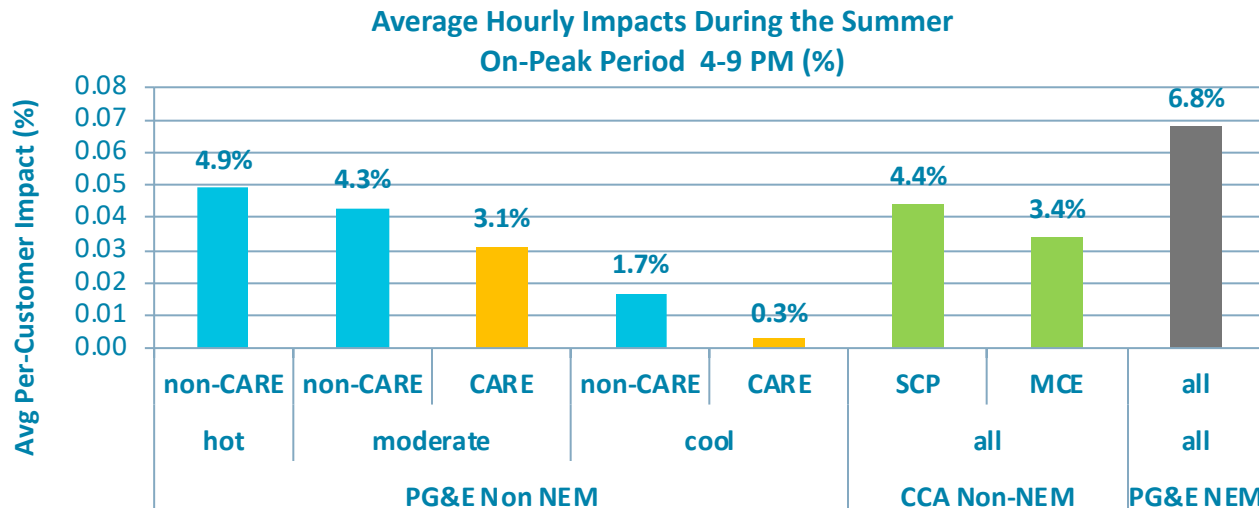


Together, Building  
a Better California

# Residential TOU Transition Phase 1 (Pilot) Overview

## Load Shifts & Conservation:

- PG&E preliminary results: overall energy conservation with some load shifting
- Summer load reductions declined or remained the same
  - SCE & SDG&E showed comparable results
- Transitioned TOU rate customers averaged 0.046 kWh daily peak period reduction per customer per hour
  - 4.2% reduction - total peak load per customer per hour
  - Impacts vary across climate zones, customer segments, day types
    - Hot climate customers have highest peak load reduction; 4.9%



# Residential TOU Transition results are encouraging

## Overall

- Awareness metrics increased from baseline
  - 84% aware of TOU rate plans .... Up from 60%
  - 59% aware on a TOU rate .... Up from 10%
- Customers exceeding awareness and understanding targets set by the CPUC
  - Aware of rate choices and TOU rates
  - Understand benefits of lowering/shifting electricity use
- 78% understand their bill is based on how much energy they use and when they use it
- PG&E's results are comparable or higher than other California IOUs





# Residential TOU Transition Phase 1 (Pilot) Targets

Transition customers continue to exceed goal metric target levels

|     |   | Wave 2 | Baseline | Goal  |
|-----|---|--------|----------|-------|
| 1   | Rate plans are available that give you more control over your bill                | 46%    | -        | -     |
| 2   | Customers know where to go to get info about how to manage their electricity use  | 52%    | 52%      | 66%   |
| 3   | Customers understand how energy use can impact bills                              | ▲ 6.7  | 5.1      | 6.5   |
| 4/5 | Customers understand the benefits of lowering/shifting their electricity use      | ▲ 6.9  | 6.4      | 7.2   |
| 6   | Customers are aware that PG&E provides rebates, energy efficiency programs & tips | ▲ 70%  | 64%      | 72%   |
| 7   | Customers feel that they were provided useful information explaining their bills  | ▲ 7.5* | 7.0      | 7.2   |
| 8   | Customers are aware of TOU rates  | ▲ 81%  | 60%      | 68.8% |
| 9   | Customers are aware of rate choices   | ▲ 52%  | 35%      | 47.5% |
| 10  | Customers have an optimal experience (satisfaction with products and services)    | 7.6    | 7.5      | 7.3   |

▲ Significantly higher than baseline

\* Wave 1, not asked in Wave 2

# Residential TOU Transition Phase 1 (Pilot) Targets

Transition customers continue to have a good understanding of basic TOU rate details

- Baseline average 4.7

|   | Wave 2 | Overall |
|---|--------|---------|
| Bill based on how much you use & time of day you use  |        | 7.8     |
| Could pay more unless you adjust some electricity use |        | 6.9     |
| Can switch to another rate plan                       |        | 6.6     |
| How to manage bill using current rate plan            |        | 6.5     |
| How bill will be impacted by TOU rate                 |        | 6.5     |

# Residential TOU Transition Phase 1 (Pilot) Targets

**PG&E's results are comparable or higher than other California IOUs**

|   | Wave 2 | PG&E   | SCE    | SDG&E  |
|---|--------|--------|--------|--------|
| Aware household part of transition      |        | 62%    | 48%    | 59%    |
| Aware can decline transition (if aware) |        | 64%    | 60%    | 69%    |
| Aware of TOU rates                      |        | 81%    | 73%    | 81%    |
| Aware of rate choices                   |        | 52%    | 48%    | 52%    |
| Understanding of peak hour times        |        | 62-76% | 41-61% | 60-72% |
| Awareness of Bill Protection*           |        | 22%    | 17%    | 23%    |
| Understanding of Bill Protection        |        | 28%    | 17%    | 23%    |
| Have shifted or reduced electricity     |        | 47%    | 40%    | 50%    |

\*SDG&E: 'No-risk pricing'

# Residential TOU Full Transition - Guiding Principles

- Geographic rollout by **County**
  - Hottest areas well in advance of summer
  - Enables targeted media/community outreach
  - Except NEM: transition in true-up month
- Transition during months customers **do not** experience their highest bills

| Months Acceptable for Transition by Baseline Territory |     |   |   |   |          |   |   |      |   |   |
|--|-----|---|---|---|----------|---|---|------|---|---|
|  | Hot |   |   |   | Moderate |   |   | Cool |   |   |
|  | P   | S | R | W | Q        | X | Y | T    | V | Z |
| Oct  | Y   | Y | Y | Y | Y        | Y | Y | Y    | Y | Y |
| Nov  | N   | Y | Y | Y | N        | N | Y | Y    | Y | Y |
| Dec  | N   | Y | Y | Y | N        | N | Y | Y    | Y | Y |
| Jan  | N   | Y | Y | Y | N        | N | Y | Y    | Y | Y |
| Feb  | Y   | Y | Y | Y | Y        | Y | Y | Y    | Y | Y |
| Mar  | Y   | Y | Y | Y | Y        | Y | Y | Y    | Y | Y |
| Apr  | Y   | Y | Y | Y | N        | Y | Y | Y    | Y | Y |
| May  | Y   | N | N | N | N        | Y | Y | Y    | Y | Y |
| Jun  | N   | N | N | N | N        | N | Y | Y    | Y | Y |
| Jul  | N   | N | N | N | Y        | N | Y | Y    | Y | Y |
| Aug  | N   | N | N | N | Y        | N | Y | Y    | Y | Y |
| Sep  | Y   | N | N | N | Y        | Y | Y | Y    | Y | Y |

Baseline Territories in PG&E Service Area

