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BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Develop a Successor to Existing Net Energy Metering Tariffs Pursuant to Public Utilities Code Section 2827.1, and to Address Other Issues Related to Net Energy Metering.	Rulemaking 14-07-002 (Filed July 10, 2014)

PACIFIC GAS AND ELECTRIC COMPANY
NOTICE OF EX PARTE COMMUNICATION

Pursuant to Rule 8.4 of the Commission's Rules of Practice and Procedure, Pacific Gas and Electric Company (PG&E) hereby gives notice of the following *ex parte* communication. The communication occurred on Thursday, June 23, 2016, at approximately 8:15 a.m. and lasting for approximately 15 minutes, at the 29th Annual Western Conference sponsored by the Center for Research in Regulated Industries (CRRI), Rutgers University, held at the Hyatt Regency in Monterey, California.

Dennis Keane, Chief Regulatory Analyst, PG&E, was one of four presenters at a session titled "Retail Pricing." The other three presenters were Russell Garwacki and Reuben Behlihomji of Southern California Edison, Katrina Jessoe of the University of California at Davis, and Ahmad Faruqui of The Brattle Group. All the presentations summarized papers that the presenters had authored. The session was chaired by Andre Ramirez of Southern California Edison. The discussants for the four papers/presentations were Scott Murtishaw, Energy Advisor to Commission President Michael Picker, and Cynthia Fang of San Diego Gas and Electric.

Mr. Keane's presentation was entitled "*Problems with Current Electric Rate Designs: Making Rates Supportable and Sustainable.*" A copy of Mr. Keane's presentation is attached to this notice. Mr. Keane's verbal remarks closely followed the attached presentation slides.

Respectfully submitted,

/s/ Sidney Dietz

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Dated: June 28, 2016

Problems With Current Electric Rate Designs: Making Rates Supportable and Sustainable

Dennis M. Keane
Chief Regulatory Analyst
Pacific Gas and Electric Company

Rutgers University Western Conference
June 23, 2012

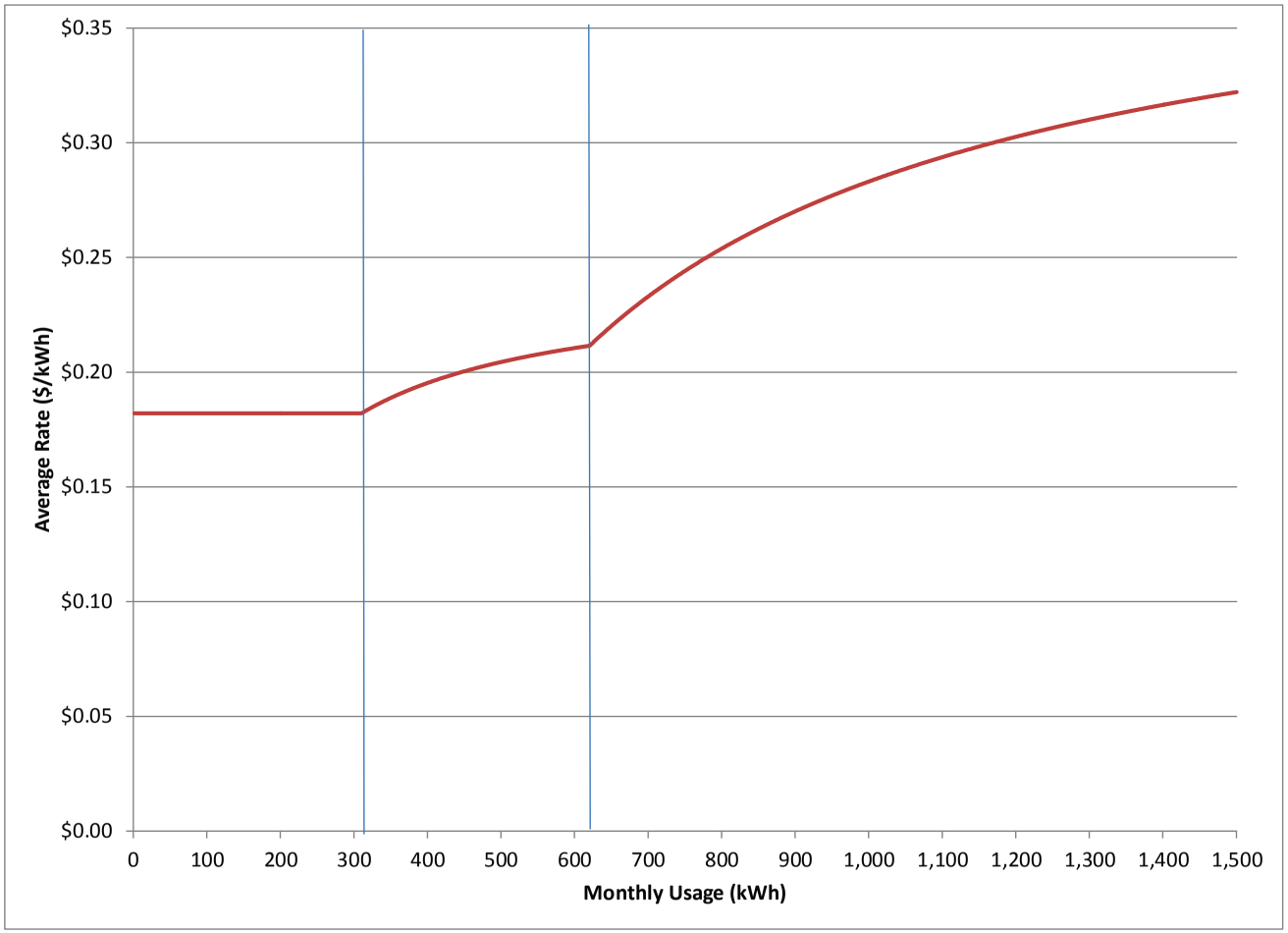
Introduction

- Electric rates in many instances poorly reflect costs
  - Significant fixed and capacity-related costs, but rates are predominantly volumetric
  - Especially true for residential and small commercial
- Policy objectives exacerbate the situation
- Result is increasingly less supportable and sustainable rates

Customer Class	Customer	Demand	Volumetric	Total
Residential	0.0%	0.0%	100.0%	100.0%
Small Commercial	4.6%	0.0%	95.4%	100.0%
Medium Commercial	5.7%	24.7%	69.6%	100.0%
Industrial	2.0%	41.6%	56.4%	100.0%
Agricultural	2.2%	30.2%	67.6%	100.0%
System	2.0%	16.6%	81.4%	100.0%

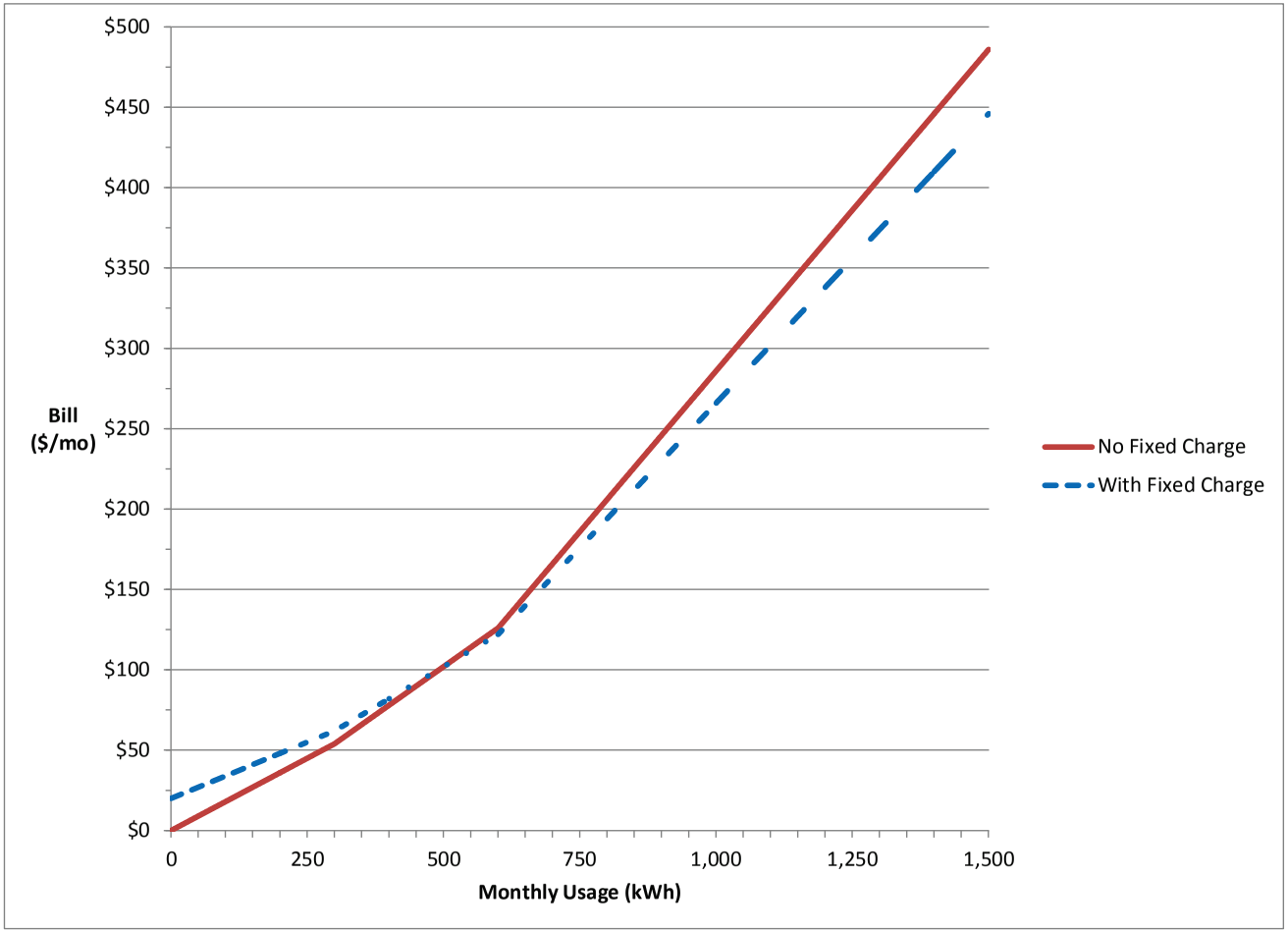
Rate Distortions – Inclining Block Tiered Rates

- Not cost-based: Higher average rates as monthly usage increases
- Subsidies from upper- to lower-tier users (very high bills, volatility)
- Super-user of electricity (SUE) charge in 2017 means there will still be 3 tiers



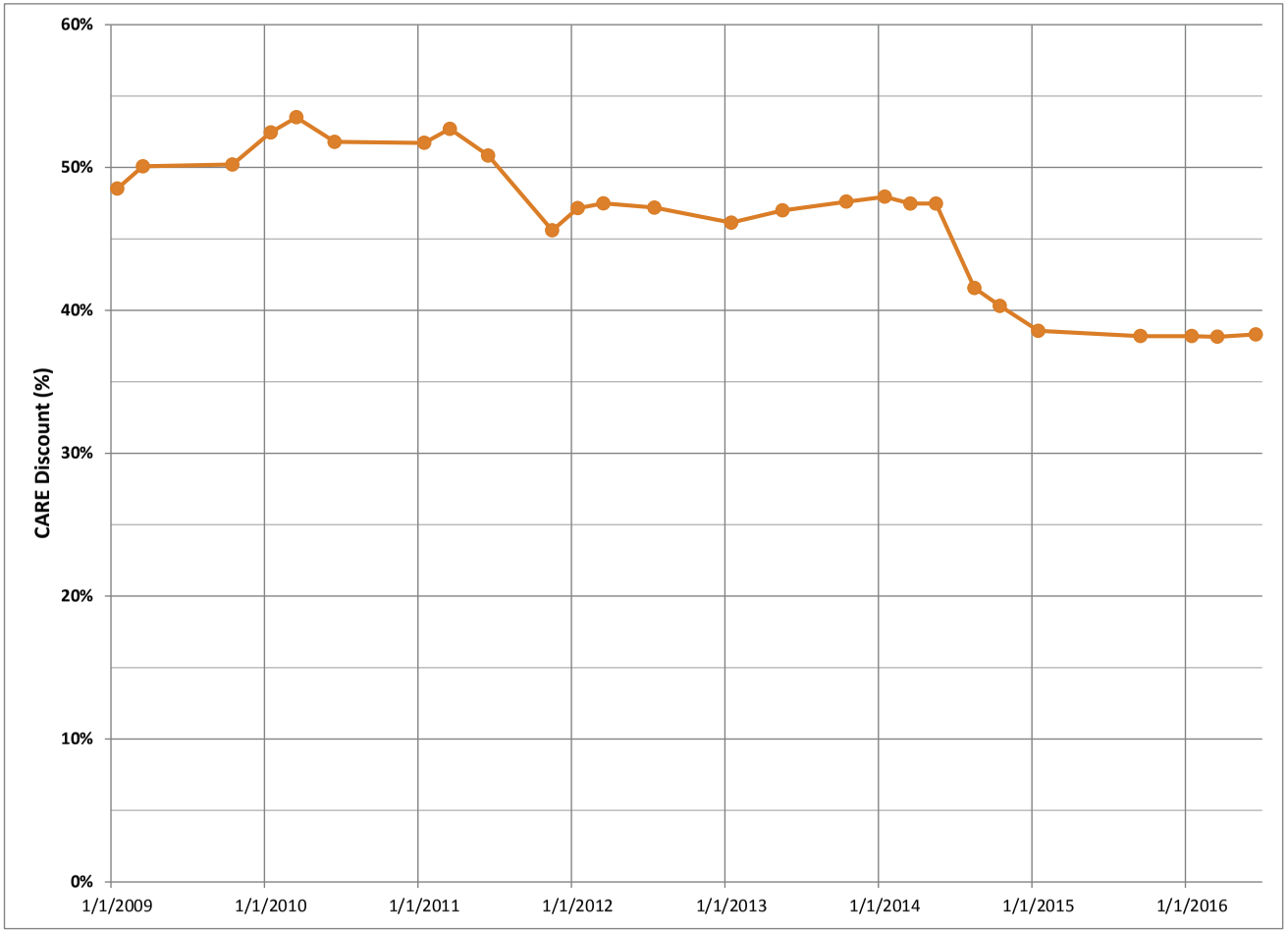
Rate Distortions – Absence of Fixed Charges

- Fixed charges better reflect cost, and ensure low-usage customers pay a more equitable share of fixed costs
- Also can reduce high upper-tier rates (depending on how fixed charge revenue is used)



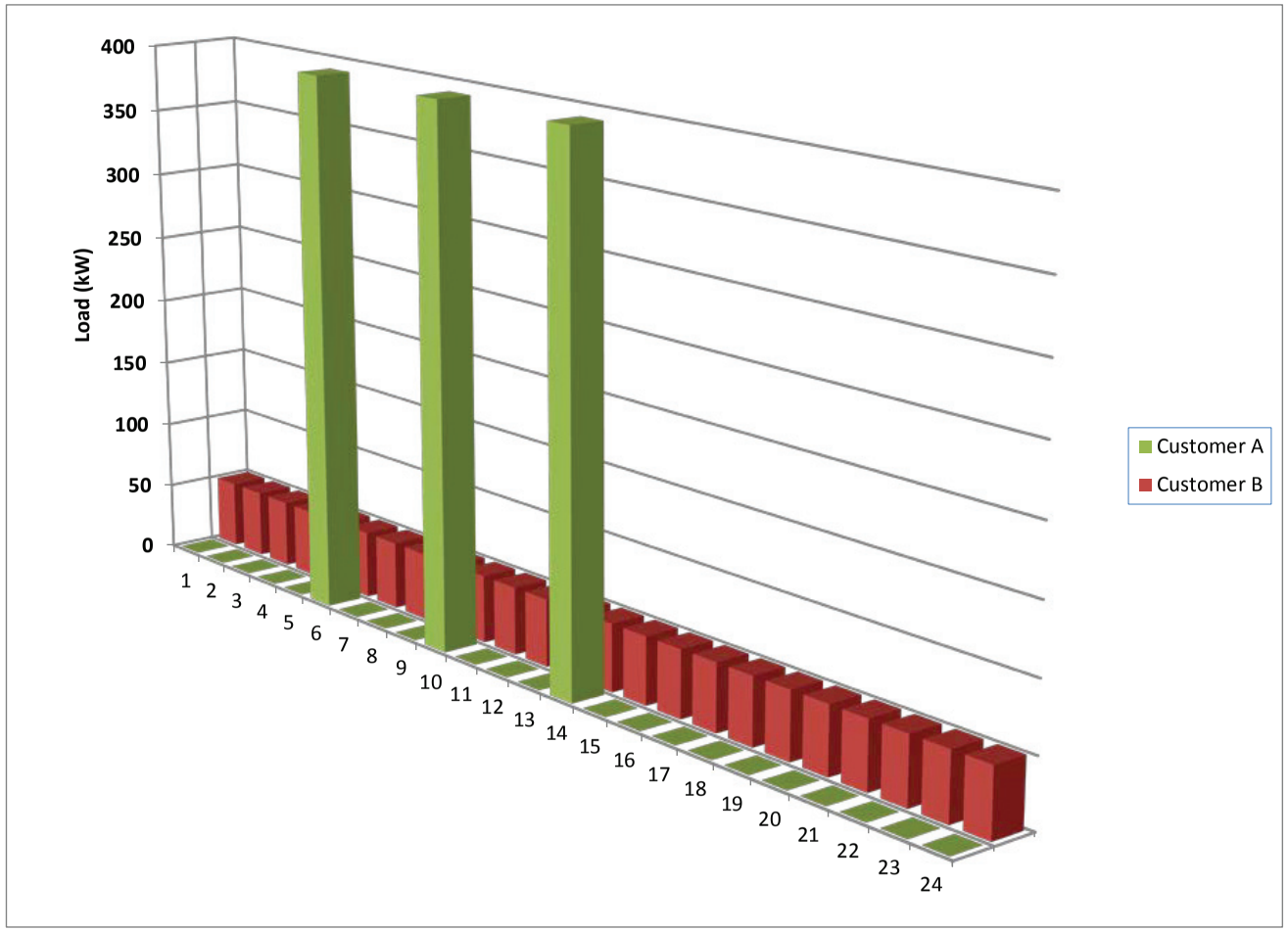
Rate Distortions – Low-Income (CARE) Rates

- Pre-energy crisis: CARE discounts were 20%
- Post-energy crisis: CARE discounts increased dramatically
- In recent years, trend has reversed, but “new normal” will be 30%-35%



Rate Distortions – Absence of Demand Charges

- Customers using same energy, but with different demands, can cost different amounts to serve
- Rates with demand charges are more cost-based and equitable, and will encourage customers to manage loads

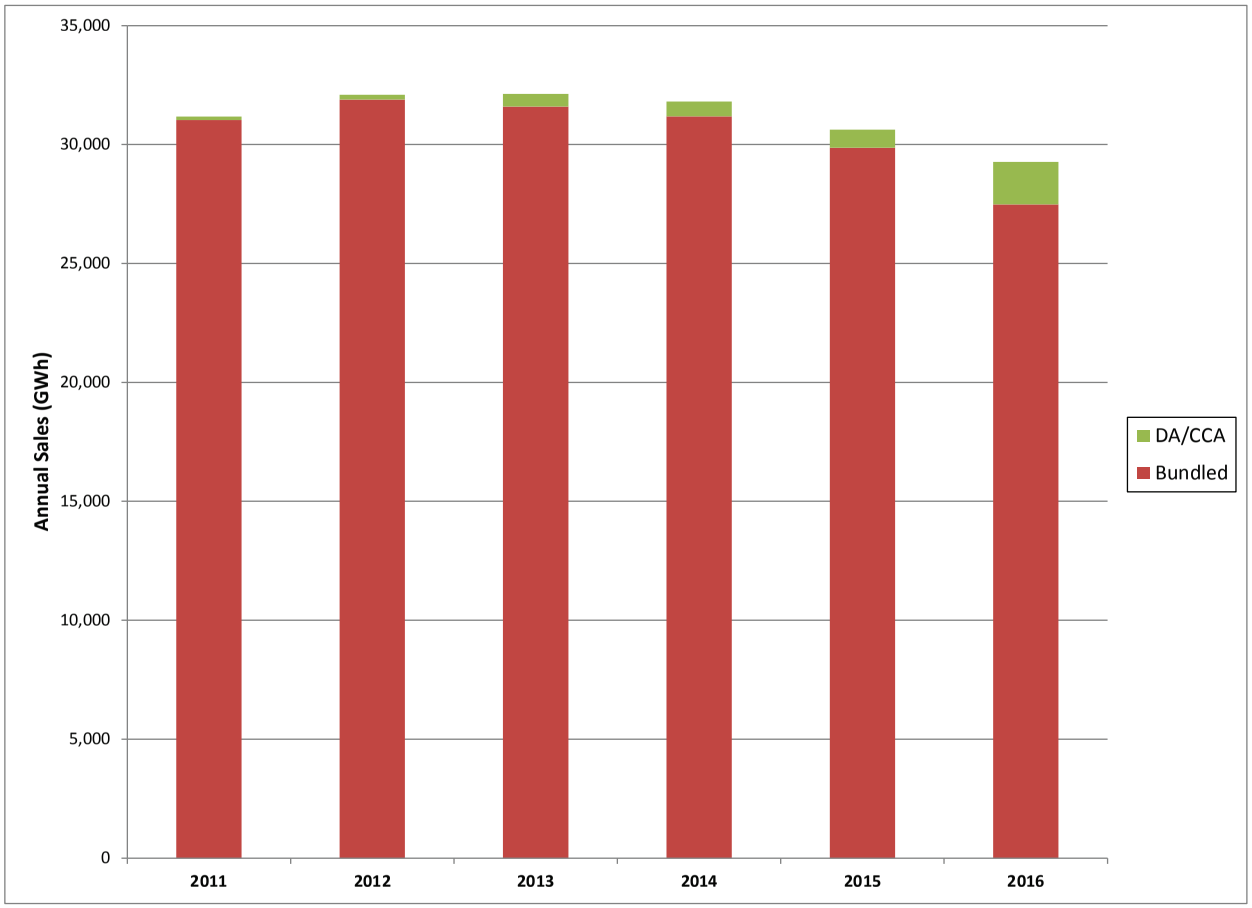


TOU Rates and Special Rate Treatment for Some

- TOU rates are more cost-based, and to be encouraged
- While mandatory for PG&E's non-residential customers, it remains uncertain how widespread they will become for residential customers
  - Cannot be made mandatory
  - Can be the default option, but there may be delays and exemptions
- For non-residential customers, TOU period hours are obsolete and need to quickly be modified
- Special favored rate treatment for particular technologies/situations
  - Solar net metering rates
  - Pressures for all-energy rate structures for electric vehicle charging
  - Future technologies like energy storage or other "good" loads

Supportability and Sustainability

- Rate structures where some customers subsidize others break down once customers are no longer captive and begin to have alternatives
- PG&E has seen declining sales in recent years, particularly residential sales (and the lost sales have been concentrated in the higher tiers)
- Potential vicious cycle of sales and revenue loss, followed by rate increases



Challenges to Fixing Rate Distortions

- Many interest groups opposed to rate reforms (consumer groups, low-income advocates, environmental groups, solar companies/advocates)
- Arguments for maintaining the status quo tend to sidestep the economist's typical concerns: that rates be cost-based, equitable, economically efficient, and send correct price signals
- Rather, arguments focus on other objectives: encouraging conservation, encouraging solar, punishing high users (who are often also assumed to be high income)
- Many intervenor claims (e.g., that flatter rates with fixed charges are anti-conservation) are disputable; these are empirical questions
- But even if true, should these other objectives be given greater weight than having more accurate, cost-based rates, especially when those on the losing end of those rates now have alternatives and can (at least partially) bypass?

Ideas for More Supportable and Sustainable Rates

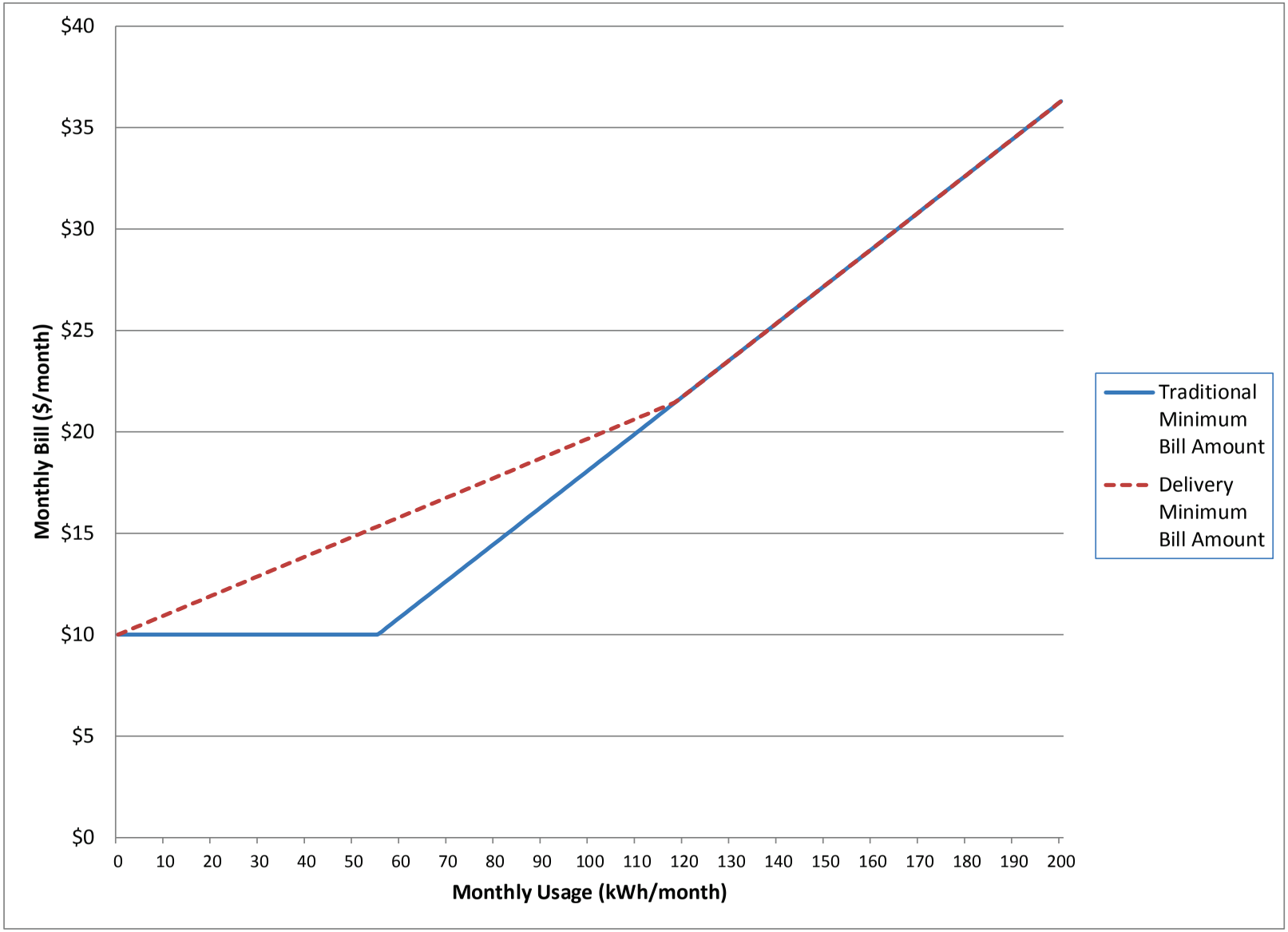
- Narrow tier differentials
  - Limitations: cap on lower-tier rate, new SUE rate
- Implement a monthly fixed charge
  - Limitations: $10 statutory cap, use of composite Tier 1 rate
- Increase the minimum delivery bill amount
- Optional cost-based rates for residential and small commercial customers
  - Three-part rates: fixed charge, demand charge, TOU energy charges
- Modify TOU periods to reflect changed hourly cost patterns
  - Late afternoon/evening peak period hours
  - Super-off-peak period hours in spring

Appendix

Effect of Basing Tier Ratios on Composite Tier 1 Rate

- Addition of monthly fixed charge provides revenue that can be used to reduce tiered energy charges
- But if rate ratios are based on composite Tier 1 rate, all of the additional revenue reduces only the Tier 1 rate, greatly diminishing the ability to provide bill relief and lower bill volatility for upper-tier users
- Solution: (a) base 1.20 ratio on nominal Tier 1 rate; or (2) continue to base the ratio on composite Tier 1 rate, but reduce it below 1.20

Scenario	Glide-Path Rate Ratio Tier 2 : Tier 1	Monthly Fixed Charge	Tier 1 Rate (Nominal)	Tier 2 Rate (Nominal)	Rate Ratio (Nominal)
1	1.20 (Based on Nominal Tier 1 Rate)	$0.00	$0.196	$0.235	1.20
2	1.20 (Based on Nominal Tier 1 Rate)	$10.42	$0.178	$0.213	1.20
3	1.20 (Based on Composite Tier 1 Rate)	$10.42	$0.160	$0.235	1.47

PG&E®

Minimum Bill Amount Methodologies