



California Alternate Rates for Energy (CARE) & Low Income Affordability Metrics



CPUC Energy Division

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California Alternate Rates for Energy (CARE) Program

Measures of Energy and Household Burden from the 2016 Low Income Needs Assessment





California Alternate Rates for Energy (CARE) Program

- CARE was established by the California Legislature in 1989 to provide financial assistance to low income residential gas and electric customers to help them afford essential utility services.
- The current CARE discount ranges between 30-35% for electric charges and 20% for natural gas charges.
- Eligibility for participation is set at 200% or less of Federal Poverty Guidelines (FPG).
- The CARE discount and income eligibility threshold are set by the Legislature.
- CARE currently provides approximately \$1.3B in annual subsidies and serves approximately 4.5 million low income households statewide (~90% enrollment).





Measures of Energy and Household Burden

- The 2016 Low Income Needs Assessment examined several different ways to look at household circumstances and challenges faced to meet energy-related and other basic needs.
- These metrics only offer partial view of trade-offs, different needs, and various combinations of resources used to cover household living expenses.
- The purpose of this portion of the study was intended to provide further understanding of different issues that may be associated with energy affordability and burden and further inform the Commission's low income programs.





Qualitative Measures of Energy and Household Burden

Measure	What it Measures	Key Inputs
Energy Insecurity	Household challenges regarding affordability of energy bills and monthly trade-offs between meeting energy needs and bill payments	Self- reported difficulty paying energy bills, household disposition and motivation to save energy
Material Hardship	Household challenges regarding broader affordability of basic necessities such as food, shelter, and energy, etc.	Household income, household size, and self-reported difficulty paying household bills and basic living expenses

Source: 2016 Low Income Needs Assessment Final Report





Quantitative Measures of Energy and Household Burden

Measure	What it Measures	Key Inputs
Energy Burden	Actual home energy costs as a percentage of household income	Household energy expenses and income
Modified Energy Burden	Actual home energy costs plus valuation of medical, housing, and food stamp assistance as a percentage of self-reported gross household income	Household energy expenses, income and valuation of non-cash assistance

Source: 2016 Low Income Needs Assessment Final Report





Key Findings

Energy Burden	<p>Households in the mountain and desert regions and those that include a member with a disability faced higher levels of burden.</p> <p>The 2016 study found Low-income customers faced energy bills that, on average, amounted to 5.6 percent of their self-reported income</p> <p>The prior 2013 study reflected an 8% energy burden for low-income customers</p> <p>Note: Differences in the sampling and self-reported telephone survey income methodologies compromise the comparison of burden over time.</p>
Modified Energy Burden	<p>Modified energy burden for low-income households was 4.1%</p>
Energy Insecurity	<p>Households with seniors reported more struggles than other low-income households in paying energy bills.</p>
Material Hardship	<p>Working-age adults with dependents face more challenges paying basic living expenses overall.</p>





CARE and Baseline Statutory Mandates in Residential Rate Reform and General Rate Case Phase II

- The CARE discount and baseline quantity provide rate assistance to residential electric and gas customers.
 - Annual rate design changes to the electric CARE discount are bringing it within the statutory limit between 30% and 35%, as mandated by AB 327.
 - PG&E and SCE were recently ordered to use a line-item discount like SDG&E to improve transparency of the value of the CARE discount.
 - “Baseline” is the quantity necessary to supply a significant portion of the reasonable energy needs of the average residential customer, was recently reviewed in PG&E’s and SCE’s GRC Phase II proceedings.
 - Medical Baseline mandated by SB 711 establish an additional baseline quantity for eligible customers. MB customers are also specifically excluded from default TOU by PU Code §745.





Legislative Reporting Tools: AB 67 Report on Utility Costs and SB 695 Report on Actions to Limit Costs and Rate Increases

- **The AB 67 and the SB 695 reports monitor cost-of-service recovery and actions to reduce rates for electricity and natural gas customers**
 - **Electric System Average Rate (SAR), defined as an IOU's total authorized revenue requirement divided by total kWh sales, is a measurement of an IOU's cost to serve electricity.**
 - **SAR is tracked relative to inflation, which is based on U.S. Department of Labor, Bureau of Labor Statistics Consumer Price Index (CPI).**
 - **The CPI market basket is developed from detailed expenditure information provided by families and individuals on what they actually bought.**
 - **The AB 67 report focuses on historical SAR and the SB 695 report examines some of the drivers of SAR trends for future cost implications.**





Affordability in CPUC Rate Proceedings: Tier 1 and Baseline Quantities of Electricity

- Tier 1 of electric rates, sometimes called the baseline tier, may serve as a proxy of “essential use” as SB 711 defines baseline as covering a “significant portion of the reasonable needs” of the average residential customer.
- Baseline methodology is not standardized across IOUs.
 - SDG&E Tier 1 includes usage up to 130% of baseline, and PG&E and SCE Tier 1 is up to 100%.
 - Studies for essential use were recently ordered in PG&E’s and SCE’s GRC Phase II proceedings, including collecting information on household size, building features, and appliances.
- Effects on Tier 1 from residential rate reform tier consolidation (“glidepath rate changes”) are limited to avoid rate shock.
- Fixed Charges, which may disproportionately affect Tier 1 customers, are deferred until at least one year after the start of default TOU.
- Baseline tier for TOU is not statutorily required but is directed by CPUC for default TOU rates.





Assessing Affordability: Unreasonable Hardship for Economically Vulnerable Customers in Hot Climate Zones

- The decision adopting findings required pursuant to **Public Utilities Code §745** for implementing residential TOU rates required consideration of impact of TOU rates on certain customer groups.
- Opt-in TOU pilots were conducted over Summer 2016 by PG&E, SCE, and SDG&E, and a report summarizing the first interim evaluation of the opt-in pilots was issued April 2017 by Nexant, the consultant selected by the TOU Working Group to inform its work on TOU pilot design.
- The Nexant report included an economic index that indicated the degree of household economic hardship by incorporating factors beyond simple household income, and was assessed in the Section 745 decision as part of determining economic hardship.

Hardship Caused on Customers in Hot, Inland Areas

- **Electricity Burden**, defined as the percentage of a household's annual income that is spent on electricity, was also considered during the Section 745 proceeding.
- Customer bill data and household income data was used for this analysis.



Affordability in Future CPUC Rate Proceedings

CARE Restructuring

- A Pre-Hearing Conference in October 2018 contemplated including CARE Restructuring in Phase IV of the RRR rulemaking. If determined to be in scope, restructuring may involve evaluating proposals with respect to IOU refining the methodology for determining CARE eligibility based on locational (zip code) data.

Rate Designs for Energy Management Tools

- A smart thermostat pilot for low-income customers that SDG&E kicked-off in October 2018 may inform future rate designs for new energy efficiency technologies.

Review Need for a New Baseline Order Instituting Rulemaking

- Last Baseline OIR was issued in 2001 and did not include an evaluation of the definition of climate zones.
- Notwithstanding the essential use studies ordered in decisions for PG&E and SCE most recent GRC Phase II proceedings, a new Baseline OIR could examine definitions of climate zones in determining baseline quantities for Basic and All-Electric residential customers, as well as defining “residential customer” in terms of household and dwelling characteristics.





Thank You!

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