Ava Community Energy

Income Graduated Fixed Charge Bill Impact Analysis

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Introduction

Ava Community Energy

Analysis Overview

- Ava Community Energy (Ava) conducted an analysis to understand how Ava customers would fare under different Income Graduated Fixed Charge (IGFC) proposals.
- Ava examined the CPUC's Decision, select party proposals from the CPUC Demand Flexibility proceeding, and AB-1999 (Irwin) to determine:
  - Are there more customers who are better off (lower bills) or worse off (higher bills)?
  - By how much are those customers better or worse off?
  - How do low-income customers and rooftop solar customers fare relative to others?

Regulatory and Legislative Background

- **June 2022:** AB 205 passed, requiring an IGFC for residential rates by July 1, 2024
- **July 2022:** Demand Flexibility proceeding initiated at the CPUC, Track A dedicated to IGFC
- **April 2023 - June 2023:** Parties submitted testimony with proposals for IGFC design
- **July - Aug 2023:** In response to an ALJ ruling, parties submitted simplified “first version” IGFC designs
- **Sept 2023 - Nov 2023:** Parties submitted briefs, reply briefs, and exhibits summarizing proposals
- **Feb 2024:** AB 1999 (Irwin) introduced to cap fixed charges at $5/care, $10/non-CARE. Does not pass.
- **May 2024:** CPUC issued a decision addressing AB 205 and establishing IGFC

Methodology and Assumptions

In this version, Ava updated the analysis to include E-1 customers in Stockton and incorporate PG&E billing system nuances regarding minimum bill charges and net energy metering (NEM) compensation

Methodology

Ava calculated the difference (Δ) between what a customer would pay under their current rate, and what they would pay under an IGFC.

- **Current bill** = current rates x customer usage
- **IGFC bill** = proposed rates x customer usage
- **Δ** = IGFC bill – current bill

Ava then examined the distribution of Δ across customer classes and territories.

Assumptions

- **Test year:** Oct 2022 to Oct 2023
- **Customers:** E-TOU-C for Ava's current service territory, E-TOU-C *and* E-1 for Stockton
- **Customer price elasticity:** None
- **Rates:** Sourced from party Demand Flexibility testimony and E3 tool
- **AB 1999:** Sets $5 and $10 fixed charge caps. Assume the CPUC enacts maximum charges.
- **Stockton data** patched together from Item 16 and is less reliable than current service territory.

Additional Methodology

Export credits

- Export credits ($) are carried over from month to month
- Exports are credited according to the time of useperiods when they were generated
- Customers are not compensated for excess credits at the end of the billing cycle

Net surplus compensation (NSC)

- The net exports for the true up period are credited at the NSC rate, not the retail rate
- Because NSC values are not affected by IGFC, we can ignore NSC

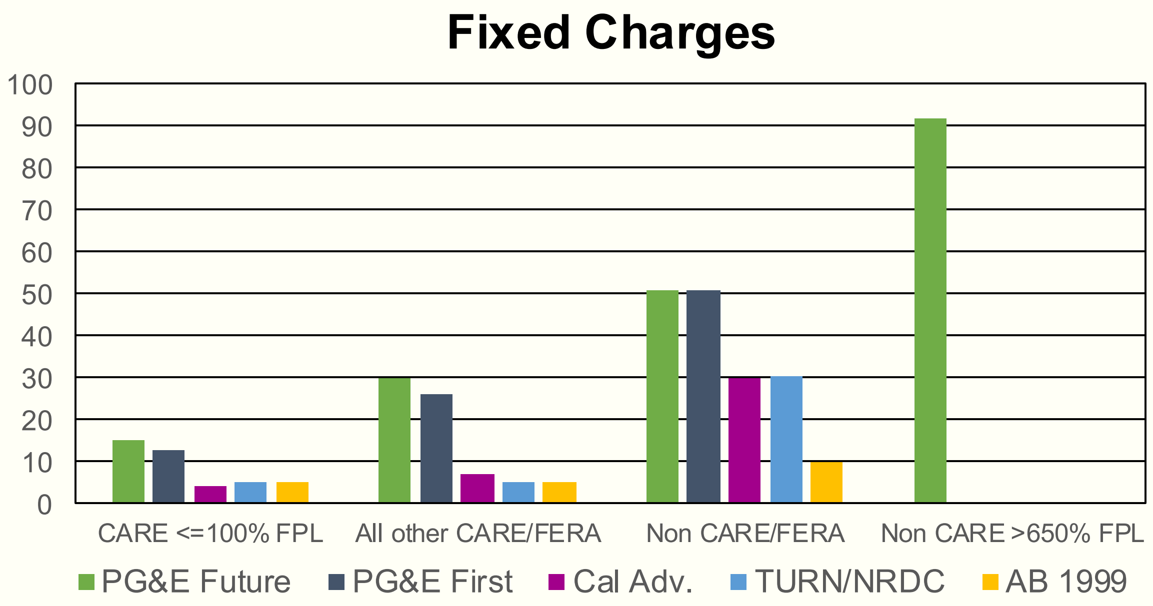
Minimum delivery charge

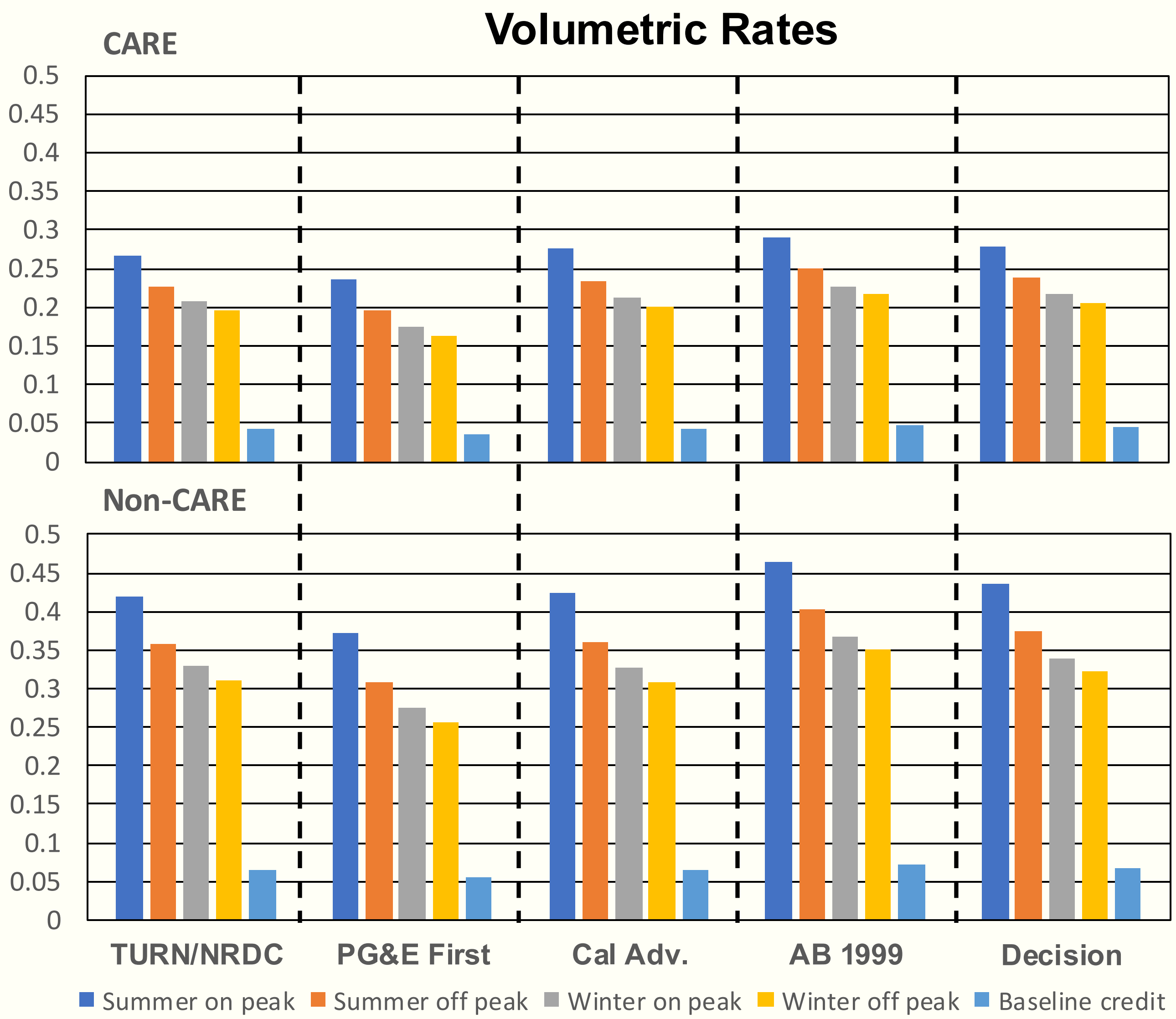
- Prior to IGFC, customers must pay minimum delivery charge each month
- NEM credits cannot be used to offset the minimum delivery charge
- Per D.24-05-028, fixed charges replace minimum delivery charge

Baseline credit

- Baseline credit subtracted from net exports in excess of baseline amount

Comparison of Proposed IGFC Rates





Higher fixed charges result in lower volumetric rates.

CPUC decision tiers/charges differ from party proposals:

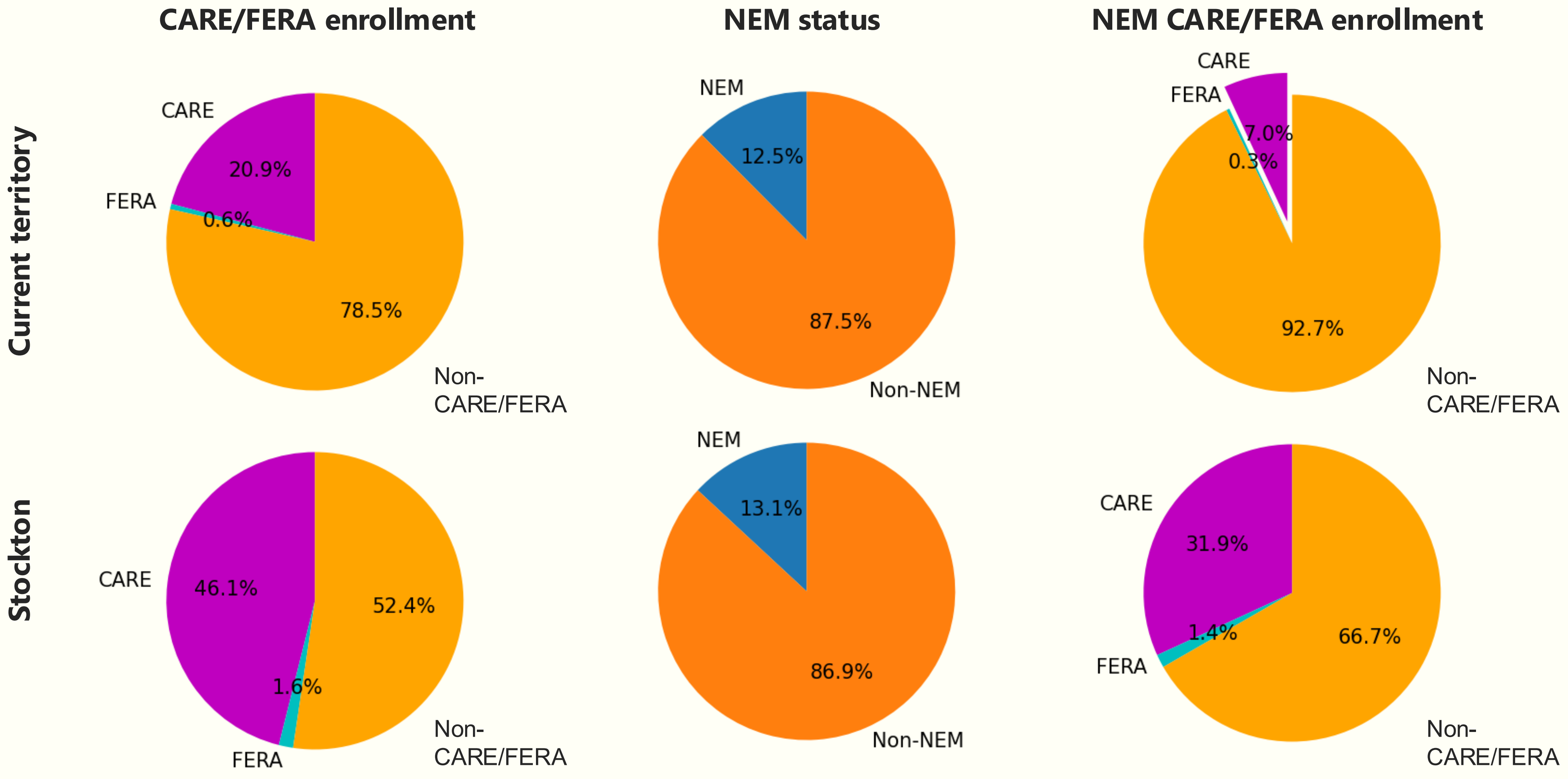
- **CARE:** $6
- **FERA:** $12
- **Non-CARE/FERA:** $24.15

"PG&E Future" is PG&E's original proposal but would not be considered until future iterations of the IGFC. "PG&E First" is a revised proposal from PG&E with streamlined income brackets submitted in response to the Administrative law Judge's Ruling on the Implementation Pathway for Income-Graduated Fixed Charges, alongside the other "first version" proposals featured here.

Analysis

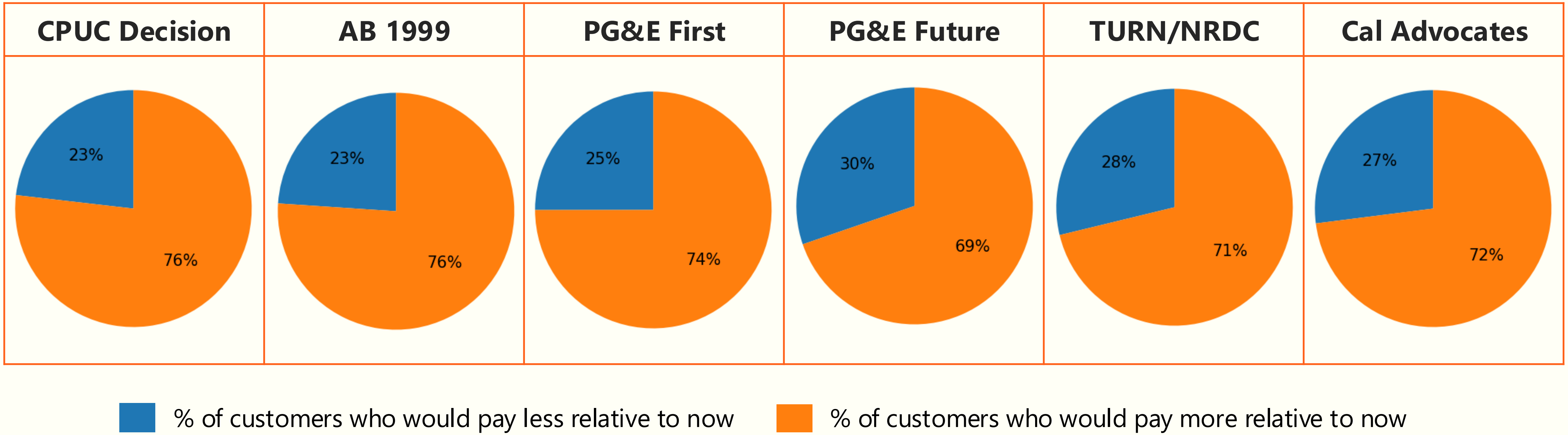
Ava Community Energy

Ava Customer Demographics



- Avg. non-NEM residential customer in Ava's current service territory uses 360 kWh per month. Stockton: 480 kWh.
- The average residential customer in California uses ~ 540 kWh per month.

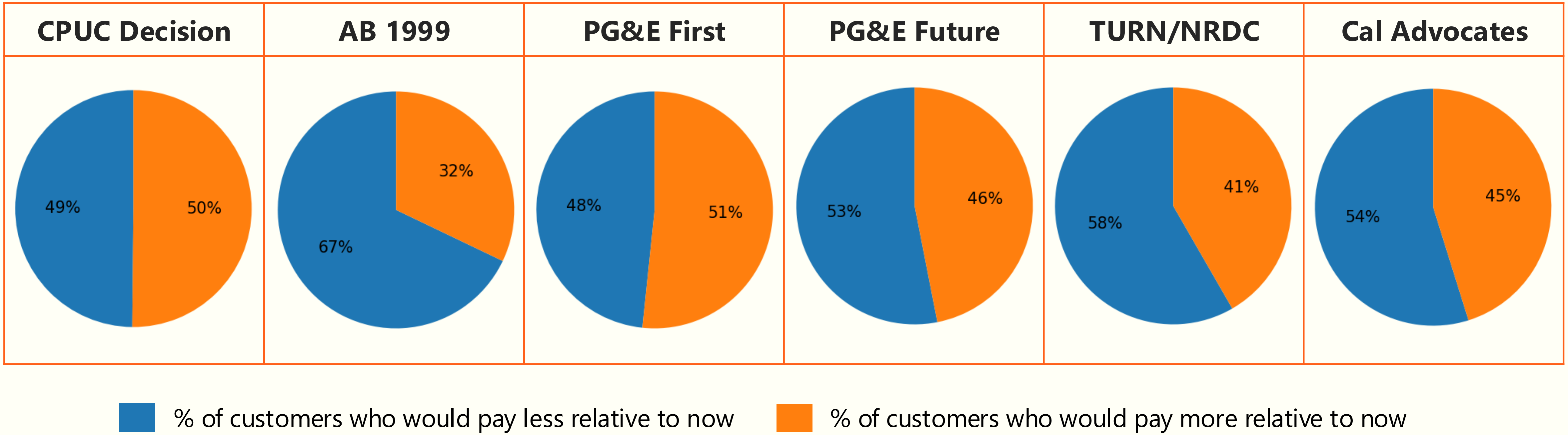
Customer Outcomes in Ava's Current Service Territory



A majority of customers in Ava's current service territory have higher bills under all IGFC designs

- These customers consume significantly less than the average Californian
- IGFC structurally benefits customers with high usage
- Results could look different for other service territories with higher customer usage

Customer Outcomes in Stockton



Stockton customer fare substantially better than customers in Ava's current service territory

- Non-NEM Stockton customers use ~120 kWh more per month on average; IGFC benefits higher users
- A greater percentage of customers in Stockton are low income, reflected in CARE statistics
- Most IGFC proposals structurally benefit lower income customers

Comparison of CARE/FERA Customer Outcomes

Proportion of **all** customers that benefit from IGFC

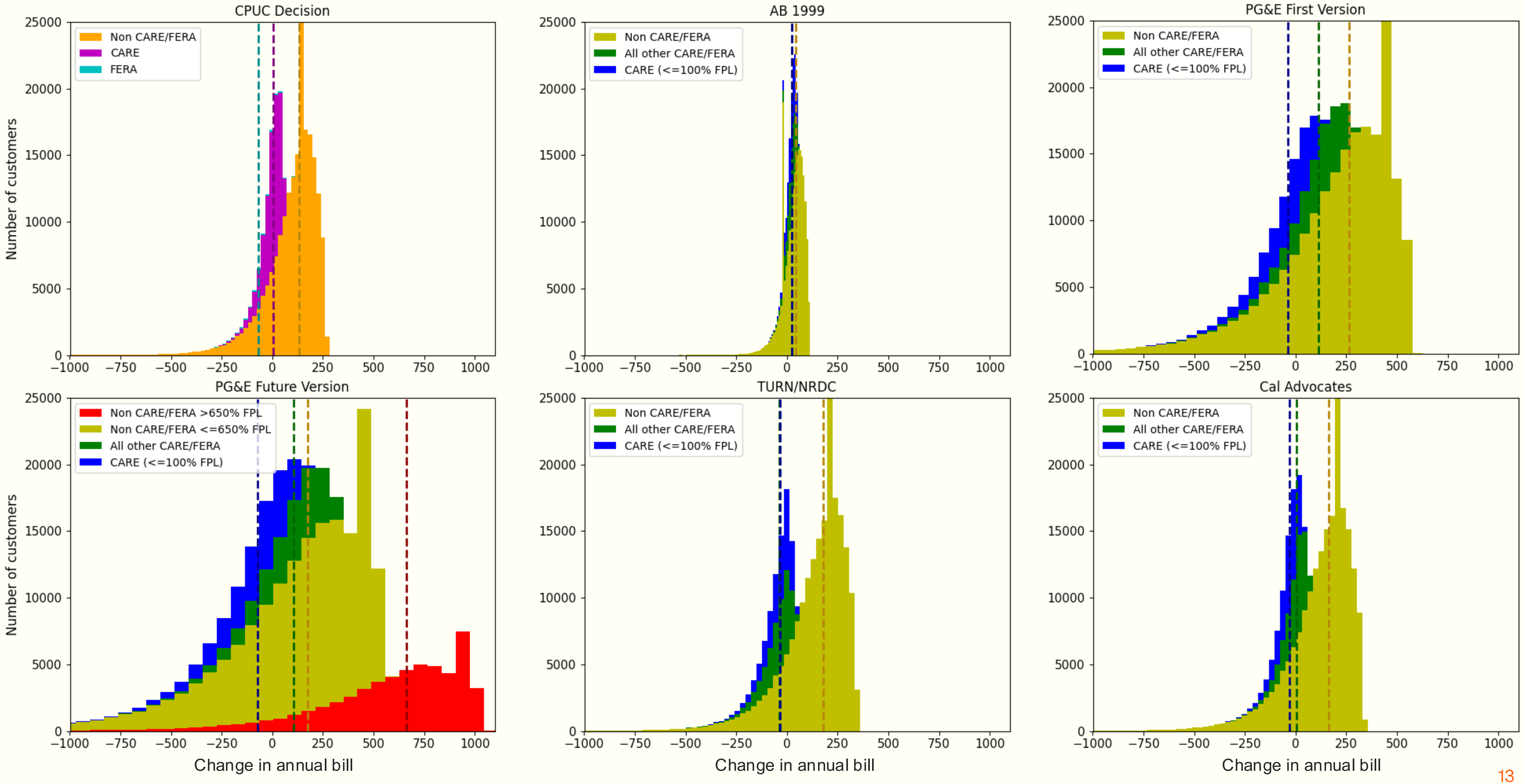
Territory	CPUC Decision	AB 1999	PG&E First	PG&E Future	TURN/NRDC	Cal Advocates
Current	23 %	23 %	25 %	30 %	28 %	27 %
Stockton	49 %	67 %	48 %	53 %	58 %	54 %

Proportion of **CARE/FERA** customers that benefit from IGFC

Territory	CPUC Decision	AB 1999	PG&E First	PG&E Future	TURN/NRDC	Cal Advocates
Current	45 %	19 %	43 %	49 %	77 %	62 %
Stockton	70 %	70 %	63 %	69 %	91 %	80 %

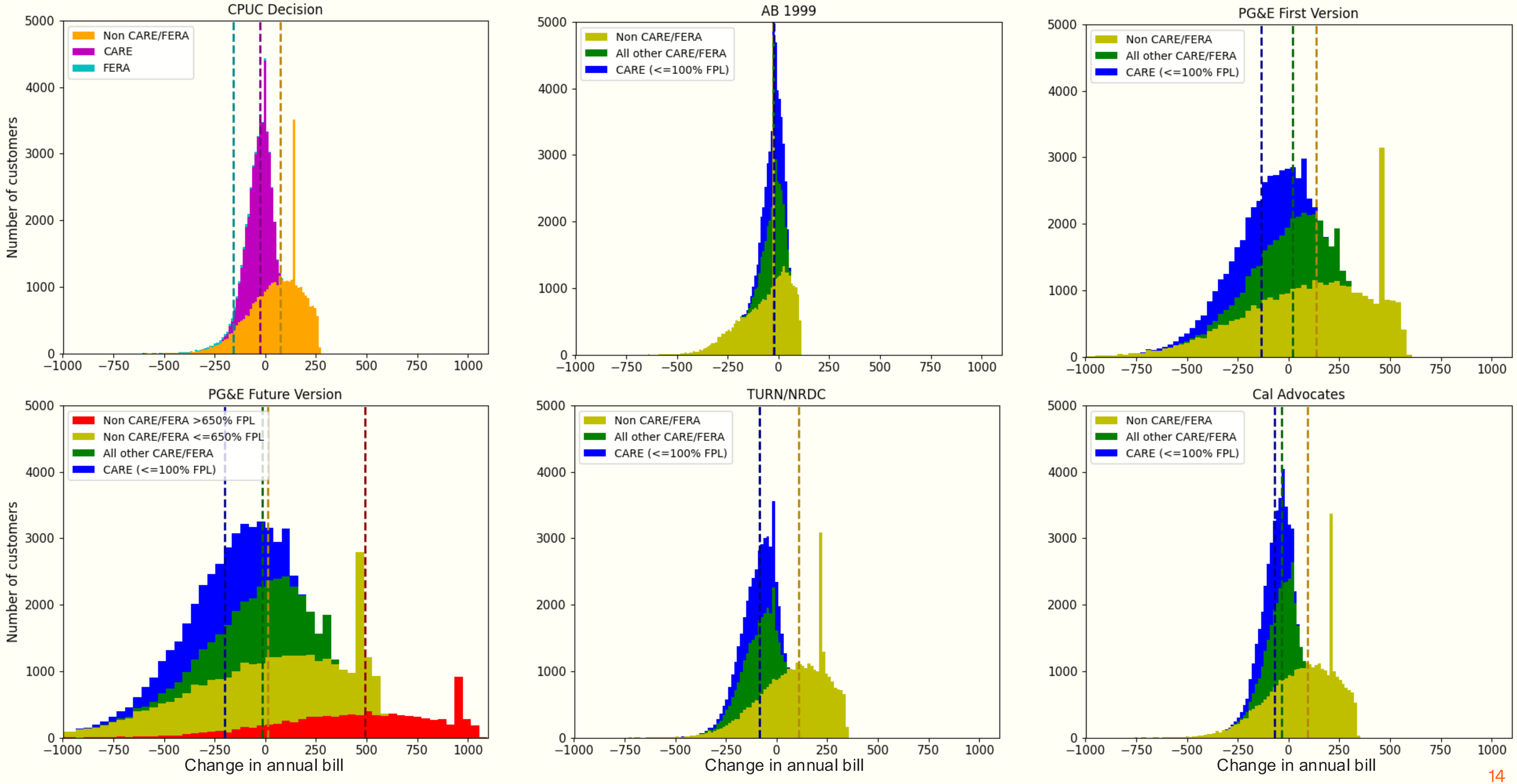
- Number of current service territory customers in analysis: 260,000. 55,000 are enrolled in CARE.
- Number of Stockton customers in analysis: 67,000. 30,000 are enrolled in CARE.

Distribution of Bill Impacts in Current Service Territory

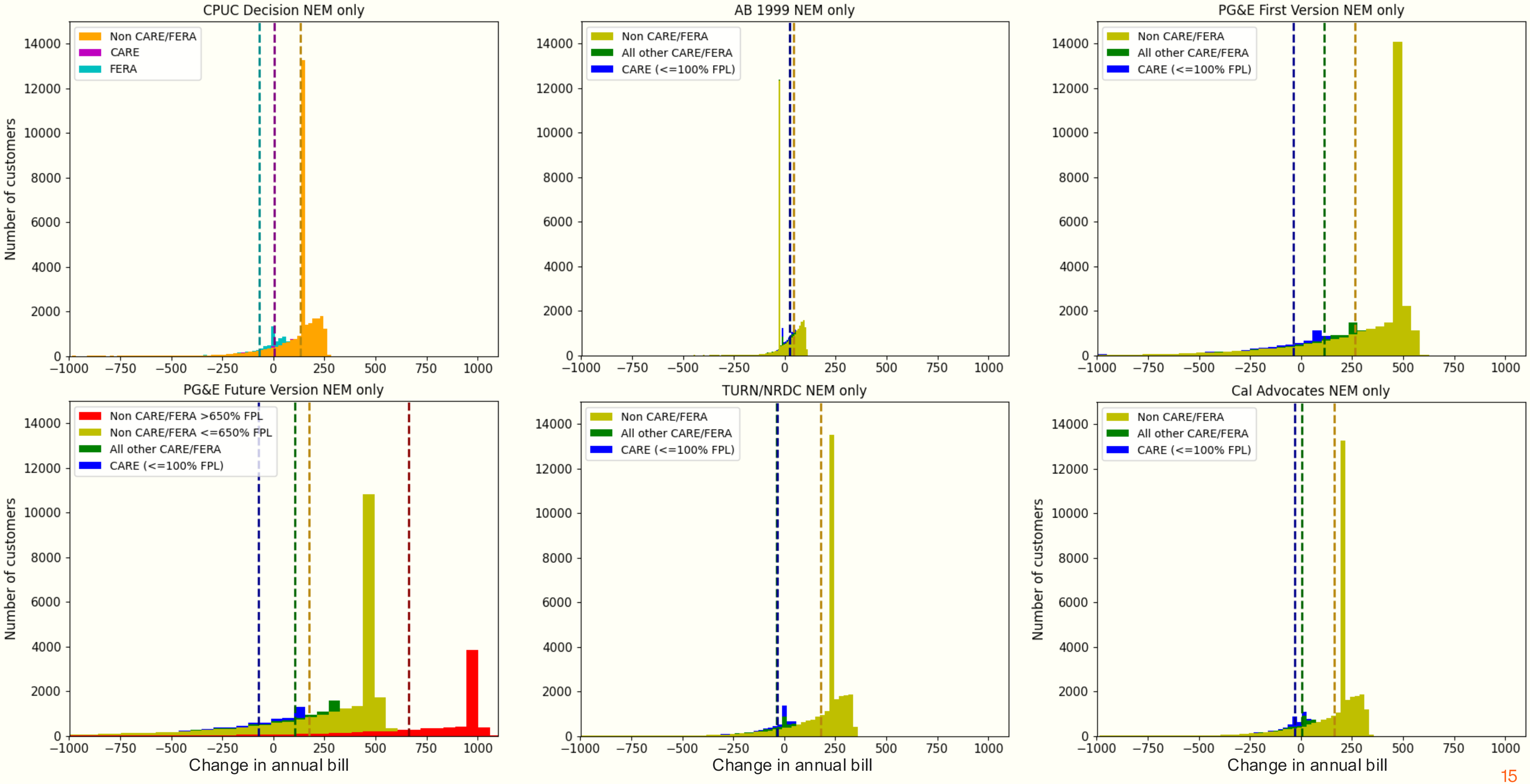


The vertical dashed lines correspond to the **median** customer of each income group.

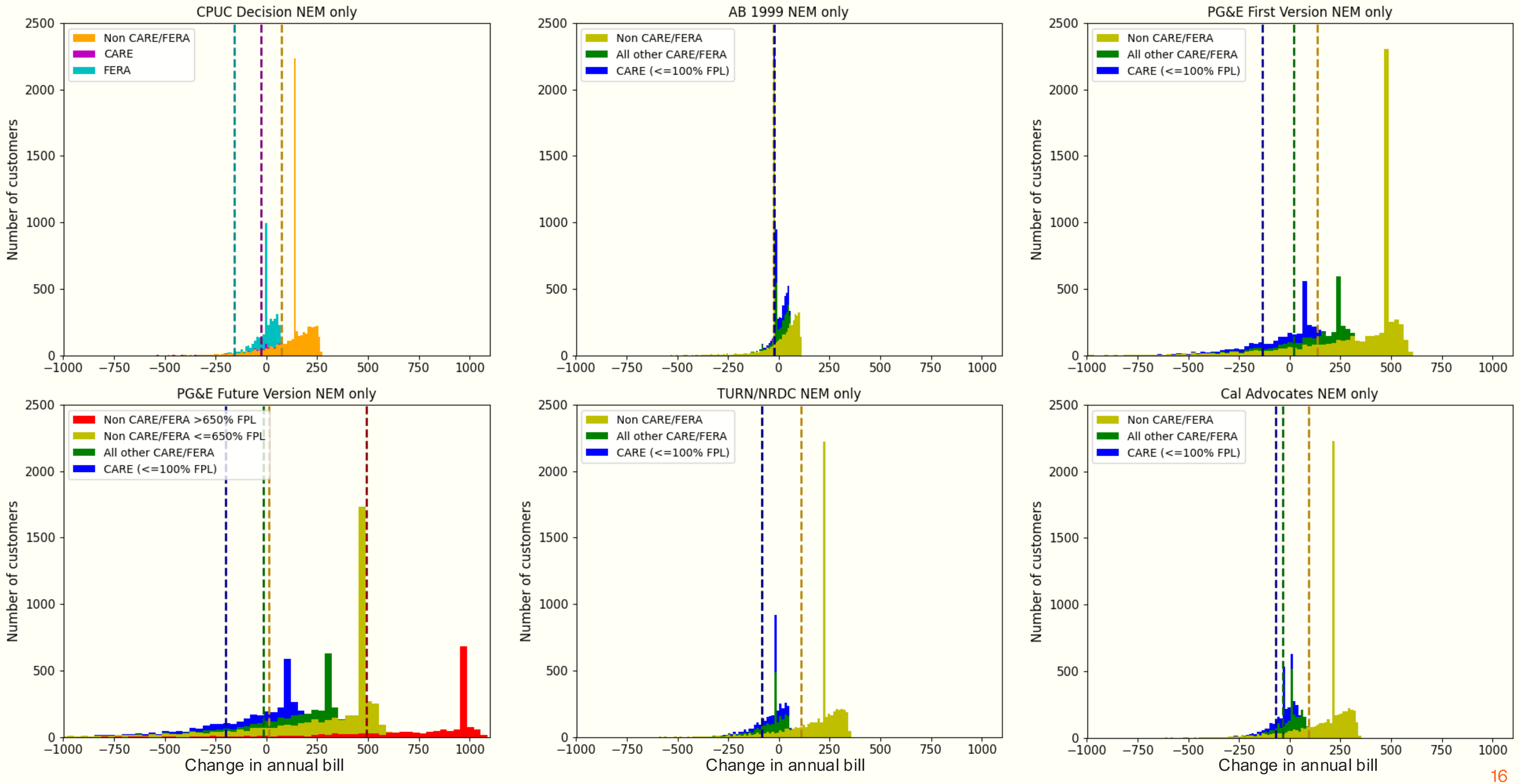
Distribution of Bill Impacts in Stockton



NEM Bill Impacts in Current Service Territory

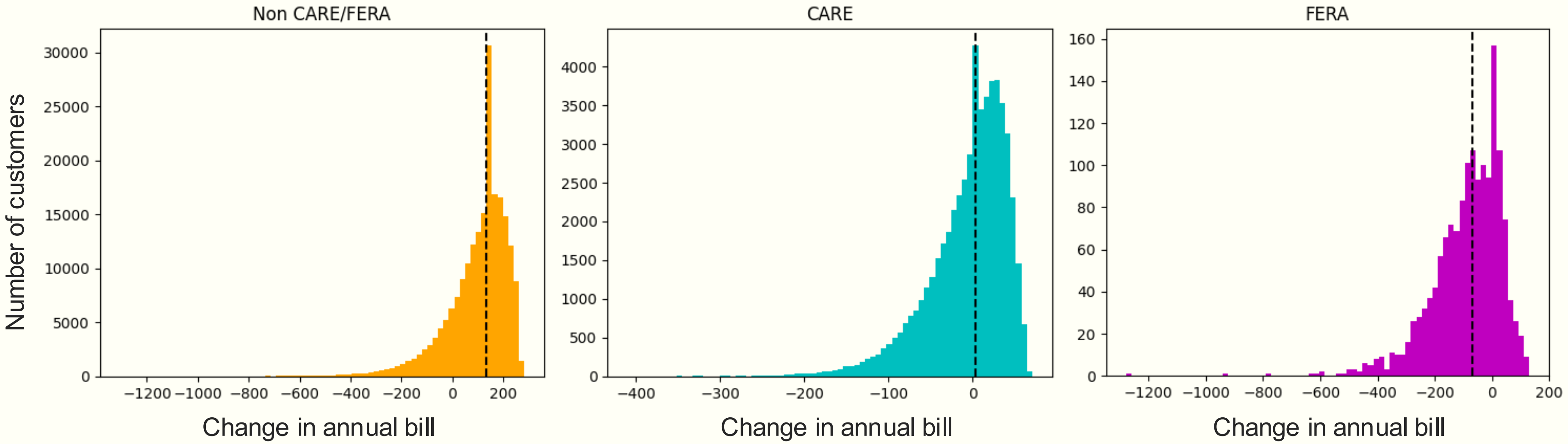


NEM Bill Impacts in Stockton



Interaction of IGFC and Minimum Delivery Charges

Breakdown of CPUC Decision bill impacts for current service territory customers



- Prior to IGFC, net exporting customers were required to pay a minimum delivery charge
- Per D.24-05-028, fixed charges will replace minimum delivery charges. Net exporters under IGFC will be billed the fixed charge associated with their income tier.
- The bill impact for customers with a net usage of zero or below is the difference between minimum delivery and fixed charges. This leads to the large "spikes" seen in the bill impact histograms.

	CARE	FERA	Non-CARE/FERA
Annual sum of minimum delivery charges	72	143	143
Annual sum of fixed charges	72	143	285
Difference	**0**	**0**	**142**

As shown above, there are "spikes" at 0 for CARE and FERA customers and 142 for non-CARE/FERA.

Conclusions

- A majority of customers in Ava's current service territory are worse off under all examined IGFC designs
- Stockton customers fare better due to comparatively higher usage and lower income
- In Ava's current service territory, a majority of CARE/FERA customers benefit <u>only</u> under the TURN/NRDC and Cal Advocates proposals.
- In Stockton, a majority of CARE/FERA customers benefit under <u>all</u> examined IGFC designs
- A high differential in fixed charges for low- and high-income customers can reduce bills for low-income customers by shifting costs to higher-income and rooftop solar customers.
- Lower fixed charges result in a smaller magnitude of bill impacts, but don't necessarily increase the number of low-usage customers that save money under IGFC
- IGFC benefits customers with high usage. Usage may increase over time with electrification, improving customer outcomes.
- Ava customers may also be disadvantaged due to higher incomes compared to state average. The IGFC income brackets, defined by CARE and FERA enrollment status, may not be appropriate for Bay Area cost of living

Appendix

Sources

- **Current rates:** E3 Fixed Charge Tool
- **Cal Advocates rates**: Cal Advocates Demand Flexibility Opening Brief
- **PG&E first version rates:** Supplemental Testimony of Southern California Edison Company, Pacific Gas and Electric Company, and San Diego Gas & Electric Company Addressing Income-Graduated Fixed Charge Proposals. Joint IOUs' Exhibit 4
- **PG&E future version rates:** Joint Testimony of Southern California Edison Company, Pacific Gas and Electric Company, and San Diego Gas & Electric Company (the Joint IOUs) Describing Income-Graduated Fixed Charge Proposals
- **CPUC decision rates:** CPUC Decision Addressing Assembly Bill 205 Requirements for Electric Utilities, E3 workbook provided by Energy Division
- **TURN/NRDC rates:** Joint Opening Brief of the Utility Reform Network and the Natural Resources Defense Council on Phase 1 Track A Issues Relating to the First Version Income-Graduated Fixed Charges
- **Alameda poverty statistic:** *S1701*, *2022 American Community Survey 1-Year Estimates*
- **Average residential consumption in California:** EIA 2020 Residential Energy Consumption Survey (RECS)
- **Overview of "first" vs. "future" version proposals:** Joint IOU Demand Flexibility Opening Brief