BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA

Order Instituting Rulemaking on the
Commission’s Own Motion to Conduct a
Comprehensive Examination of Investor Owned
Electric Utilities’ Residential Rate Structures, the
Transition to Time Varying and Dynamic Rates,
and Other Statutory Obligations.

Phased 1 Opening Brief of Southern California Edison
Company (U 338-E)

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(U 338-E)

I.
INTRODUCTION AND SUMMARY OF RECOMMENDATIONS


The Commission recently held:

In rate design the object of the exercise is to set retail electric prices so that the utility has a reasonable opportunity to recover its authorized revenue requirement while the customers pay a fair rate that is based on the cost to serve them.1

The objective in this OIR, for residential rates, is no different and is essential to achieving future Commission objectives for residential rate design. What is different is that for the first time in over a decade, the Commission is now free from legislative restrictions that had prohibited it from making meaningful revisions to residential rates to achieve fair rates that better reflect the cost of service. The

1 D.14-12-080, p. 13.
Commission has a long-overdue opportunity, afforded by Assembly Bill (AB) 327, to continue reforms that began with baby steps in 2009 with Senate Bill (SB) 695. If done right, timely reform of tiered rates will open up many additional opportunities to pursue important Commission policies, including widespread adoption of residential time-of-use rates.

A. **SCE’s Proposed Reforms Are Reasonable, Fair, And Overdue**

SCE’s rate reform proposal (SCE’s Proposal) has five main components that will be implemented gradually over a four-year period to ensure reasonable impacts on customers who face bill increases without unduly deferring relief for customers who have long suffered. SCE’s Proposal would fairly design rates for over four million residential customers while preserving transparent subsidies that the Legislature and the Commission have long held are important for low-income and low-usage customers.

1. **SCE Proposes To Reduce The Number Of Tiers From Four To Two, And To Narrow The Differential Between The Rates Charged For Each Tier To Significantly Reduce The Existing Subsidy From Higher-Usage to Lower-Usage Customers Relative To Actual Costs.**

SCE’s tier-flattening proposal moves in lock-step with the thoughtful *Staff Proposal for Residential Rate Reform in Compliance With R.12-06-013 and Assembly Bill 327*, dated May 9, 2014 (ED Staff Proposal) toward an improved, simpler, easier-to-understand rate structure. This component of SCE’s Proposal is the single most effective and efficient way to reduce hidden intra-class subsidies because today’s steeply tiered structure results in charging higher-usage customers rates that far exceed the cost of serving them, especially during hot summer months when they cannot easily reduce their consumption. In fact, reducing the highest tiered rate from approximately 200% to 120% of the baseline

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2 Pages ii and 12 of Exhibit SCE-101 show a detailed outline of SCE’s proposed roadmap by topic area and year.

3 The ED Staff Proposal was attached to the January 6, 2014 *Amended Scoping Memo and Ruling of Assigned Commissioner and Assigned Administrative Law Judge* and was admitted as an exhibit pursuant to Ordering Paragraph 9 thereof. A corrected version of the ED Staff Report, dated May 9, 2014, was appended to EDF’s rebuttal testimony (Exh. EDF-102).
rate, SCE’s Proposal will greatly reduce the risk of bill volatility during heat storms that previously led to customer discontent in 2006 for SCE’s and 2008 for PG&E’s customers.\footnote{Exh. SCE-101/Garwacki, p. iii.} A two-tiered structure with a 20% differential between the baseline (Tier 1) rate and the Tier 2 rate is much simpler and easier to understand than the current steeply-tiered structure. It is also reasonable because it has nearly the same 15% differential that the Commission found reasonable before the 2001 energy crisis as an “appropriate inverted rate structure” with “an appropriate gradual differential between the rates for the respective blocks of usage,” which are two long-standing statutory requirements that were not modified by AB 327.\footnote{California Public Utilities Code Section 739.7 requires the Commission to “retain an appropriate inverted rate structure,” and Section 739(d)(1) requires that the Commission “establish an appropriate gradual differential between the rates for the respective blocks of usage.”} The effect of tier-flattening, together with a monthly fixed charge of $10 ($5 for CARE customers), will reduce from approximately $600 million to $260 million the subsidy currently paid by higher-usage to lower-usage residential customers relative to SCE’s actual costs.

2. **SCE Proposes To Phase-In A Modest $10 Fixed Charge ($5 For Care Customers) To Reasonably Reduce Seasonal Bill Volatility And Provide An Appropriate Price Signal To Customers Regarding Fixed Costs While Continuing To Recover The Vast Majority Of Costs Through Volumetric Rates.**

The purpose of a fixed charge is to collect a reasonable portion of the fixed costs of serving residential customers, which SCE incurs for all residential customers every month regardless of how much energy they use. Fixed charge revenues offset, dollar-for-dollar, customers’ variable (volumetric) energy rates, so they are an important way—together with tier-flattening—to reduce seasonal bill volatility and to provide an appropriate price signal to customers that there are fixed costs to serve them that differ from the variable costs that they can control. Today, SCE’s fixed charge of under $1 recovers only 1% of the residential revenue requirement. Under SCE’s Proposal, that will increase over three years to only 8% at most—even though SCE incurs far greater fixed costs to serve residential customers than it can legally recover under the statutory cap. That means that towards the
end of SCE’s transition period, SCE will continue to collect over 92% of its costs through volumetric rates. This change is modest and will not “unreasonably impair incentives for conservation and energy efficiency” (a statutory mandate\(^6\)). It is nonetheless significant enough to put residential customers on a more equal footing as all non-residential customers of SCE who have traditionally paid reasonable fixed charges, including small commercial customers whose fixed charges are routinely approved by the Commission with the full support of intervenors charged with protecting the interests of both residential and small commercial customers.

The increased fixed charges will also bring California’s three largest investor-owned utilities (IOUs) in line with utilities nationally who have long-employed fixed charges, as well as the smaller electric IOUs regulated by the Commission who fortunately evaded the now-repealed statutory restrictions that applied only to the large IOUs. This last point is important because the outcome of this Rulemaking applies to all electric utilities regulated by the Commission, not just to the three large IOUs, which affords a key opportunity for the Commission to achieve consistency and fairness for all residential electric customers.

### 3. SCE’s Proposal Preserves Or Enhances Discounts For Low-Income Customers

While Appropriately Addressing Broader Affordability Considerations For All Of SCE’s Customers.

SCE’s two income-qualified rate assistance programs, CARE and FERA,\(^7\) currently provide direct subsidies to eligible customers and will be preserved or enhanced under SCE’s Proposal. Approximately 1.3 million CARE customers, which constitute nearly a third of all residential customers of SCE, will continue to receive an average effective discount of 32.5% off a non-CARE bill, which is exactly in the middle of the statutory CARE discount range mandated by AB 327 and is highest level of discount for CARE customers in SCE’s history. The FERA program is not mandated by law, but was created by the Commission as a “tier 3 exemption” program in 2004 for large, low-income households

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\(^6\) California Public Utilities Code Section 739.9(e)(2). Hereinafter, references to “Section,” unless otherwise specified, are to sections of the California Public Utilities Code.

\(^7\) FERA stands for Family Electric Rate Assistance Program, and it is described in more detail in Chapter V.B.
whereby customers paid Tier 2 rates for consumption in Tier 3 only and only for large IOUs whose rate structures were broken as a result of energy-crisis legislation. SCE proposes to take the 2009 – 2013 average FERA discount, which actually equals the current maximum FERA discount of 10% for customers with usage solidly within Tier 3, and apply it instead as a flat discount off of all FERA customers’ bills regardless of their usage, which makes the discount simpler and more generous than it is today.

Having a strong CARE program that complies with the law and enhancing the FERA program to make it simpler and more generous are important measures for assessing the affordability impacts and reasonableness of SCE’s Proposal. However, there are other measures, including the following:

- The “electric energy burden” metric, which is a customer’s electric bill as a percentage of the customer’s total income, reveals that the percentage of household income spent on electricity bills is generally quite small relative to other household budget items, ranging from 1% to 2%. SCE’s Proposal results in only a modest increase to the already low energy burdens of low-usage customers. For high-usage customers, for whom the electric energy burden is highest, SCE’s Proposal offers some relief, even though these customers’ energy burdens will still remain higher than those of low-usage customers. This is the direction the Commission should be going with rate reform.

- SCE’s data show that high-usage CARE customers, like high-usage non-CARE customers, are the most likely to contact SCE to seek payment assistance, likely because their energy burdens are higher. As cited below, both the Commission and its staff took heed of these statistics, in the Phase 2 decision and the ED Staff Proposal, and these are more valuable indicators than percentage bill impacts at identifying who needs immediate relief. SCE’s tier-flattening and fixed charge proposals moderate high bills for these customers even though they will continue to pay more when using more electricity.

- SCE’s Proposal complies with the baseline statute, which requires that usage for essential supplies of electricity are provided at an affordable rate. Medical baseline customers,
who receive an additional allotment to the extent they use devices critical to meeting their medical needs, also receive below-average rates at an affordable price. SCE’s Proposal does not modify the medical baseline program.

- The Commission’s approval of SCE’s Phase 2 settlement with ORA, TURN, Sierra Club, NRDC and CUE resulted in sizable percentage increases to rates for non-CARE and CARE Tiers 1 and 2 (12% and 17% relative to January 1, 2014 rates), but no notable customer outcry resulted. This suggests not only that the dollar (as opposed to percentage) increases were reasonable for low-usage customers, but that impacted customers were sufficiently educated by SCE about what to expect and why.

4. **SCE Will Leverage Its Effective Customer Education And Outreach From Phase 2 To Support Its Reasonable Phase-In Plan.**

Before summer 2014, SCE undertook a targeted outreach campaign for customers who were most likely to feel the impact of the Phase 2 reforms, which constituted the first step in the process to normalize tiered rates under AB 327. SCE’s website information, web-based tools, letter campaigns, customer panels, and media strategy worked in tandem to educate and prepare customers whose rates had not risen in years, and the efforts paid off. This same strategy will apply to the Phase 1 reforms, and will appropriately address some parties’ criticisms about customers not preferring or understanding fixed charges, concerns that the Commission has already held can be overcome—as they have elsewhere in California and around the country—with proper education and a gradual phase-in.

5. **SCE’s Opt-In, Non-Tiered TOU Tariffs Provide Important Learning Opportunities And Prepare The Way For Default TOU Pilots.**

In December 2014, the Commission approved two opt-in TOU tariffs for SCE’s customers—one suitable for low-usage customers, with a baseline credit and a fixed charge that mirrors SCE’s current default tiered rate schedule; and one attractive to high-usage customers, with a fixed charge of $16 and a lengthened super-off peak period to encourage charging of electric vehicles and other appliances. The new tariffs, subject to a cap of 200,000 customers, will permit some high-usage customers to get relief immediately from the punitive tiered structure. To successfully market these
rates, and to provide customers with an online rate analysis tool that can assist them in finding the best rates for their usage patterns and lifestyles, SCE requests authorization to record incremental expenses in a memorandum account.

SCE plans to learn what it can from opt-in TOU rates, including about customer recruitment and retention on the rates, but the best way to learn about default TOU is by simulating it. The first time that can happen by law is 2018, at which time SCE—together with the majority of active parties in this proceeding—proposes to launch default TOU pilots following coordination on pilot design and other important issues with interested stakeholders (and after obtaining requisite cost recovery). It is prudent for the Commission not to rush into default TOU, which has enjoyed only scattered success in the few places in the world where it has been done, and to instead lay the groundwork for widespread adoption of cost-based TOU regardless of its ultimate decision on this issue. That groundwork is facilitated by reforming the broken tiered structure (which will reduce revenue shortfalls associated with migrations to TOU rates), exploring seasonally differentiated tiered rates as a predecessor to TOU, and resisting the calls to adopt “introductory” tiered TOU rates, which threaten to be more confusing than today’s complicated tiered structure.

B. Opposition To SCE’s Proposals Reflects Interests Too Narrow To Adequately Address Comprehensive Reform For Over Four Million SCE Customers

The remainder of this Opening Brief supports SCE’s Proposal laid out above and addresses, in detail, the contrary proposals by intervenors, whose positions are summarized and addressed below.

1. Consumer Advocates

With respect to tiered rate reform, ORA proposes—at a high-level—a two-tiered rate structure with a reasonable rate differential, which is close to SCE’s position. That general alignment between SCE and ORA is encouraging and not insignificant. However, ORA weighs down its proposal with contingencies about future revenue requirements that neither SCE nor the Commission can predict, to the point where ORA is unable to look beyond even 2015 to lay out year-by-year tier differential adjustments. That wait-and-see hesitance risks undermining two years of hard work by all parties, the assigned ALJs and the Commission staff to set out a predictable road map for reform over the OIR Rate
Period. When the Commission undertook a similar effort in the late 1980s and early 1990s to reduce tier differentials to appropriate and gradual levels, it did so steadily and consistently, neither ignoring revenue requirement changes nor holding reform hostage to them.\(^8\) Just as the Commission sets rates for customers over multi-year horizons in every General Rate Case Phase 2, and appropriately accounts for revenue requirement changes either in that proceeding or in the ones pursuant to which the revenue requirement changes are authorized, the same could be done here.

CforAT offers no rate reform proposal at all, and thus again casts a vote for the status quo, as it did in Phase 2 of this proceeding. The Commission should do what it did in Phase 2, which is to reiterate the need for reform and undertake it in earnest. Proposals that make no movement should be accorded no weight at all.

TURN has a very specific tier proposal—three tiers, with nonbaseline rate ratios of 1.6 and 1.3 to 1.0—but it fails the basic test of justifying why, despite the simplicity, understandability, and historical Commission and customer preference for two tiers, the Commission should settle on three. An average of the baseline-to-non-baseline tier rates under TURN’s proposal reveals a 42% differential. That is still too high to achieve meaningful reform and stops short of putting California on par with peers nationally. In the alternative, TURN proposes that if the Commission rejects its request to roll back SCE’s current fixed charge to $0, it should adopt a “composite tier differential” of “at least 20%.” This rate design mechanism, not explicitly required by law, tries to account for fixed charge revenues within the Tier 1 price on the theory that because customers pay the fixed charge regardless of usage, the Tier 1 rate should be viewed as a “composite” of the energy rate and the fixed charge to determine whether the rate structure is appropriately inverted (as opposed to flat or declining). The problem is that TURN’s proposal for an “at least” 20% differential is arbitrary, has never been adopted as a target by the Commission, and is contradicted by composite tier rate ratios of Commission-regulated utilities whose rate structures must comply with the same laws invoked by TURN. More importantly, because TURN

\(^8\) See Exh. SCE-106/Garwacki, p. 15 \emph{et seq.} for a description of the Commission’s tier-flattening trajectory beginning in 1989 and concluding in 1996.
is ostensibly concerned with the degree of incline in a tiered rate structure, it should not matter—at all—whether that incline is calculated using a three-tiered structure without a fixed charge, or using a two-tiered structure with a fixed charge. Nor should it matter where on the spectrum between $0 and $10 the fixed charge lies. That is why TURN’s primary proposal, with a 42% “incline” set at twice the level of its alternate proposal (of at least 20%, with no explanation of what would or should trigger more than a 20% composite ratio), underscores the arbitrariness of both.

With respect to opposition to fixed charges, ORA argues that fixed charges cannot be justified based on marginal cost ratemaking, even though the Commission has a longstanding practice of doing so (even for residential customers, at the urging of ORA’s predecessor) and continues to do so for all other rate groups. Neither TURN nor ORA reconcile their zealous opposition to fixed charges with the prevalence of these charges—with no customer uproar—elsewhere in California and across the country. The Commission has also held, correctly, that any customer aversion to fixed charges can be overcome with appropriate phasing-in and education.

On one hand, TURN argues for a reduction from SCE’s current $1 per month fixed charge achieve consistency with PG&E and SG&E, who have no customer charge. But on the other hand, TURN ignores the inconsistent and inconvenient fact that the Commission has adopted fixed charges for smaller California electric IOUs and has retained them for over 25 years, with current non-CARE levels of $7 per month, 70% of the statutory limit, and slightly above $5 per month for CARE customers, which is just above the statutory limit for 2015. That inconsistency between all the electric IOUs in California resulted unintentionally from AB 1X restrictions that applied to the large electric IOUs, but not to the small IOUs. The Commission has the opportunity to achieve consistency by realizing the promise of AB 327, which, as of January 1, 2015, applies to all six electric IOUs.

TURN, ORA and almost every other non-IOU party except UCAN urge the Commission to adopt a minimum bill as a substitute for a fixed charge, but that would be a false and woefully inadequate substitute at the $5 to $10 levels recommended by intervenors. That is because a minimum bill applies to only a minority of customers with very low usage, meaning that the revenues it would
collect—compared to a fixed charge for *every* residential customer—would have a very limited effect on reducing subsidies paid by higher-usage customers or moving volumetric rates closer to cost.

TURN and ORA, together with some solar and environmental intervenors, also argue that fixed charges do not encourage conservation or that they dilute conservation and energy efficiency incentives, but that is not the standard the Legislature has directed the Commission to use. Under AB 327 fixed charges should not “unreasonably impair incentives for energy efficiency and conservation.” Even before AB 327, concerns similar to these did not prevent the Commission from finding in the 1980s and 1990s that the benefits of cost-causation and avoidance of cross-subsidies (and lack of evidence that energy efficiency goals will not be met) trump these arguments opposing fixed charges. Fixed charges do not adversely affect conservation for many reasons, not least of which is because customers respond to *average rates*, not to individual rate components in their bills. Because SCE’s proposed fixed charges represent less than one-third of its total fixed costs and less than 8% of total residential revenues, a strong incentive for energy efficiency and conservation remains.

With respect to affordability concerns raised by consumer groups, it is telling that TURN ignores completely SCE’s energy burden statistics. Instead, it charges that the IOUs’ rate reforms are regressive, even though the evidence shows that the beneficiaries of the reformed rates will be middle-income, fixed income, and low-income *families* who are paying a penalty for largely unavoidable high usage in hot summer months. The proper correlation is between household *size* and usage anyway, not between *income* and usage. For its part, ORA raises a technical and inconsequential attack on SCE’s energy burden statistics, arguing that its values are questionable because the averaging was not done consistently with the brand new way the LINA Report calculates energy burden for low-income customers. But ORA’s main complaint with SCE’s methodology makes only a small difference in the individual numbers produced because SCE already accounted for outliers that ORA fears would corrupt the data, leaving intact the overall upshot of the energy burden metrics, which is that *higher usage customers have higher energy burdens than low-usage customers*, and they deserve and need relief from subsidies that do not reflect the cost to serve those higher-usage customers.
Regarding TOU rates, SCE and ORA agree that the more cost-based the tiered rates are, the easier the move to cost-based TOU rates. That fact, when understood and translated into meaningful rate reform, neutralizes TURN’s concern that a mass migration to TOU will create revenue shortfalls that would disadvantage low-usage customers. With respect to default TOU, ORA’s proposal is too inflexible and hurried. Instead of pushing for default TOU by 2018 with “introductory” tiered TOU rates that did not benefit from pilot studies, SCE, TURN, and others support a measured approach that permits the Commission and interested stakeholders to understand and study default TOU before the Commission embarks on it statewide.

2. Environmental Advocates

Environmental advocates look at rate reform through the narrow prism of conservation and energy efficiency, worrying that the reforms will roll back California’s gains in these important areas. Without analyzing prior Commission decisions on rate design, or balancing rate design principles in assessing the IOUs’ proposals, their tiered rate ratios make little to no movement from the status quo. The environmental advocates’ alarm is unwarranted, however, because the IOUs’ proposals will unlock conservation and energy efficiency incentives for large groups of customers whose rates were artificially depressed under the broken tiered structure. Thus, the IOUs’ proposals will have a positive, if not negligible, impact on overall consumption and energy efficiency incentives. In fact, the only study that analyzed the impact of steeply tiered rates on overall consumption, SCE’s undisputed Anaheim study, concluded that when comparing SCE’s residential customers’ consumption under steeply tiered rates with neighboring City of Anaheim customers’ consumption under less steeply tiered rates, there was a slight increase in usage of SCE’s customers. Thus, steep tiers are not the panacea for conservation that environmental advocates assume they are. Rather, because consumers respond to average and not marginal prices, the modest overall increases to low-usage customers’ bills will likely increase the pool of customers who receive a conservation signal. Many years of artificially depressed lower-tier rates prevented millions of California residents from getting that very signal before, and there is room to conserve for even Tier 1 customers because the level of discretionary usage in Tier 1 has risen over time, another fact no party disputed. In any event, no party offered any evidence that tiered rates, rather
than direct incentives and building/appliance standards, advance state policy in this area, so the
Commission should not worry that the important steps it takes in this proceeding will slow down its
progress as the vanguard among energy efficiency-minded states.

3. **Solar Advocates**

Solar advocates made up nearly half the number of active parties in this proceeding, despite the fact that less than 2% of SCE’s residential customer population has bought or leased solar panels to generate electricity. Many of the advocates for solar parties represent the same handful of large solar installers, whose executives have made representations to investors during the course of this proceeding that directly contradict the testimony of their witnesses about the alleged impact of rate reform on the pace of future solar installations. The narrow focus of the solar parties appears to be to preserve their pecuniary interests in the development of solar generation under a steeply tiered rate structure, which they attempt to justify on a cost-basis using unreasonable methodologies that are addressed and discredited in detail in Chapter III.A.4. The solar parties’ reform proposals are the most sluggish of all (ending in 2020 for three of the five parties) and, even at that late end-state, their proposals make little movement away from the status quo.

By contrast, SCE’s goal is to achieve a reasonable rate structure that applies as soon as practicable to all of its four million-plus residential customers, not just to the fewer than 70,000 or so SCE residential NEM customers. In any event, because the levelized cost of solar is decreasing year over year, and the cost to new customers will remain lower than the lower-tier prices that are projected from SCE’s Proposal, the value proposition for new customers considering solar will remain even taking into account the reforms SCE urges the Commission to adopt.

Equally importantly, the interests of solar parties in future rate structures should be addressed elsewhere by the Commission, in the rulemaking dedicated to developing the NEM successor tariff. In that proceeding, required by statute to be completed by the end of 2015, interested stakeholders will input rates developed in this proceeding and use them to fully assess the impact on NEM customers of rate changes and netting strategies, among other things, and a comprehensive record will be developed in that proceeding that considers customer adoption rates, cost-shifts, and ratepayer impact.
tests in a far more robust and focused manner than was performed in this proceeding for this small subset of customers.

II. BACKGROUND

The February 13, 2014 Assigned Commissioner Ruling requiring utilities to submit long-term rate change proposals defined the “OIR Rate Period” for Phase 1 as covering January 1, 2015 through December 31, 2018. It is instructive to place this four-year period within its proper historical and regulatory context so that the Commission can better evaluate the phase-in of the proposed reforms. This is especially true given the narrow timeframe that some intervenors considered in evaluating the present rate inequities, and their uninformed views about the statutory and regulatory history affecting residential rate design over time. The Phase 1 IOU tiered rate reform proposals are continuations of limited but unsuccessful measures that began with the passage of Senate Bill (SB) 695 in 2009 and that have now been greatly facilitated by Assembly Bill (AB) 327 in 2013 for the OIR Rate Period. These Phase 1 proposals set the stage for larger-scale adoption of cost-based residential time-of-use (TOU) rates in 2018 and beyond.

A. The Origins Of The Residential Rate Design Inequities

Eighteen years ago, in 1996, SCE’s default residential tariff consisted of a two-tiered rate structure with baseline and nonbaseline rates, and a customer charge of less than one dollar per month, with rates for the two tiers separated by a differential of approximately 15%. These rates were frozen by AB 1890 in late 1996. In 2000 and 2001, wholesale power prices skyrocketed. Substantial rate increases were needed so that PG&E, SCE, and SDG&E could continue procuring power and serving their customers. In response to the crisis, the California Legislature and the Commission took a number of actions beginning in 2001 that substantially changed the relatively simple, two-tiered residential rate structure that existed prior to 2001. Importantly, the two pieces of legislation described below—AB 1X and SB 695—applied to the state’s three major IOUs but did not apply to three small electric IOUs.

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2 Assigned Commissioner’s Ruling Requiring Utilities to Submit Phase 1 Rate Change Proposals, p. 4.
under the Commission’s jurisdiction (PacifiCorp, Liberty Utilities, and Bear Valley Electric Services (a division of Golden State Water Company)). Although all six electric IOUs are bound by the provisions in AB 327 and the outcome of this OIR, the three small IOUs completely averted the negative rate structure outcomes resulting from AB 1X. The evolution of their current tiered rate structures—unfettered by AB 1X and SB 695—closely reflects the structure SCE, PG&E, SDG&E, and the Energy Division staff believe should exist after the phase-in process for rate reform has ended and will facilitate further future evolution to optional or default TOU rate structures and the achievement of the Commission’s policy objectives.

1. **Assembly Bill 1X**

   Water Code Section 80110(e) enacted by AB 1X, capped electricity charges for the three large IOUs as of February 1, 2001 “for existing baseline quantities or usage” up to 130% of the baseline allocations that customers received on that date.\(^\text{10}\) The AB 1X rate cap, which applied to approximately 70% of all residential usage, forced utilities to increase rates for Tiers 3, 4, or 5, which applied to approximately 30% of residential usage, to recover additional revenues allocated to the residential rate group, including the revenues required for renewable power procurement and infrastructure replacement that benefit all customers. In 2002, the Commission also ordered PG&E, SCE, and SDG&E to establish their baseline allocations at 60% of average usage, the maximum amount allowed under Public Utilities Code Section 739, intending by this action to further reduce electric bills for low-usage customers by protecting more usage from higher rates and rate increases that would affect higher-usage tiers.\(^\text{11}\) In 2004, the Commission held that the “total rates” that applied to 130% of existing baseline quantities or usage could not exceed the amounts charged as of February 1, 2001.\(^\text{12}\) This cap on total rates was later interpreted by the Commission to extend until the California Department of Water Resources (DWR)

\[^{11}\] Id., pp. 10-11, 15. In D.09-08-028, the Commission approved SCE’s request to reduce the baseline allowance to 55% and, in D.13-03-031, further reduced the allowances to 53% as modest attempts to help mitigate the upper tiered rate increases.
\[^{12}\] D.04-02-057, pp. 94-95.
had fully recovered its power charges, potentially as long as twenty years or more until the DWR bondholders had been fully repaid.

As a consequence of these policy decisions and statutory restrictions on residential rates, as utility revenue requirements for the three large IOUs increased over the period from 2001 through 2009, enormous discrepancies developed between volumetric rates for Tiers 1 and 2, which were capped at their February 2001 levels, compared to the non-CARE rates for Tiers 3 and above, which had to increase dramatically in order to recover the increased revenues allocated to the residential rate group. Ultimately, this resulted in enormous differentials between the volumetric rates for usage up to 130% of the baseline allocation, i.e., Tiers 1 and 2, that remained capped at February 1, 2001 levels, and the rates for usage in excess of 130% of baseline (Tiers 3 and above) that increased SCE’s Tier 5 rate to a level of almost as much as 300% of the Tier 1 rate. While this was an unintended and inequitable result, it was the predictable outcome of a rate design that capped rates for usage in a manner that forced all recovery of increased utility authorized revenues into upper-tiered rates. In the Commission’s Phase 2 decision (D.), D.14-06-029, the Commission explained that for over a decade following the passage of AB 1X, “statutory restrictions prevented the utilities from implementing rates that give residential customers an accurate price signal as to the costs of their electricity service.”

2. **SB 695**

By 2009, when SB 695 was passed on an emergency basis, “residential tiered rates did not comport with the Commission’s general policies to design rates consistent with cost to serve.”

SB 695 authorized the Commission to begin making limited, annual increases to non-CARE Tier 1 and

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13 By July 2006, SCE’s four-tier rate structure was scheduled to include a Tier 5 rate, which was projected to increase from the then-current Tier 4 rate of 31.2 cents per kilowatt-hour (kWh) to 48.2 cents per kWh, primarily due to allocation of the DWR revenue requirement and increased fuel and purchased power costs. SCE successfully delayed (and later mitigated their impact) implementing the new rates due to record-breaking heat conditions that had occurred in July 2006 in SCE’s service territory which had caused severe bill impacts even at the lower volumetric rates that existed prior to the scheduled date to implement D.06-06-067.

14 D.14-06-029, p. 3.

15 *Id.*, p. 3.
Tier 2 rates for usage up to 130% of baseline for non-CARE customers within a range of 3 to 5 percent per year until January 2019, with commensurate reductions in volumetric rates for Tiers 3 and above. However, the potential increase for non-CARE Tier 1 was further limited by then-effective Section 739(b), which, importantly, was deleted by AB 327. That statutory provision had required that the composite Tier 1 rate (i.e., the energy rate for Tier 1 plus the fixed charge revenues) be less than 90% of the system average rate.

SB 695 also allowed the Commission to authorize annual increases to CARE Tier 1 and Tier 2 volumetric rates up to a maximum of 3% based on increases to benefits provided under the California Work Opportunity and Responsibility to Kids (CalWORKS) program. However, through 2013, no increases were permitted to CARE Tier 1 and Tier 2 volumetric rates because the Legislature suspended the CalWORKS index.

Meanwhile, the volumetric rate for SCE’s non-CARE Tier 4 remained at historically-high levels of 240% of the Tier 1 baseline rate. Thus, SB 695 failed to solve the following concerns associated with high tier differentials: (1) extreme bill volatility in response to hot weather patterns, (2) the inequity between rates paid by higher-usage customers and lower-usage customers, and (3) the fact that much of the residential usage was exempt from making their fair share of the contribution to recovery of revenue increases associated with grid reliability or increased costs associated with mandates to procure power from renewable resources. Because average costs decline as a function of usage, as explained in Section III.A.4., low-usage customers received (and continue to receive) a significant intra-class subsidy from higher-usage customers due to the mandated inclining block rate structure. As the differential between rates for lower versus higher-usage customers grew over time, the intra-class subsidy relative to cost of service grew from an estimated $200 million in 2001 to over $600

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16 In January 2014, the CARE Tiers 1 and 2 rates for SCE were increased for the first time since 1996 pursuant to a settlement agreement between SCE and consumer groups, D.13-03-031, even though SB 695 had been repealed by then.

17 SCE was authorized to collapse non-CARE rates for Tiers 4 and 5 by a settlement agreement adopted in D.13-03-031.
million in 2012. With this background in mind, D.14-06-029 concluded that despite the changes permitted by SB 695, “residential rates are still not consistent with the Commission’s cost to serve objective and these rates impede the Commission’s ability to implement many other policy objectives.”

B. The OIR Phase 2 Decision (D.14-06-029)

Because SB 695 provided only modest protection from even more steeply-tiered rates, D.14-06-029 launched the first step towards seizing the opportunity that AB 327 provides to rebalance rates. As the Commission explained, AB 327 “allows us for the first time in over a decade to align customer rates with cost of service,” and the ability to approve rates “that are more reflective of cost, in keeping with the Commission’s principle that rates should be based on cost-causation.” The Commission characterized its Phase 2 decision as “begin[ning] to shift a portion of the costs to the lower tiers and prevent the disparity between lower and upper tiers from getting wider over the coming year.” The Commission also found that “[s]ince 2001, lower usage tiers have essentially been frozen resulting in all increases in revenue requirements allocated to residential customers being borne by customers with usage in the upper tiers.”

After D.14-06-029 listed the ten rate design principles developed for use in this proceeding, it explained that “a significant portion of the principles relate to setting rates to reflect cost of service (Principles 2, 3, 7, 8 and 9),” principles which “weigh in favor of setting rates based on cost of service so that consumers have accurate price signals.” Having explained the legislative history affecting the residential rate structure, the Commission reasoned that:

During the past decade, residential rate design has not allocated costs to residential ratepayers in a manner that reflects the individual ratepayer’s

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18 Exh. SCE-101/Garwacki, p. iii, 18.
19 D.14-06-029, p. 4.
20 Id., p. 13.
21 Id., p. 5.
22 Id., p. 10 (emphasis added).
23 Id., Finding of Fact 2, p. 53.
24 Id., p. 13.
impact on the cost of electricity. Instead, rates for certain ratepayers (lower usage ratepayers) have been artificially kept low, and the remaining ratepayers have made up the difference.25

Aside from the fundamental unfairness of the steeply tiered rate structure, the Commission focused on how steeply tiered rates structures produce unacceptable bill volatility for higher usage residential customers. For example, the Commission found that “because residential customers typically do not know at what point during the month their usage will reach a higher tier threshold, customers can experience unexpected large increases in monthly bills for a small increase in usage,” and that this unfair result “is particularly true during high-usage periods such as summer months.”26 Largely for that reason, the Commission found the settlement agreements to be in the public interest because “it is important to implement these rate changes in order to reduce the volatility of summer electricity rates.”27 The Commission also relied on an important finding that “in SCE’s service territory, higher usage customers, both CARE and non-CARE, are the most likely to ask for bill payment assistance or extensions” and that “higher usage customers have, on average, higher energy burdens than lower usage customers.”28

C. **Legal Requirements For Residential Rates**

D.14-06-029 summarized the key legal provisions applicable to the interim residential rate changes it adopted in Phase 2.29 Because these are among the provisions that apply to the evaluation of longer-term Phase 1 rate proposals, they are re-listed here:

- Section 451 requires that rates be “just and reasonable.”
- Section 382(b) as amended by AB 327, states that “electricity is a basic necessity” and that “all residents of the state should be able to afford essential electricity.”
- Section 382(b) directs the Commission to ensure that low-income ratepayers are not “jeopardized or overburdened by monthly energy expenditures.”

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25 *Id.*
26 *Id.* See also Finding of Fact 7, p. 54.
27 *Id.*, p. 50.
29 *Id.*, p. 11.
Section 739.9 defines the “baseline quantity.” Section 739.7 requires the Commission to “retain an appropriate inverted rate structure,” and Section 739(d)(1) requires that the Commission “establish an appropriate gradual differential between the rates for the respective blocks of usage.”

Section 739.1, which was amended by AB 327, addresses the CARE program. Section 739.1(c) requires the average effective CARE discount to be between 30-35% “of the revenues that would have been produced for the same billed usage by non-CARE customers.”

Section 739 which, pursuant to AB 327 replaced the prior Section 739.9, requires that any increases to electrical rates, including reductions in the CARE effective discount, “be reasonable and subject to a reasonable phase-in schedule relative to the rates and charges in effect prior to January 2014.”

AB 327 also establish legal requirements for establishing or increasing fixed charges for residential customers, and those provisions are evaluated in detail in Section IV. AB 327’s requirements for default TOU are detailed in Section VIII.

With respect to the number of tiers, AB 327 did not modify the long-standing law requiring an “appropriate inverted rate structure” (Section 739.7) with “a gradual differential between the rates for the respective blocks of usage” (Section 739.9 (d)(1)) but it did repeal the mandate to have a minimum of three tiers for CARE rates, and also repealed the requirement that Tier 2 be defined as 101-130% of baseline, meaning that the non-CARE and CARE tiered rates could have as few as two tiers.

D. The Legislature’s Motivation For Passing AB 327

The Commission has already determined that “by passing AB 327, the Legislature indicated its support for making residential rates more reflective of cost.” It is also instructive to review the bill analyses of AB 327 to better understand the Legislature’s motivations for undertaking residential rate reform. The Author’s Statement, dated April 12, 2013, described the objective of the bill this way:

Id., p. 46.
The energy crisis is long over, but laws meant to protect residential rate users are now preventing the CPUC from governing the rate structure and making necessary changes for the thousands of middle to low income families struggling to pay high energy costs. For example, the gap between Tier 2 and Tier 5 increased from 5 cents per kWh to 15 cents per kWh today. Absent rate reform, the gap between Tier 2 and Tier 5 will double to nearly 29 cents per kWh by 2022 causing tens of thousands of customers to pay rates significantly higher than the actual cost of electricity. Without legislative changes, the CPUC has only very limited ability to fix this unfair residential electric rate structure.31

The bill analysis for the Assembly Committee on Utilities and Commerce, dated April 15, 2013, refers specifically to this rulemaking, and states that “Current rate design is not working” in a section that quotes supporters of the bill.32 The bill analysis for the Assembly Committee on Appropriations, dated May 15, 2013 (at page 2), refers to supporters of the bill who were “asserting [that] current rates are punitive and discriminatory at the top tier,” and that “[f]amilies . . . who live in hotter, inland areas are subsidizing the rates for cooler coaster residents.” The Senate Energy, Utilities and Communication Committee issued a bill analysis dated July 1, 2013, page 5 of which contained an underlined heading—“Something’s Got to Give”—in which the analysis concluded that:

If a family can’t buy or lease solar to shave the tier 3 and 4 electricity rates off of their bill, and if they don’t qualify for enrollment in the CARE program, the cost of electricity, particularly in hot climates, can be a tremendous burden. The problem is not going to go away and is going to get worse for those customers[.]

Thus, although the Legislature left to the Commission’s discretion the details of the rate reform, the motivations for the statutory changes that permit the Commission to undertake meaningful rate relief are critical to consider in evaluating the extent and pace of the IOUs’ proposals.

E. **The Commission Should Accord Little Weight To Proposals That Fail To Consider The**

**Appropriate Statutory and Regulatory Background For Residential Rate Design**

Some intervenors make the mistake of proposing reforms in a regulatory vacuum, without regard to long-standing and still-relevant Commission precedent about the principles guiding residential rate design. The Commission’s Phase 2 decision offers a reminder that the OIR “set forth a preliminary list of principles for optional rate design,” and that the “list echoed Commission decisions, such as Decision D. 08-07-045". In fact, the Commission’s residential rate design principles have not been significantly modified despite the passage of time; rather, the statutory restrictions, described above, prevented the Commission from aligning rates with cost or maintaining tiered rate differentials that complied with the gradual and appropriate inclining block requirements of Sections 739 (d)(1) and 739.7.

By the early 1990s, the Commission had achieved tiered rate structures with a tiered ratio of 1.15 to 1.0 that were reasonable and that complied with Sections 739 and 739.7—as these provisions existed then and still exist today—and these differentials continued at appropriate levels until AB 1X capped rates for usage up to 130% of baseline in 2001 for the state’s three major IOUs. At that point, the Commission’s hands were tied, and tiered rate differentials inevitably increased to levels inconsistent with policy pronouncements and Commission precedent as utility revenue requirements increased. This distortion occurred not because the Commission concluded these differentials were appropriate. The precedential value of 1990s-era decisions is significant because under AB 327, for the first time since 2001 for the large IOUs, the Commission may now act under essentially the same authority it had prior to February 2001, and can re-establish residential inclining block tiered rate structures that reflect cost, are fair, and make sense.

In light of the origins of the residential rate design inequities, and the impetus for rate reform ushered in by AB 327, the Commission should accord no weight to (a) proposals that urge the Commission to essentially maintain the status quo (discussed in Chapter III.A.2., below); and (b) proposals and recommendations that rely on uninformed statutory interpretation or mischaracterize

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33 D.14-06-029, p. 12.
the regulatory backdrop against which rate design reforms have been made in the past. The remainder of this section summarizes and refutes the latter arguments.

For example, NRDC’s witness, Mr. Chernick, testified that “[w]ithin legal constraints, the utilities have proposed moving to nearly flat energy rates.”\textsuperscript{34} When asked to explain those “legal constraints,” however, NRDC relied on AB 327 exclusively, indicating that that law requires a minimum of two usage tiers for residential customers. Mr. Chernick confirmed that when he developed NRDC’s recommended tier rate structure—a three-tiered rate with a differential of 2 to 1 between the upper-most and the baseline rate—he was unaware of the requirements of Section 739(d)(1) and Section 739.7, the long-standing Public Utilities Code provisions that have been in effect for more than a quarter of a century. Both of these statutory requirements were in effect at a time when the Commission last adopted in D.96-04-050 a \textit{two-tiered} residential rate structure for SCE’s customers with only a 15\% rate differential.\textsuperscript{35}

Mr. Chernick explained that he had not read D.96-04-050, and went on to explain that he did not know what the Legislature meant by the reference to “gradual differential” between tiers (Section 739(d)(1)), speculating—incorrectly—that the phrase referenced phasing in of tiered rates gradually (“don’t make the changes too fast so that people can gradually adapt to them”).\textsuperscript{36} Mr. Chernick maintained that:

\begin{quote}
. . . even if the first block and the second block are very different, even by a factor of two or three, then your bill changes slowly because you’ve got the entire first block rate or the average rate or the average rate changes slowly as you move into the second block. So maybe that’s gradual in itself.
\end{quote}

This interpretation of the statutory mandate, aside from being difficult to decipher, is flatly wrong, as the plain language of the statute refers to the gradual \textit{price} differential of rates within an inclining block structure.\textsuperscript{37} The more steep the differential, by definition, the less “gradual” the price change per

\textsuperscript{34} Exh. NRDC-101/Chernick, p. 7.
\textsuperscript{35} Exh. SCE-113, p. 4 (“Mr. Chernick has not reviewed [D.96-04-050], and has no opinion regarding its reasonableness.”)
\textsuperscript{36} NRDC/Chernick, Tr. 17/2266:7-28.
\textsuperscript{37} Another guess by Witness Chernick was that the reference to “gradual differential” in Section 739(d)(1) could be read to mean that if a customer passes a certain threshold, “suddenly all [the customer’s] consumption is

\begin{center}
Continued on the next page
\end{center}
kilowatt hour, making Mr. Chernick’s “bill changes” month-to-month more, not less, stark, even with a small increase in total usage. In any event, Mr. Chernick conceded on cross examination that a 20% differential in a two-tiered rate structure is “gradual as well.”

IREC’s witness, Mr. Fulmer, made the same mistake of basing IREC’s rate design proposal on policy considerations only, without regard to Section 739.(d)(1)’s mandate to have an “appropriate gradual differential” between tiers. He testified that a 2 to 1 ratio is “meaningful” in service of policies to “encourage energy efficiency and distributed generation such as solar.” However, with respect to designing rates that comply with the legal requirement for a gradual differential between tiers, Mr. Fulmer confessed that he had “not thought about that before.” Like Mr. Chernick, Mr. Fulmer erroneously concluded that Section 739.9(d)(1)’s reference to a “gradual differential” was about “[s]ort of a change from the status quo to something new where you do indeed need a gradual change.”

Because it is clear that neither NRDC nor IREC designed rates that considered, much less complied with, long-standing legal requirements, their steep tier rate proposals should be given no weight.

As another example, TASC’s witness, Mr. Friedman, sought to divorce this proceeding from any of the Commission’s prior policy pronouncements on cost-based residential rate design, failing to even explain whether or how the rate design principles adopted for use in this proceeding differed from long-standing principles the Commission applied to cases like D.96-04-050. Similarly, Mr. Fulmer stated that he had not read the series of Commission decisions resulting in the adoption of a 15% differential in a two-tier structure in the mid-‘90s before the energy crisis, instead describing the outcome as “where the merry-go-round stopped,” rather than as an intentional principle- and policy-based result.

Continued from the previous page

billed at a higher rate including what was in [the customer’s] first tier,” a reading that flies in the face of the baseline statute, which requires that the baseline rate be billed at a lower rate than the non-baseline rate.

NRDC/Chernick, Tr. 17/2266:28-2267:2.

38 NRDC/Chernick, Tr. 17/2268:1-5.
39 IREC/Fulmer, Tr. 24/3826:9-17.
40 Id. 3826:18-28.
41 Id. 3827:1-3.
42 For reference, SCE’s maximum tiered rate differential at the time the Legislature passed SB 987 which added Section 739(f)(1) was 1.53 to 1.0.
This misapprehension of the 1990s decisions is significant. For example, the Commission found as follows in 1993:

We find that a flatter tier structure promotes economic efficiency goals of rate design and is more fair because it reduces built-in subsidies... The evidence shows that subsidies now exist, which runs counter to our movements to a more cost-based rate structure.

Notably, in D.93-06-087, PG&E had proposed to establish its residential tier rate ratio at 1.1 to 1.0 (a 10% differential, compared to the 15.47% differential then in place for PG&E). ORA supported PG&E “on the basis that [its tier flattening proposal] promotes economically efficient marginal cost pricing.” The Commission reviewed existing law, interpreted it in 1993 to neither mandate nor forbid further tier closure, and announced that “the legislature had left to our discretion the determination of a residential inverted rate structure based on the above mandates and legislative findings as well as our other rate design goals and constraints.” It elected to maintain the 15% differential rather than adopt TURN’s proposal to widen it to 25%. Specifically, the Commission found that “a 15% tier differential strikes the best balance between our goal of a cost-based rate structure with minimized subsidies and the legislative mandate for an inverted residential rate structure.” In light of this history, IREC’s conclusion that D.96-04-050 maintained the tier differential at 15% as “a result of the Commission complying with [a] legislative directive” is simply wrong because it ignores the fact that the Commission had established that differential three years earlier in the absence of a legislative mandate (SB 987 had expired).

Sierra Club’s witness, Mr. Barsimantov, not only excluded earlier Commission decisions from his analysis, but also admitted to not accounting for all of the rate design principles adopted in Attachment A of the November 26, 2012 Scoping Memo and Ruling of Assigned Commissioner and subsequently re-articulated in D.14-06-029. Instead, in response to a question on cross-examination about whether it is necessary to redress intra-class subsidies in a steep tiered rate structure, he acknowledged that he is “not making a judgment on what’s necessary for all the rate design principles” and that his analysis was “narrowly focused on one principle” which was “a specific analysis on how

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43 D.14-06-029, p. 12.
proposed rates would affect customer incentives” in the energy conservation and solar contexts.\footnote{Sierra Club/Barsimantov, Tr. 23/3578:17-28, 3579:11-12.}
Because Sierra Club’s proposal ignored nine of ten rate design principles (\textquote{I did [look at the rate design principles that were adopted in this proceeding] and I was asked to do analysis focusing on \textit{one of those}”\footnote{\textit{Id}. 3579: 1-7 (emphasis added).}), its recommendation should be accorded very little weight.

\section{TIERED RATE REFORMS}

\subsection{Proposed Tiered Rate Design Changes}

In SCE’s view, the most significant concerns with residential rate design related to the tiered rate structure that can now be remedied under AB 327 are as follows:\footnote{Exh. SCE-101/Garwacki, p. 2.}

(1) The intra-class subsidies resulting from the restrictions that had been imposed on non-CARE and CARE Tier 1 and Tier 2 rates since 2001 (until AB 327 passed) resulted in large deviations from the cost of service, and have caused the 25\% of higher-usage residential customers to pay for 70\% of the residential class’s share of increased costs associated with utility infrastructure and renewable energy requirements—costs that are incurred for the benefit of all customers;

(2) There are no material, cost-based, fixed charges, which has inappropriately forced the collection of fixed costs through higher volumetric rates;

(3) Growing intra- and inter-class subsidies have resulted from increased participation in, and an increased level of discount for, the CARE program compared to historical discount levels;

(4) There is continued risk of customer discontent from bill volatility caused by the high ratio of upper-tier to lower-tier rates when extreme hot weather conditions prevail; and

\footnote{Sierra Club/Barsimantov, Tr. 23/3578:17-28, 3579:11-12.}
\footnote{\textit{Id}. 3579: 1-7 (emphasis added).}
\footnote{Exh. SCE-101/Garwacki, p. 2.}
(5) The current four-tiered rate structure provides the wrong pricing incentives to customers, and makes a successful large-scale transition to optional or default, cost-based, time-variant rate structure difficult and extremely unlikely.

Tier flattening is the single most effective tool at remedying these distortions in current rate design, as observed by SCE and other parties.\textsuperscript{47} The ED Staff Proposal stated that “Staff agrees with those parties who acknowledge that the existing tiered rate structure is in need of reform to alleviate well documented distortions, inequities, and unintended consequences.”\textsuperscript{48} As SCE’s efficiency analysis shows (reproduced below from Table V-7 of Exhibit SCE-101), the flatter the tiers the closer the rates are to cost (short of moving to TOU, which offers a small increase in efficiency relative to SCE’s proposal).

\begin{center}
\textit{Efficiency Analysis of Potential Residential Rate Structures}
\end{center}

\begin{table}
\begin{center}
\begin{tabular}{|l|c|c|c|c|c|}
\hline

 & Four Tiers & Three Tiers & Two Tiers & Flat & TOU \\
\hline
\textbf{non-Baseline/Baseline Ratio:} & & & & & \\
\textbf{Current (Jan. 2014)} & 1.5/1.25/1 & 1.2 & 2 & 1 & \\
\hline
\textbf{Illustrative Fixed Charge ($/Month)} & & & & & \\
$0$ & 35.7* & 25.3 & 22.3 & 30.9 & 19.8 & 20.2 \\
$5$ & 33.0 & 23.5 & 20.8 & 28.6 & 18.5 & 18.7 \\
$10$ & 31.2 & 21.9 & 19.4 & 26.4 & 17.4 & 17.3 \\
$20$ & 28.0 & 19.1 & 17.2 & 22.6 & 15.9 & 15.2 \\
\hline
\end{tabular}
\end{center}
\begin{itemize}
\item Note: Three-tiered structure combines present Tiers 2 and 3.
\end{itemize}
\end{table}

As noted in the ED Staff Proposal, steeply tiered rates charge vastly different rates for incremental usage, both above and below marginal cost and depending on whether the energy is used early in the month or later in the month.\textsuperscript{49} Thus, tiered rates provide little incentive for residential customers to shift

\begin{itemize}
\item See, e.g., ORA/Danforth, Tr. 21:3246 (“In fact, Edison has a table in its opening testimony that looks at the efficiency associated with tier closure versus establishing a fixed charge. And the increase in efficiency is higher through the tier flattening.”); Exh. SCE-126, SEIA’s Response to Question 7 of SCE Data Request Set 1 (“Finally, to the extent that the current tiered increasing-block rate structure creates subsidies from large users to small users, the best and most direct ways to address such subsidies are to reduce tier differentials and to move to the greater use of more cost-based TOU rates.”); Exh,TASC-108/Friedman, p. 4 (“raising lower-tier rates to more accurately reflect costs is the best and most efficient way to address the fact that lower-tiers are currently out of line with costs.”)
\item ED Staff Proposal, p. 38.
\item \textit{Id.}, p. 49.
\end{itemize}
their load from on-peak hours. Flattening tiers will mitigate today’s problem where customers see a disproportionately large bill increase compared to increased usage (and also disproportionate to the increase in the utility’s cost to serve the customer).

1. **SCE’s Proposal Is Consistent With The ED Staff Proposal And Commission Precedent Predating The Legislative Restrictions**

SCE’s Proposal to reform the tiered structure mirrors that of the ED Staff Proposal, which describes year-by-year tier-flattening as a “gradual yet deliberate process of transitioning residential customers to time-of-use (TOU) rates.”

Table V-9 of Exhibit SCE-101 compares SCE’s tiered rate reform to the ED Staff Proposal:

<table>
<thead>
<tr>
<th>Year</th>
<th>ED Staff Proposal</th>
<th>SCE’s Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Tiers</td>
<td>Tier Ratios</td>
</tr>
<tr>
<td>2015</td>
<td>3</td>
<td>2.0/1.5/1.0</td>
</tr>
<tr>
<td>2016</td>
<td>3</td>
<td>Ratio reduction unspecified</td>
</tr>
<tr>
<td>2017</td>
<td>2</td>
<td>1.3/1.0</td>
</tr>
<tr>
<td>2018</td>
<td>2</td>
<td>1.2/1.0</td>
</tr>
</tbody>
</table>

Note: Both SCE and the Energy Division redefine Tier 2 as usage from 101% of baseline to 200% of baseline beginning in the first year (2015) of reforms. The definition of Tier 1 remains unchanged while Tier 3 includes usage in excess of 200% of baseline.

SCE’s Proposal and the ED Staff Proposal end-state tiered structures are consistent with the structures that the Commission approved prior to the energy crisis in 2001, when SCE’s default residential structure was a two-tiered, inclining block structure, consisting of baseline and nonbaseline tiers with a composite ratio of nonbaseline to baseline rates of 1.15 to 1.00, including relatively small fixed charges for single- and multi-family residences. Customers whose usage remained primarily in Tiers 1 and 2 as defined beginning in 2001 actually enjoyed declining real rates over the last 13 years.

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51 Exh. SCE-101/Garwacki, p. 22
while higher-usage customers have endured large rate increases even though SCE’s cost per kilowatt-hour to serve such customers actually declines with increasing usage.\footnote{52}

The proposed two-tiered rate structure with a 20% rate differential approximates the Commission’s judgment as to the rate differential that complies with the requirements of Sections 739(d)(1) and 739.7 before its hands were tied by legislative restrictions.\footnote{53} Specifically, D.96-04-050 and D.93-06-087 adopted nonbaseline to baseline rate ratios of 1.15 to 1, consistent with both the ED Staff Proposal and SCE’s Proposal. Intervenors who cast aside the pre-energy crisis two-tiered rate structures and rate ratios adopted by the Commission not only ignore history, but they also ignore reality elsewhere throughout the country. Figure II-2 of Exhibit SCE-106 catalogues rate structures of the fifty largest utilities (by electric sales), 22 having flat rates, 5 having declining block rate structures, and 20 others (excluding the three California IOUs) having inclining block structures. Of those with an inclining block rate structure, fourteen have maximum tiered rate ratios equal to or less than 1.2 to 1.0.

Indeed, the large California IOUs are outliers among the nation’s largest electric utilities. The IOUs’ phased-in, end-state proposals over a four-year period would bring large California IOUs to the middle of the pack among their peers (assuming the peers make no changes over the same four-year period), as shown in the table below (a reproduction of Figure II-1 of Exhibit SCE-106):

\footnote{52} Id.
\footnote{53} Section 739.7 requires that the Commission “shall retain an appropriate inverted rate structure. If the commission increases baseline rates pursuant to Section 739, revenues resulting from those increases shall be used exclusively to reduce nonbaseline residential rates.”
Of the largest utilities in the country who have inclining block structures, a large majority have small differentials between the upper-most and baseline tiers, similar to the way California’s electric rates looked before 2001. But in contrast to the IOU proposals, intervenors’ tiered rate proposals overlook the efficiency gains of a two-tiered structure and would have the Commission adopt tiered rate ratios that have no legitimate cost basis. The intervenors’ positions stand at odds with Commission policy and precedent on reasonable residential tiered rate ratios, do little or nothing to meaningfully reform the current structure, or they delay any meaningful progress. Specifically, intervenor proposals fall into four categories, addressed in order below.

54 See Table II-2, Exhibit SCE-106, where the two utilities with the highest tiered rate differentials, Arizona Public Service and Public Service Company of Colorado, have tiered rates (or IBR, inclining block rates) only during the summer months.
(1) **CforAT, IREC, Sierra Club, NRDC, CALSEIA, SEIA, TASC, Vote Solar:** Proposals that do nothing to achieve this proceeding’s goal of reforming rates because the proposals simply support, or even make worse, the status quo, often as a result of misreading Commission policies and precedents on tiered rates;

(2) **ORA, EDF**\(^{55}\): Proposals are too indeterminate to be applied simply and predictably over the four-year OIR Rate Period;

(3) **SEIA, TASC, IREC**: Proposals result in steep tier differentials that are erroneously asserted to be based on cost;

(4) **TURN**: Proposal is arbitrary, based not on cost but on alleged public policy objectives that are better achieved through consistent application of transparent subsidies.

2. **The Commission Should Reject Proposals That Maintain The Status Quo, Make It Worse, Or Make Immaterial Reductions To Steeply-Tiered Rate Structures**

a) **CforAT**

The Commission has already considered and rejected unworkable proposals that unreasonably seek to maintain the status quo residential rate design despite the urgent need for reform. CforAT/Greenlining had argued that the IOUs’ settlements in Phase 2 of this proceeding were inadequate, and yet CforAT/Greenlining failed to offer an alternative. The Commission rejected the status quo approach, reasoning that progress toward reformed rates is a legal mandate: “Current rate design does not reflect cost of service, which makes it difficult to argue that current rate design is ‘just and reasonable’ as required by Section 451.”\(^{56}\) Stated a different way, the Commission found that a rate ratio that prices the highest tier at double the price of the lowest tier results in “steep differentials between usage tiers” whereby “lower tier rates [are] substantially below cost of service and upper tier rates [are] substantially above cost of service.”\(^{57}\) In Phase 1, CforAT witness Mr. Contreras confirmed

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\(^{55}\) ORA’s proposal is addressed in detail below. EDF proposes fewer than four tiers, without additional specificity, and does not provide an end-state for its vague proposed reforms. Exh. EDF-101/Fine.

\(^{56}\) D.14-06-029, p. 46.

\(^{57}\) Id., Finding of Fact 5, p. 54.
that CforAT once again did not make a rate design proposal and that the scope of Mr. Contreras’ testimony was limited to low income customers with disabilities. Mr. Contreras nonetheless urges that the “Commission should not adopt the plans as proposed.” The Commission should again reject this appeal to maintain the status quo, as it did in Phase 2.

b) **Sierra Club, NRDC, IREC and CALSEIA**

CforAT is not alone in advocating no meaningful change in residential tiered rate structures. Four other parties—Sierra Club, NRDC, IREC and CALSEIA—recommend a rate ratio at or near 2 to 1 between upper-most and baseline rates. The only difference between that type of steeply-tiered proposal and today’s rate structure is the **number** of tiers, as Sierra Club, NRDC and CALSEIA propose three tiers and IREC recommends two tiers compared to today’s four tiers. However, a reduction in the number of tiers alone does little to reduce intra-class subsidies or provide a more equitable rate structure. In fact, it would be a mistake to view these proposals as “movement” in the direction of rate reform at all, as SCE shows in a table below in this chapter evaluating baseline to non-baseline rate ratios of various parties relative to SCE’s.

When Mr. Fulmer was asked during cross examination about how IREC’s proposed 2 to 1 tiered rate ratio “provid[ed] for any evolution or reduction in today’s rate disparity for upper tier users,” he pointed to the reduction in the number of tiers (to two) as evincing “some evolution.” However, the result of reducing the **number** of tiers while maintaining the **steepness** of the differential between upper-most and baseline tiers is to **increase** the intra-class subsidy, not **reduce** it. That is because, under IREC’s proposal, the 2 to 1 ratio of non-baseline to baseline rates is **steeper** than

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58 CforAT/Contreras, Tr. 22/3399:6-18.
60 Id., p. 27 (“No such changes should be adopted without a direct evaluation of the impact of the proposed changes on affordability.”)
61 IREC’s direct testimony was agnostic as between two and three tiers, but Mr. Fulmer confirmed on the stand that IREC proposes two tiers, even though it would not oppose having three. IREC/Fulmer, Tr. 24, 3822:5-10.
62 IREC/Fulmer, Tr. 24/3823:8-18.
SCE’s current rate ratio of 1.77 to 1.00. Stated another way, a two-tiered structure with the second tier priced at twice the first tier rate exacerbates rather than ameliorates the intra-class subsidy that currently exists under SCE’s current four-tiered rate structure. So, four years later, IREC’s proposal would actually deteriorate the outcome for customers who have unfairly borne the costs of a rate structure that the Commission can now reform under AB 327.

A similar result occurs for a different reason under CALSEIA’s proposal for a three-tiered rate structure that would collapse Tiers 3 and 4 as a new Tier 3, but leave Tier 2 as it is currently defined for the small amount of usage from 101% to 130% of baseline. CALSEIA’s proposal is an outlier because it is the only one to reflect a Tier 3 for all usage above 130% of baseline, setting that rate at a price 75% higher than the baseline rate for what constitutes 36% of SCE’s residential usage. This results in a weighted-average nonbaseline to baseline rate ratio of 1.64 to 1.00, thereby only marginally reducing SCE’s current non-baseline to baseline rate ratio of 1.77 to 1.0, and only after four more years of an unfair rate structure.

The table below illustrates the lack of progress towards more efficient baseline to non-baseline rate ratios for various intervenors’ end-state proposals relative to today’s status quo (January 1, 2015 rate structure) and SCE’s 2018 end-state proposal.

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63 The baseline to non-baseline rate ratio for more than two tiers is derived by using a weighted average of the tier differentials (using the percentage of usage in each tier) of each non-baseline rate compared to the baseline rate. For this calculation of the current differential, SCE is using its residential rates effective January 1, 2015 (see AL 3155-E dated December 24, 2014 (hereinafter AL 3155-E)). The percentage of usage in each tier is explained in the footnote associated with “Percent of Usage” in the table below.

64 Exh. CALSEIA-106/Gerza, p. 5.

65 The percentage of usage in Tier 3 is 17%, and the percentage of usage in Tier 4 is 19%. See footnote explaining “Percent of Usage” in the table below.
Even without recognizing the fact that reducing the number of tiers alone, with minimal or no reduction in the non-baseline to baseline tier differential, does little or nothing to reduce the cost-subsidy problem, some parties are transparent about their desire to retain the status quo. Such extreme positions stand as unreasonable outliers along the spectrum of positions in this proceeding and should be rejected. For example, Mr. Chernick originally responded to a data request from SCE indicating that “NRDC has not made a proposal” and that “NRDC will review the proposals of other parties and will make a final recommendation in its post-hearing brief.”68 On cross-examination, Mr. Chernick testified that NRDC’s proposal was “more of an outline than a definitive result,”69 but he ultimately agreed that NRDC recommended a three-tiered structure with rate ratios of 2.0 and 1.4 to 1.0, which is the same weighted-average nonbaseline to baseline rate ratio of 1.64 to 1.00 as proposed by CALSEIA—again ensuring four more years of inequities—and making clear that his proposal was not radically different from the status quo four-tiered structure.70

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66 The values in this column “Percent of Usage” are taken from NRDC-101/Chernick, p. 34, where Mr. Chernick relies on data from SCE to provide a “Summary of SCE Residential Energy by Tier” for CARE and non-CARE customers.
67 SCE AL-3155-E, Table 5, page 14.
68 Exh. SCE-113, p. 6.
69 NRDC/Chernick, Tr. 17/2254:9-10.
70 Id. 2256:13-2257:4.
In a similar vein, Mr. Barsimantov proposes a three-tiered rate structure with rate ratios of 2.0 and 1.5 to 1.0, but his proposal was justified on the erroneous assumption that SCE’s current rates reflect a 2.4 to 1.0 rate ratio between the highest tier and baseline tiers. In fact, SCE’s maximum rate ratio effective January 1, 2015 of approximately 2.1 to 1 and SCE’s non-baseline to baseline rate ratio of 1.77 to 1.0 means that Sierra Club’s proposal will only marginally reduce SCE’s non-baseline to baseline rate ratio of 1.70 to 1.0 after another four years of unfair subsidies just like CALSEIA’s and will only negligibly reduce the ratio of the highest tiered rate to the baseline rate. Sierra Club rejects any further reform, however, with Mr. Barsimantov concluding that he “no longer think[s] that a substantial reduction is needed.”

c) **CALSEIA, IREC, TASC, and Vote Solar**

Most of the solar parties urge the Commission to ignore the decisions from the 1990s that established flatter tier differentials, arguing that Commission policy—and prior legal mandates to flatten tiers—have changed over time in support of steep tier differentials to increase solar and EE investments. But this is a mistaken view of the history of Commission regulation of residential rates, as explained in Chapter II.A., above. Understanding the regulatory and legislative history leading up to today’s broken tier rate structure is important because it may lead to the erroneous conclusion that the Commission intended to create and maintain the steep rate ratios that currently exist. The Commission emphatically stated in its Phase 2 decision that it was statutory restrictions that caused higher-usage customers to receive inaccurate price signals:

> For over a decade, statutory restrictions prevented the utilities from implementing rates that give residential customers an accurate price signal as to the costs of their electricity service. AB 1X (Keeley, Ch. 4, Stats. 2001), enacted in 2001 in response to the energy crisis of 2000-2001, suspended direct access and capped residential rates for usage up to 130% of baseline quantities (Tiers 1 and 2) at the levels in effect on February 1, 2001. As a result of the AB 1X restrictions, the rates that

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71 Sierra Club/Barsimantov, Tr. 23/3577:15-28.
72 SCE AL 3155-E, filed December 24, 2014.
73 Sierra Club/Barsimantov, Tr. 23/3578:4-7.
apply to usage in Tiers 1 and 2 did not increase until the end of the decade. As a result, higher usage customers have experienced large rate increases that do not reflect cost of service. *Thus, by 2009 residential tiered rates did not comport with the Commission’s general policies to design rates consistent with cost to serve.*

Against this backdrop, as well as the history of AB 327 the Commission should accord little weight to intervenors’ proposals to retain steeply-tiered rate differentials on the basis that these tiered rate ratios were part of an *intentional* policy to encourage conservation, energy efficiency and solar generation investments. CALSEIA, for example, described the current tiered structure as a “conscious price signal that the state has given to customers.” IREC argued that “the size of the tier differential has a direct impact on . . . Commission and state policies, as the price signal associated with the highest electric rate tier tends to drive customer decisions to engage in these [solar and EE] programs or in particular desired behaviors.” TASC argued that the Commission’s solar energy policies “were predicated upon rate designs that send strong signals to customers to invest in these resources[.]” Ironically, these statements were contradicted by another solar intervenor, SEIA, who opined that that “[a] significant issue with the current rate design has been the lack of any foundation in costs for the adopted tier differentials.”

As explained in Chapter II, tiered rate ratios that began to increase in 2001 did so not based on traditional rate design policy principles that the Commission was able to apply prior to the energy crisis, but from an *unintended*, even if predictable, negative consequence of more than a decade of legal restrictions that could only assign revenue requirement increases to rates for Tiers 3 and above. Even IREC admitted, in response to an SCE data request, that “the rate differentials since the passages [sic] of AB 1X are the result of legislative directive,” not Commission policy.

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74 D.14-06-029, p. 3 (emphasis added).
75 Exh. CALSEIA-104/Gerza, p. 7.
77 Exh. TASC-105/Friedman, p. 7.
78 Exh. SEIA-101/Beach, p. 38.
79 Exh. SCE-106/Garwacki, p. 17 n. 34.
Vote Solar incorrectly cites a recent decision to argue that the Commission has, in the past, “maintain[ed] rate structures in order to protect customer investments.”\textsuperscript{80} In D.14-01-002 the Commission rejected a contested settlement that adversely impacted a commercial solar rate.\textsuperscript{81} The Commission concluded that the commercial solar rate at issue was “developed, in part, to advance the State’s solar policies.”\textsuperscript{82} The same cannot be said for the steeply-tiered residential rate structures that arose from more than a decade of legal restrictions and unfairly burdened customers with usage in Tiers 3 and above. Far from describing the current tiered rate structure as “advancing” Commission policies, the Phase 2 decision said nearly the opposite, \textit{i.e.}, that the legislative restrictions that forced revenue requirement increases to be borne almost exclusively by higher usage customers resulted in “residential rates [that] still are not consistent with the Commission’s cost to serve objectives and these rates impede the Commission’s ability to implement many other policy objectives.”\textsuperscript{83}

3. \textbf{ORA’s Proposal To Reform Tiered Rates And Move To Cost-Based TOU Rates, While Laudable, Reflects An Indeterminate And Drawn-Out Proposal}

ORA “recommends moving from the current four tiers to two tiers of residential rates over the next several years,”\textsuperscript{84} which, absent the difference in fixed charge proposal, is no different from SCE’s Proposal. ORA’s witness, Mr. Khoury, acknowledged that “we’re moving in the same direction.”\textsuperscript{85} However, ORA has no definitive timeline for its proposal and provides no year-by-year schedule because its proposed road map is contingent on variables that render it too indeterminate to be adopted. ORA’s proposal with respect to SCE (and as to PG&E and SDG&E) is weighed down by tentative qualifications:

\begin{itemize}
\item \textsuperscript{80} Exh. Vote Solar-101/Monsen, p. 27
\item \textsuperscript{81} D.14-01-002, at pp. 33, 34, states that “the fact that signatories may have reservations about a settlement, combined with strong opposition by non-signatories, lead us to conclude in this instance that the settlement is not reasonable.”
\item \textsuperscript{82} \textit{Id}, p. 34.
\item \textsuperscript{83} D.14-06-029, p. 4.
\item \textsuperscript{84} Exh. ORA-101/Khoury, p. 4-1.
\item \textsuperscript{85} ORA/Khoury, Tr. 22/3407:14-15.
\end{itemize}
• “When risks of bill shock can be mitigated and revenue requirements do not
significantly increase, rate tiers can be combined and the differentials between rate
tiers can be further reduced.”86

• Collapsing from four tiers to three is possible in 2015 “as long as the residential
average rate (‘RAR’) increases are 3% or less.”87

• “Changes to the residential rate design should only be made when it is possible to do
so without substantial bill impacts.”88

• TOU rates will replace block rates “when conditions are appropriate.”89

• “If revenue requirements increases become larger and the associated bill impacts
become too large, it would be preferable to wait, and make progress in a sustainable
manner that avoids significant customer discontent.”90

• “[P]rogress on residential rate reform can be made if SCE’s RAR increases by 3
percent or less.”91

• “Assuming that the RAR stays close to 2.1 percent annual increases, it will be easier
to move to two tiers of residential rates by 2018.”92

ORA’s testimony on cross-examination did not reveal any more specificity about its end-
state tier differential, even assuming all the vague conditions quoted above had been met. Mr. Khoury
even added “another caveat here,” not originally included in his direct testimony—that “any tier ratio
that we would support would be a composite tier ratio”—however he could not specify a percentage
because “there are just simply too many moving parts.”93 (The composite tier ratio issue is addressed in
Chapter III.A.5., below.)

86 Exh. ORA-101/Khoury, p. 4-1.
87 Id. See also p. 4-3.
88 Id., p. 4-2.
89 Id., p. 4-1, n. 1.
90 Id., p. 4-4.
91 Id.
92 Id., pp. 4-6 to 4-7.
93 ORA/Khoury, Tr. 22/3409:25-3410:9.
When asked to assume that all of the revenue requirement increases were sufficiently modest to permit ORA to agree to a two-tiered rate in 2018, ORA still could not definitively propose a specific differential between its two tiers “because there’s a lot of moving parts accruing that we’re examining in this proceeding.” ORA also noted that its two-tier proposal is contingent on the Commission ordering default TOU for residential customers, despite the legal consensus by all parties (ORA included) that default TOU pilot programs may not commence before 2018.

ORA’s approach, which weds the speed of rate reform to the indeterminate nature of changing revenue requirements, is a recipe for uncertainty that should not be approved. Parties and the Commission have already invested more than two years in this proceeding, yet ORA neither provides a plan nor a procedure that could be implemented if the RAR does increase by more than 3% per year in 2016 and beyond. Nor does ORA provide a year-by-year road map for SCE that leads to any discernable end-state, and it punts to “rate design windows and general rate case Phase 2 proceedings” all incremental changes to be made along the way under the theory that “I’m not sure why we have to determine today what will be put in place in 2018.” ORA does not even provide a proposal as to how in 2015—and even assuming SCE’s residential class revenue requirement increases by under 3%—it would set the tiered rate ratios for a three-tiered structure, maintaining that “having certain tier rate ratios every year” is an IOU objective, not an ORA objective.

That failure of specificity invites continuous litigation, a possibility ORA overlooks. When asked whether it should simply propose, via an advice letter subject to protest, the tier rate ratio resulting from the Year One collapsing of Tiers 2 and 3, Mr. Khoury testified, “You know, that’s a good question. I don’t know how the Commission will handle this[.]” Mr. Khoury further testified that it was implausible for a Phase 1 decision to authorize tiered rate ratios on a year-by-year basis, even

24 Id. 3408:28-3409:1.
25 Id. 3409:5-11.
26 Id. 3410:18-28.
27 Id. 3413:10-21.
28 Id. 3414:1-3.
though that is how all the IOUs’ proposals and the ED Staff Proposal are structured. In response to a question about what the Commission should do for interim rate changes occurring mid-year, Mr. Khoury testified:

[Y]our question really begs the other question [which] is, what procedure would we be implementing in 2016 rate [sic]? So I have a hard time sitting here today believing that the Commission is really going to set rates for 2015, 2016, 2017, 2018. I could be wrong, but not knowing the revenue requirements—I’m a rate designer which is something similar to a plumber so I can’t imagine setting rates today without knowing all the inputs.99

This testimony should be accorded little weight, however, given that Mr. Khoury consistently represents ORA in three-year General Rate Case (GRC) Phase 2 proceedings in which procedures used to establish residential rates are set for three years, with agreed-upon approaches for incorporating uncertain interim revenue requirement and rate changes.100 Mr. Khoury testified that “[u]ntil this proceeding I haven’t seen such an emphasis placed on this tier rate ratio, so it’s not—it’s part of your thinking but it’s not really part of ORA’s thinking.”101 But when asked whether, in the past thirteen years, parties placed little emphasis on tiered rate ratios because legislative restrictions on Tier 1 and 2 offered no substantial means of changing Tier 1 and 2 rates, Mr. Khoury of course acknowledged that “It could be.”102 Even the threshold value of a below-three-percent-increase in the residential class’s revenue requirement is somewhat arbitrary, as ORA concedes that it ran bill impacts assuming a 2.1% annual increase and a 5% annual increase, thought the latter was too large, and proposed 3% without even running bill impacts.103

Because ORA’s proposal relies so heavily on revenue requirement changes, it fails to offer rate ratios that could even be applied consistently to the three IOUs in this ratesetting

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99 Id. 3415:3-13.
100 Id. 3423:6-20.
101 Id. 3416:14-18.
102 Id. 3416:23.
103 Id. 3417:1-12.
ORA also fails to define the bill impacts that would result in freezing future annual rate revisions, referring instead to vague and subjective adjectives such as “large increase,” “significant rate increase,” “too high an impact,” “significant enough,” and “large bill increases,” etc. Ms. Kao, another ORA witness, testified that “frankly, I did not think too far ahead beyond 2015.” When ALJ Halligan asked Ms. Kao whether ORA recommends that the Commission identify a particular percentage range of bill impacts that could be considered reasonable, Ms. Kao again demurred: “Not directly . . . I would stick by sort of what I said in the testimony in terms of I think ORA would prefer more of a wait-and-see approach and looking at circumstances as they turn out.”

ORA’s piece-meal, wait-and-see annual approach has been considered and rejected in the past by the Commission, with good reason. In 1993, TURN advocated for continually adjusting the tier differential “to respond to the ever-changing conditions of the residential class,” a proposal the Commission rejected because it “believe[d] the need for longer-term stability overrides any need to adjust the tier differential between now and the next GRC.” As UCAN noted, it is not efficient to hinge rate design changes on revenue requirement uncertainties: “That is why utilities often keep restructuring and rate increases in separate proceedings if the changes are significant or excessive.” Even ORA’s witness, Ms. Kao, testified that revenue requirement increases are outside the scope of the proceeding and that the Commission will evaluate bill impacts resulting from future revenue requirement increases in the appropriate proceeding. This would mean that ORA proposes to have the Commission decide the reasonableness of bill impacts twice before implementing its Phase 1 decision.

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104 SCE’s end-state tier rate ratio under ORA’s proposal, assuming all of ORA’s contingencies have been met, is 1.5 to 1.0. For PG&E, it is 1.4 to 1.0, and for SDG&E it is 1.3 to 1.0. See generally ORA-101.

105 Exh. ORA-101/Khoury, pp. 4-4 to 4-7.

106 ORA/Kao, Tr. 22/3468:19-20.

107 Id. 3477:2-14.

108 D.93-06-087, p. 56.

109 Exh. UCAN-104/Croyle, p. 25.

110 ORA/Kao, Tr. 22/3463:13-24 (Q: “[I]f the Commission in the future revenue requirement change proceedings evaluates the bill impacts at that time under whatever the adopted rate design is and determines whether those revenue requirement changes are reasonable from the standpoint of bill impacts on customers, hasn’t the Commission then determined the reasonableness of those bill impacts?” A: “I guess in the very indirect way that you’ve described it.”)
This is inefficient and unnecessary. SCE explained why it is inappropriate to consider additional, hypothetical, future revenue requirement changes in this proceeding, providing examples of how large revenue requirement increases have been mitigated, when necessary, in the past. That is covered in Chapter X.

4. **There Is No Cost Basis For The Steeply Inclined Tiered Rate Proposals Of SEIA, TASC, IREC And NRDC**

Three parties—SEIA, IREC and NRDC—argue that their proposed steep, three-tiered rate structures (with non-baseline to baseline rate ratios ranging from 1.65 and 2.0 to 1.0) should be adopted because they are cost-based. Notably, TURN made no such claim about its three-tiered proposal of 1.6 and 1.3 to 1.0 (non-baseline to baseline ratio of 1.42 to 1.0), maintaining instead that its proposal is appropriate for bill impact and other policy reasons—not because its rate ratio has a cost basis.\(^{111}\) ORA’s witness, Ms. Tan, testified that tiered rates are not cost-based.\(^{112}\) This section explains why the Commission should reject the erroneous conclusions of SEIA, IREC and NRDC, which (a) are contradicted by undisputed evidence to the contrary; (b) depart significantly from long-standing and recently affirmed Commission conclusions that reached opposite conclusions; and (c) are based on arbitrary three-tiered rates with ratios that unreasonably assume that no Tier 1 usage, whenever consumed, causes the utility to incur marginal generation capacity costs.

a) **Inclining Block Rates Do Not Reflect Cost-of-Service Regardless of Marginal Cost Methodology**

No party offered any evidence to dispute SCE’s testimony showing that the cost to serve residential customers declines, *on a per kilowatt hour basis*, the more customers consume electricity. PG&E also offered testimony that the cost to serve an individual household does not increase with its cumulative monthly consumption.\(^{113}\) SCE provided evidence that regardless of the marginal customer cost methodology employed (SCE’s marginal costs versus TURN’s, for example),

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\(^{111}\) Exh. SCE-122, p. 12 (response to Question 4 of SCE Data Request Set 2).
\(^{112}\) ORA/Tan, Tr. 21/3075:1-5.
the average cost per kWh declines as usage increases, as shown in Figure II-2 of Exhibit SCE-106, replicated below:

**Effect of Changed Customer Marginal Cost on Rate Efficiency**

![Effect of Changed Customer Marginal Cost on Rate Efficiency](image)

Figure II-2 demonstrates that there is no significant difference in the trend line (downward sloping) of the curves—plotted across an x-axis showing customers moving from lower-usage to higher-usage—when costs are expressed on a volumetric basis in cents per kilowatt hour, regardless of unit marginal cost assumptions.\textsuperscript{14} In fact, if the residential rate structure were designed on a true cost basis, it would be a *declining* block rate structure.\textsuperscript{15} Even TURN’s witness, Mr. Marcus, corroborated that finding, stating that “within each group of single-family and multi-family customers,

\textsuperscript{14} Exh. SCE-106/Garwacki, p. 32.

\textsuperscript{15} Id.
customer costs decline in cents per kWh as usage increases. This would tend to reduce the cost to serve on a per-kilowatt-hour basis as customers become larger, all else being equal.\footnote{Exh. SCE-106, Appendix C (TURN response to SCE Data Request 1, Question 3).}

The relationship between annual consumption and the cost per kilowatt hour is the most straight-forward way to observe rate efficiency because it takes into account the costs of a \textit{variety} of inputs (distribution, generation, customer, etc.), all of which make up the ultimate rates customers pay.\footnote{Exh. SCE-106/Garwacki, p. 33.} Chapter III.A.4.c, below, describes the limits of using marginal generation capacity costs alone, which SEIA and IREC do.

b) \textbf{The Commission and the Energy Division Staff Have Concluded That Steep Tiers Are Not Cost-Based}

Differentials more steep than those adopted by the Commission in the mid-‘90s (two-tiered, with differentials of 15-20%) are problematic for the basic reason that they deviate from cost, under the Commission’s own repeated analysis. This OIR, issued June 28, 2012, emphasized “the principle of cost causation [as] one of the underlying goals of the Commission’s rate making process.”\footnote{OIR, p. 14.} The OIR nonetheless recognized the many sources of intra-class subsidies in current residential rate design, indicating that “[s]ome are clear and intended to achieve explicit goals of the Legislature and Commission, such as the discounts included in CARE and medical baseline rates,” and that others were unintended, such as the subsidy resulting from the fact that “customers in Tiers 3 and 4 pay a higher average price for the same kilowatt-hour of electricity than Tier 1 and 2, \textit{regardless of when or where that kWh is consumed}. “\footnote{Id., p. 15 (emphasis added).}

This basic idea—that higher usage customers pay higher rates under the current non-time-differentiated tiered structure even though these customers are not necessarily costlier to serve—has been corroborated by the Commission and its staff on multiple occasions. For example, the Commission found in D.93-06-087 that “[t]he average cost per kWh of serving [a utility’s] residential...
electric customers decreases as monthly usage increases”\textsuperscript{120} and that “[a] flatter tier structure promotes economic efficiency goals of rate design and is more equitable because it reduces built-in subsidies.”\textsuperscript{121} No party presented any evidence to challenge that long-standing finding, with which ORA agreed at the time the case was litigated (in part based on ORA evidence “that flattening the residential tier structure moves rates closer to the true marginal cost basis”).\textsuperscript{122} The ED Staff Proposal concluded substantially the same thing:

\textit{Every kWh consumed is as marginal as any other, since each customer’s last kWh causes an equivalent marginal increase to the utility system’s costs. However, the current steeply tiered rate structure results in charging the incremental usage of different customers at vastly different rates, and therefore not at marginal cost.}\textsuperscript{123}

Even as recently as D.14-06-029, the Commission found that “[a]s a customer’s energy usage increases into higher tiers, the price paid for that energy also increases. This increase is made without regard to the cost to provide the increased amount of electricity.”\textsuperscript{124}

Parties who urge the Commission to assign marginal generation capacity costs to upper-tiered rates exclusively (as SEIA and IREC do, explained further below) ignore another relevant Commission policy pronouncement that bears on this issue. As recently as December 2014, the Commission reiterated its view that when rate reform efforts result in narrowing the “differences between lower and upper-tier rates” such that they are “substantially reduced or eliminated,” it will then be appropriate to include greenhouse gas costs incurred by the utility in lower-tiered rates, including Tier 1.\textsuperscript{125} IREC’s witness, Mr. Fulmer, testified that he was “not familiar enough with the GHG

\textsuperscript{121} D.93-06-087, Finding of Fact 29.
\textsuperscript{122} Id., p. 51.
\textsuperscript{123} ED Staff Proposal, p. 49.
\textsuperscript{124} D.14-06-029, p. 3 (emphasis added).
\textsuperscript{125} D.14-12-054, p. 5 n. 10.
policies” to reconcile that Commission policy with his rate design proposal (described in the next section).126

Notwithstanding the marginal cost and policy principles noted by the Commission and the ED staff in the sources quoted above, the law of course mandates at least two inclining blocks for two main public policy reasons: (a) to provide baseline rates for “essential usage” that are lower than the average cost to serve; and (b) to provide customers an incentive to conserve. SCE’s Proposal satisfies part (a) because its inclining block tier proposal complies with the baseline statute (Section 739). Chapter VI.B. demonstrates why SCE’s Proposal appropriately addresses part (b), conservation incentives. The next subsection summarizes and refutes attempts by some intervenors to justify steep tier differentials on the basis of cost, an approach never before adopted by the Commission in setting residential tiered rates.

c) **SEIA’s And IREC’s Methodology For Using Marginal Generation Capacity Costs To Set Tiered Rates Is Deeply Flawed**

Rather than measuring the cost-to-serve using a cent-per-kilowatt-hour metric, SEIA, IREC and NRDC argued for inclining block tiers by focusing narrowly on marginal generation capacity costs (MGCCs) on the theory that higher-usage customers allegedly drive up generation-related capacity costs in the summer. Specifically, the proposals were as follows:

- **SEIA**: Mr. Beach testified that a “reasonable cost basis for the differentials between the tiers” relies on “marginal capacity costs that are driven by system peak demand.”127

- **IREC**: Mr. Fulmer testified that “while [it] is technically accurate” that “tiered rates cannot reflect the temporal aspect of marginal costs,” it is nonetheless possible for the “lower tier [to] be set to reflect the cost of existing resources while the upper tier reflects the cost of marginal

126 IREC/Fulmer, Tr. 24/3853:16-28.
resources.”128 By “existing” resources, Mr. Fulmer meant hydro and coal, and by “marginal” resources, he was referring to “new supply.”129

- NRDC: Citing work by TURN witnesses in an unnamed proceeding, Mr. Chernick asserted that tiered rates are justified, in part, because they “reflect the tendency for larger customers, with more weather-sensitive load, to impose higher costs per kWh on the system,”130 but offered no analysis about why that asserted fact, alone, justifies a maximum rate ratio of 2 to 1 (a weighted average ratio of Tiers 2 and 3 (non-baseline) to Tier 1 (baseline) of 1.64 to 1.0).

Even if these parties’ narrow approach, with the limitations explained below, were adopted by the Commission as one way to set rates for an inclining block structure, their steep tier rate ratios are not based on sound calculations, as was revealed on cross examination of SEIA and IREC.131

First, as a threshold matter, it is important to recognize the inherent flaws of using MGCCs as the sole basis for determining tiered rate structures. As Mr. Beach acknowledged during cross examination, MGCCs are driven by system peak demand, and system peak demand hours normally occur during weekday summer days. Under a non-time-differentiated tiered rate structure, customers are charged for energy regardless of when it is consumed, meaning that customers will pay the highest marginal generation capacity cost-based rate for every kilowatt hour consumed after they meet a particular threshold during their monthly billing cycle, even if that kilowatt hour is consumed in

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128 Exh. IREC-101/Fulmer, p. 4.
129 Id.
130 Exh. NRDC-101/Chernick, p. 5. The reference cited in footnote 1 of NRDC’s direct testimony to “Marcus, Ruszovan, and Nahigian at 33-38” was not listed in the “Works Cited” of Attachment B to Mr. Chernick’s testimony.
131 SCE notes that SEIA’s three-tier proposal is also supported by TASC, who offers no purported cost-based analysis for the tier differential. Moreover, IREC tacitly endorses SEIA’s proposal as well, because Mr. Fulmer acknowledged that SEIA’s rate proposal was a “bit lower” than IREC’s 2 to 1 two-tiered proposal and that, if a “compromise” of a three-tiered rate of 1.7 to 1.35 to 1.0 was proposed in settlement negotiations, he would support that. IREC/Fulmer, Tr. 24/3836:10-15
the dead of winter or at two o’clock in the morning.\textsuperscript{132} When asked whether it is appropriate to use “a marginal cost that’s based on certain peak hours of the year” to set a non-TOU rate, Mr. Beach pointed only to the “correlation” between high usage and peak demand.\textsuperscript{133}

However, the assumed correlation falls apart for eight of twelve months out of the year for SCE because no MGCCs are even assigned to the winter season, a fact Mr. Beach acknowledged on cross examination: “Well, that’s you know -- it’s -- I recognize that the correlation is strongest in the summertime.”\textsuperscript{134} Mr. Beach opined that seasonally differentiated rates might mitigate the flaw of using MGCCs to set year-round rates, but he did not make a specific proposal for seasonally differentiated rates that is ripe for review in this proceeding and offered that SEIA’s proposed tier rate ratio would be even steeper than 1.7 to 1.35 to 1.0 if applied only to the summer months.\textsuperscript{135}

The second fundamental flaw in using MGCCs to set tiered ratios is that MGCCs account for only under a quarter of SCE’s total residential class’s revenue requirement.\textsuperscript{136} If the Commission considered the residential class’s revenue requirement as a whole, and analyzed cost-of-service on a per kilowatt hour basis using all marginal costs, as described in Chapter III.A.4.a. above, the cost of service clearly declines with increasing usage, a reality avoided and ignored by proponents of using MGCCs alone to set tiered rates. “Marginal generation capacity costs are but one type of marginal cost that is ultimately reflected in customers’ bills; rates are comprised of generation and distribution charges, and, when bundled together, the cost to serve declines with increased usage over the year, as shown in Figure II-1” of Mr. Garwacki’s rebuttal testimony.\textsuperscript{137} Stated differently, “the proper marginal
cost analysis would include marginal distribution, generation and customer costs, which, taken together, show a decrease in per unit cost of energy as usage increases.”

Even if the Commission were to recognize the many limitations of using MGCCs to set non-time-differentiated, non-seasonally differentiated tiered rates, the record shows that the manner in which SEIA and IREC did so is fundamentally flawed and unreasonable. Mr. Beach’s response to Question 12 of SCE’s Data Request Set 1, contained in Exhibit SCE-126 starting on page 9, provides “details and calculations that support the collection of marginal capacity cost revenues through the tiered rate structure with tier differentials of 1, 1.35 and 1.7.” To achieve that tier ratio, Mr. Beach took $1,171 million, which represents the on-peak and mid-peak marginal capacity cost revenues from SCE’s 2012 GRC, and multiplied that number by 71.6% (the percentage of total sales to non-CARE customers).

That calculation yields $838 million that, in Mr. Beach’s words, is “to be collected from non-CARE customers.” Significantly, Mr. Beach’s calculations also show how the $838 million worth of revenues is allocated to each non-CARE tier based on forecast sales within each tier. Forecast sales to Non-CARE Tier 1 (10,103 GWh of the total 19,990 GWh) account for approximately half of the total marginal capacity cost revenues assigned to non-CARE residential customers. Yet, Mr. Beach acknowledged during cross-examination to having constructed a tier rate ratio that assigns a dollar value of zero to Tier 1 under the theory that only consumption above Tier 1 is “marginal” or “incremental.” Mr. Beach explains that “[t]he purpose here is to collect all the marginal capacity costs from Tiers 2, 3, and 4 rates.”

The obvious upshot of assigning no generation capacity cost revenues to Tier 1 is to artificially inflate the ratio between the non-baseline rates and the baseline (Tier 1) rate. Mr. Beach describes it this way: “[W]e are trying to back into a tier differential for the upper tiers versus the

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138 Id., p. 37 n. 91.
139 Exh. SCE-126, p. 9.
140 SEIA/Beach, Tr. 24/3783:20-3784:17.
141 Id. 3785:7-13.
baseline tier that will recover marginal capacity costs” from only the upper-tier rates.\textsuperscript{143} The 1.7 to 1.35 to 1.0 ratio, in other words, is predicated on assigning no marginal capacity costs to Tier 1 (“Well, the point here is that you are recovering your marginal capacity cost in usage above Tier 1. So you are right. There is no marginal capacity cost assigned to Tier 1 usage.”)\textsuperscript{143}

This outcome, however, is unjustified for the simple reason that Tier 1 customers \textit{do} cause the utility to incur costs during time of system peak demand, even if not at the rate that larger customers do. Mr. Beach’s direct testimony acknowledged this fact explicitly when he testified that setting a differential based on marginal capacity costs that are driven by system peak demand \textit{“does not mean that a customer whose energy use is limited to the baseline quantity does not incur such capacity costs.”}\textsuperscript{144} Mr. Beach acknowledged this fact a different way on cross-examination, when he was asked to recall his testimony that Tier 1 usage is purportedly inelastic because Tier 1 customers cannot unplug their refrigerators to conserve energy, which of course means that these refrigerators are running during times of system peak: “Sure. I mean if a customer who is just in Tier 1 will make some contribution at the time of the system peak, yes.”\textsuperscript{145} This is significant given that one-third of SCE’s residential customers never leave Tier 1.\textsuperscript{146} In reference to the ED Staff Proposal’s conclusion that “every kWh consumed is as marginal as any other, since each customer’s last kWh causes an equivalent marginal increase to the utility system’s costs,”\textsuperscript{147} Mr. Beach further acknowledged that “Yes. I would agree that every – if you are looking at just one particular hour [during time of system peak], every kilowatt-hour has the same impact.”\textsuperscript{148}

Mr. Fulmer testified that IREC’s two-tiered proposal reflected an analysis that “was relatively high level,” but nonetheless not substantially different from Mr. Beach’s:

\textsuperscript{142} Id. 3785, 14-21 (emphasis added).
\textsuperscript{143} Id. 3786:10-14.
\textsuperscript{144} Exh. SEIA-101/Beach, pp. 38-39 (emphasis added).
\textsuperscript{145} SEIA/Beach, Tr. 24/3787:4-6.
\textsuperscript{146} Id. 3812:5-11.
\textsuperscript{147} ED Staff Proposal, p. 49.
\textsuperscript{148} SEIA/Beach, Tr. 24/3787:27-3788:2.
[IREC’s approach] simply identified what the marginal [generation] costs were, summed them up and determined what that sum would be and said if the rate was set at that amount, this is what it would be. To the extent that that implicitly doesn’t include marginal costs in the lower tier, one may be able to say that.149

Mr. Fulmer acknowledged, however, that if some marginal costs were assigned to Tier 1, the rate differential in a two-tiered rate would be narrower.150 That conclusion is consistent with SCE’s analysis (described in the next section) and with Professor Severin Borenstein’s conclusion that:

[T]he true incremental cost per kWh of serving large and small residential customers is virtually the same. And that cost is much lower than the upper-tier prices under the IBP [inclining block pricing] used by the California regulated utilities. Even if you added the carbon cost of the emissions and priced those emissions at $37/ton (the latest estimate of the social cost of greenhouse gas emissions from the Obama administration), that would raise the appropriate price by less than two cents per kWh.151

Unlike Mr. Beach and Mr. Fulmer, Mr. Marcus did not justify his rate proposal on the basis of cost, and, in fact, Table 13 of Mr. Marcus’s direct testimony (Exhibit TURN-201, p. 44) provides further evidence that the methodology employed by SEIA and IREC to set tier differentials by attributing MGCCs solely to the upper tier(s) is arbitrary and unreasonable. TURN’s unit marginal cost for generation demand, taken from Table 14 of Exhibit TURN-201, is $80.23/kW-year. When that value is multiplied by the “Annual Total” kWh-year numbers presented in the “All Residential Customers” section of Table 13, as divided by the “Summer Coincident peak” data (measured in kW-customer), the cent per kilowatt hour values for low-usage, medium-usage and high-usage customers are 2.32 cents/kWh, 2.61 cents/kWh and 2.64 cents/kWh, respectively. Thus, the difference between high-usage and low-usage customers (2.64 divided by 2.32) is approximately 14%. Indeed, when, on

149 IREC/Fulmer, Tr. 24/3852:13-23.
150 Id. 3853:1-9.
cross-examination, Mr. Marcus was asked to “use marginal generation capacity costs alone to set a tier differential between upper tier and lower tier rates,” he testified that that differential should be approximately two cents only,\textsuperscript{152} which, when applied to a hypothetical two-tiered rate with a 50% baseline allowance and a residential class \textit{average} rate of nineteen cents, results in a tier differential of about 11% (20/18), or a maximum tier differential of 1.11 to 1, which is far from the proposed differentials of 100% by IREC, 70% by SEIA and even 60% by TURN between the highest tiered rate and the baseline rate.

\begin{itemize}
\item[d)] \textbf{SCE’s Marginal Generation Cost Analysis Yields A 20\% Differential}
\end{itemize}

Notwithstanding the analytical flaws that would plague tiered rate design if it relied exclusively and narrowly on MGCCs, SCE presented undisputed\textsuperscript{153} analytical evidence in Mr. Garwacki’s rebuttal testimony assuming, for the sake of argument, that a differential between baseline and nonbaseline rates could be designed to reflect the isolated fact that higher-usage customers consume a higher percentage of electricity during system peak hours relative to lower-usage customers.\textsuperscript{154} Specifically, SCE created a generation cost-of-service curve (replicated below from Figure II-5 of Exhibit SCE-106, as modified by Mr. Garwacki’s oral testimony\textsuperscript{155}) showing, on the x-axis, average monthly usage, and, on the y-axis, marginal generation cost. The cost difference between the two usage “blocks” at 300 kWh, which is the average break point between baseline and nonbaseline usage for SCE’s customers, is about twenty percent, which matches SCE’s proposed 2018 ratio of non-baseline to baseline rates.

\textsuperscript{152} TURN/Marcus, Tr. 22, 3297:17-3298:14.
\textsuperscript{153} IREC/Fulmer, Tr. 24/3855:5-9 (acknowledging SCE’s study depicted in Figure II-5 of Exhibit SCE-106 but stating that he did not address the analysis therein).
\textsuperscript{154} Exh. SCE-101/Garwacki, pp. 36-38.
\textsuperscript{155} SCE/Garwacki, Tr. 19/2460:23-28.
Unlike SEIA’s and IREC’s analysis, SCE’s analysis above does not pretend that no generation costs are incurred by Tier 1 customers; rather, it appropriately attributes costs to Tier 1 and measures them relative to non-Tier 1 usage to yield a rough differential. This analysis, not SEIA’s, is consistent with Mr. Beach’s view that “tier differentials should not be arbitrary, and should be based on a measure of marginal costs, such that there is a rational price signal sent to high usage customers.”156 At the very least, SCE’s evidence above demonstrates that its proposed tier rate ratio is not arbitrary. Rather, it realigns the tier rate ratio to pre-crisis levels in a way that appropriately balances the declining cost-of-service to residential customers, on the one hand, with the legal mandate to have an inclining block structure with gradual tier price differentials, on the other.

5. **Comparing TURN’s Primary Proposal To Its Alternate Proposal Underscores The Arbitrariness Of Both**

TURN proposed both a primary and an alternate tiered rate structure. Its primary proposal, to take effect in 2017 at the earliest, is for a three-tiered structure with rate ratios of 1.6 to 1.3 to 1.0 and no fixed charge.157 Its alternate proposal, triggered only if a fixed charge is adopted, is for the

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156 Exh. SEIA-101/Beach, p. 38.
157 Mr. Marcus did not propose to roll back to $0 SCE’s existing customer charges until during cross-examination when he testified in response to a question about what TURN proposes to do with SCE’s current basic charges as follows: “TURN proposes to remove the basic charge and assign everybody zero customer charges.” TURN/Marcus, Tr. 22/3298:17-19.
Commission to adopt “at least a 20% COMPOSITE tier differential.”\textsuperscript{158} TURN defines a composite tier differential as “comparing the second tier to the customer charge revenue plus the first tier revenue divided by first-tier kWh.”\textsuperscript{159}

The sections below explain why TURN’s primary proposal is arbitrary and does not go far enough to obtain meaningful rate reform. TURN’s alternate proposal is arbitrary insofar as it (1) requires a composite tier rate ratio that is not explicitly required and is inconsistent with the explicit fixed charge limits of AB 327; (2) offers an unprecedented recommendation for a composite tier differential that stands at odds with the composite tier rate ratios currently applied to other Commission-regulated utilities; and (3) calculates the composite tier rate ratio inconsistently with methods TURN and the Commission have previously used. TURN’s alternate proposal, however, directly undercuts its primary proposal. TURN’s primary proposal yields a “composite” rate ratio of 42\%\textsuperscript{160} that more than doubles TURN’s recommended lowest composite tier ratio of 20\% for its alternate proposal. In other words, if TURN’s reason for supporting a composite tier differential is “to create meaningful differentials between baseline and non-baseline rates”\textsuperscript{161} including the impact of fixed charges in the baseline, Tier 1 rate, then it should not matter whether Tier 1 customers pay $0 or some other fixed charge when comparing that composite baseline rate to the non-baseline rate(s). Even Mr. Marcus conceded on cross examination that, as a matter of mathematics, the same composite tier differential could be derived with and without a customer charge.\textsuperscript{162} This important fact, that TURN’s primary proposal reflects a tier ratio set at double its alternate proposal, underscores the arbitrariness of both proposals.

\begin{flushleft}
\textsuperscript{158} Exh. TURN-201/Marcus, p. 2 (emphasis in original).
\textsuperscript{159} Id.
\textsuperscript{160} This is the same calculation as used for other parties in Chapter III.A.2 of this Brief titled “Comparison of Parties’ Positions On End-State Baseline-to-non-Baseline Rate Ratios Relative to Today.”
\textsuperscript{161} Exh. TURN-201/Marcus, p. 51.
\textsuperscript{162} TURN/Marcus, Tr. 22/3306:20-27 (Q: “[L]et’s remove the fixed charge entirely but still target a 20 percent composite tier rate ratio. Couldn’t you get there with a simple tier ratio of 20 percent?” A: “If there were no customer charge, the simple and composite tier ratios are these same, yes.”)
\end{flushleft}
a) **TURN’s Primary Proposal (Three Tiers, No Fixed Charge)**

When asked to provide the basis for TURN’s recommended tier rate ratios of 1.6 to 1.3 to 1.0, TURN responded as follows:

TURN first offered this recommendation in its 2013 testimony and continues to believe that these ratios are appropriate. TURN supports the creation of the equal differentials amongst Tiers 1, 2 and 3 and selected these ratios in an effort to balance the goals of maintaining affordable baseline pricing and moderating upper tier rates (relative to current levels). TURN’s bill impact analysis suggests that these ratios are appropriate for accomplishing both objectives.¹⁶³

This response is significant in its silence about four matters bearing on the reasonableness of TURN’s tiered rate proposal.

First, TURN did not maintain that there was any cost-basis for the steepness of its three-tiered rate proposal, notwithstanding arguments Mr. Marcus had made in direct testimony that “at least some degree of rate tiering” is cost-justified given his view that the unit cost of serving apartments is less than that of serving single-family homes.¹⁶⁴ In rebuttal, SCE demonstrated why tiered rates have no cost-basis.¹⁶⁵ Even if one were to adopt TURN’s view that any difference in the cost to serve multi-family versus single-family customers should be reflected in rate differentials, not just in a differentiated fixed charge, TURN’s own cost analysis supports tier rate ratios that are closer to SCE’s tier rate proposal than to TURN’s.¹⁶⁶ In any event, Mr. Marcus acknowledged on cross-examination that with respect to TURN’s proposed tier differential, he “did not provide a cost basis for it,” and that he “did not

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¹⁶³ Exh. SCE-122, TURN response to SCE Question 4 of SCE Data Request 2. Mr. Marcus amended this data request response during cross-examination, adding, as an afterthought, that “there is one additional point that needs to be considered, which is the tier ratios should continue to encourage efficient use of energy by customers, and that was a factor in here as well as what was written on this page.” TURN/Marcus, Tr. 22/3294:2-10.

¹⁶⁴ Exh. TURN-201/Marcus, p. 43.


¹⁶⁶ *Id.*, p. 35. Specifically, Table 14 of TURN’s testimony shows a “Total demand and customer TURN per kWh” value of 9.12 cents for single-family customers and 8.15 cents for multi-family customers, which is a “differential” of 12%, not the 70% difference (between upper-most and baseline tiers) reflected in TURN’s three-tiered ratio.
design this rate necessarily to reflect costs.”  

When asked about parties who justify tiered rates based on marginal generation capacity costs alone, and who assign zero value to the marginal generation capacity costs of Tier 1, Mr. Marcus testified that he “would probably not assign – [he] would probably not follow that method.  [He] would use a more policy-oriented method to set the tier differentials[.]”

Second, TURN, like every other party who proposed a three-tiered end-state, failed to justify why three tiers are superior to two. The Hiner Survey concluded that, with respect to rate structures, “Highest and nearly equal utility values given to Flat and 2 Tier rate structures with much lower utility given to TOU 2, 3 Tier, TOU 3,” which “[i]ndicates preference for Flat and 2 Tier rate plans.” The law prohibits flat rates for California’s residential customers served by IOUs, so it is significant that some intervenors ignore the rate structure that stands on par with flat rates in terms of customer preference, especially some justify their opposition to fixed charges (which are prevalent in many utility bills customers already pay) in part in reliance on alleged lack of customer preference for them. Even IREC’s witness, Mr. Fulmer, acknowledged that a two-tiered rate is more understandable to customers and simpler, which serves Rate Design Principle 6 adopted in this proceeding. TURN touts the attractiveness of its rate design proposal as being “quite similar to the current rate design of the Los Angeles Department of Water and Power [LADWP].” But ironically, the Hiner Survey concluded that among several comparative reference points (the California IOUs, SMUD, LAWP and Riverside), “LADWP customers were the most dissatisfied across all measures.”

Third, Mr. Marcus testified that TURN’s tier proposal serves the goal of “maintaining affordable baseline pricing,” which is a decisive and clear conclusion that differs from that of ORA, who could not manage to propose any tiered rate ratio that, in its view, would yield acceptable

167 TURN/Marcus, Tr. 22/3294:2-10.
168 Id. 3297:9-12.
169 Exh. TASC-102, p. 21 (emphasis added).
171 IREC/Fulmer, Tr. 24/3829:25-28.
172 Exh. TURN-201/Marcus, p. 3.
173 Exh. TASC-102, p. 38.
bill impacts.174 However, it is unreasonable for TURN to have reached these conclusions about affordability without testifying at all about, and failing to even mention, SCE’s energy burden metrics in either TURN’s direct testimony (Exhibit TURN-201) or its “Supplemental Testimony On Tiered Rate Design Bill Impact Analysis for the Long-Term Residential Rate Reform Proposals of Southern California Edison” (Exhibit TURN-203), notwithstanding the Commission’s conclusion that “higher usage customers have, on average, higher energy burdens than lower usage customers.”175

Finally, TURN is inexplicably silent about how its proposal comports with tier rate ratios of the IOUs’ peers nationally who employ inclining block rates. Both SCE and SDG&E demonstrated that their proposals would bring California’s IOUs in line by 2017 or 2018 with the present structures of their peers nationwide.176 Ignoring that fact is unreasonable and telling. Moreover, TURN ignores the tiered ratios for PacifiCorp, and Liberty Utilities (1.12 and 1.27), discussed with respect to the requirement that the outcome of this proceeding apply to all electric IOUs.

For these reasons, TURN’s primary proposal is arbitrary. It makes a modest move to a three-tiered structure starting no earlier than 2017, but it fails to put the large California IOUs within a proper national rate design context or, even more importantly, on a consistent basis with the small California electric IOUs, fails to address SCE’s evidence regarding energy burden, fails to justify three tiers over two, and promotes a steep incline that is not based on cost and is inexplicably steeper than the alternative proposal, addressed below. TURN’s omission of any fixed charges is similarly out of step, and is discussed in Section IV.

b) TURN’s Alternate Proposal (Unspecified Fixed Charge With At Least 20% Composite Tier Ratio)

TURN’s alternative to its all-volumetric three-tiered rate structure accounts for the possibility that the Commission adopts an increased fixed charge for SCE and new fixed charges for PG&E and SDG&E. Specifically, the subheading of Mr. Marcus’s direct testimony states that “TURN

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174 Exh. SCE-122, TURN response to SCE Question 4 of SCE Data Request 2.
Recommends a Composite Differential of at Least 20%.”177 TURN’s asserted policy rationale for the composite differential is to “create meaningful differentials between baseline and non-baseline rates,” which TURN asserts is the way the Commission, in its discretion, should ensure compliance with legal requirements—applicable to gas and electric investor-owned utilities—to “establish an appropriate gradual differential” between rates and to “retain an appropriate inverted rate structure.”178 SEIA and ORA make similar, though less detailed, arguments.179

Without explaining the basis for its recommendation, TURN urges a composite tier differential of 20% using the smallest average annual baseline quantity offered in any baseline zone.180 TURN’s proposal should be rejected for the reasons below.

(1) **AB 327 repealed SB 695’s legal mandate to design rates with composite tier differentials.**

As explained in Section II.A.2., above, AB 327 expressly deleted Section 739.9 (b), formerly part of SB 695, which had explicitly limited rate increases to the non-CARE Tier 1 rate by requiring that the composite Tier 1 rate (i.e., the energy rate for Tier 1 plus all fixed charge revenues applied to the baseline quantity) be less than 90% of the system average rate.181 After AB 327, that explicit limit based on a composite Tier 1 rate no longer exists.”182 Moreover, pursuant to AB 327, the Commission has authority to establish non-CARE fixed charges at a maximum of $10. Had the Legislature intended to require the Commission to include fixed charge revenues in the Tier 1 rate and compare that composite rate to the average non-baseline rate for purposes of setting tier differentials, it

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177 Exh. TURN-201/Marcus, p. 51.
178 Id., p. 51 (quoting Sections 739 (d)(1) and 739.7).
179 Exh. SEIA/Beach, p. 43. Mr. Khoury of ORA indicated support for a composite tier rate ratio but did not have a specific percentage proposal. ORA/Khoury, Tr. 22/3410:3-9.
180 Exh. TURN-201/Marcus, p. 58.
181 The former Section 739.9(b), which was enacted in 2009 in SB 695 and has now been removed by AB 327, stated that “the rates charged residential customers for electricity usage up to the baseline quantities, including any customer charge revenues, shall not exceed 90 percent of the system average rate ….”
182 Section 739(a)(1). AB 327 added Section 739.9(c), which requires the first tier of a default rate (absent default TOU) to be include “electricity usage of no less than the baseline quantity” provided in Section 739(d)(1).
could have reflected such a requirement in AB 327 but it did not do so. TURN is thus grafting onto the statute a requirement it lacks, and arguing unreasonably that the Commission must adopt a composite tier rate ratio in addition to any fixed charge it approves in order to ensure compliance with the legal mandate that there be an “appropriate inverted structure” pursuant to Section 739.7 and a gradual inclining block pursuant to 739(d)(1).

Mr. Marcus cites D.11-05-047 (predating AB 327) as a recent decision standing for the proposition that the customer charge must always be included with the Tier 1 volumetric rate for evaluating whether the tiered rate has an appropriate incline under Section 739.7. However, in D.11-05-047, the Commission interpreted a provision of SB 695 (language in former Section 739.9 (a), which was, like 739.9(b), removed by AB 327 to require or impute a customer charge with the Tier 1 volumetric rate for the purpose of calculating customer bill impacts.183 More importantly, the Commission in that case rejected TURN’s argument that the composite tier ratio be set at least at 10% to achieve compliance with Section 739.7’s mandate that the tiered rate have an “appropriate inverted rate structure,” holding instead that:

We disagree . . . with TURN’s interpretation that the differential between PG&E’s proposed Tier 1 and 2 rates, including any customer charge in Tier 1, must be at least 10 percent in order to comply with Sec. 739.7. We interpret Sec. 739.7 merely as requiring that an inverted rate structure be maintained.184

As explained in the Section III.A.5.b.3., below, the Commission in the same decision also rejected TURN’s assertion that would mandate a comparison of the composite Tier 1 rate to the Tier 2 rate only, instead of all nonbaseline rates, for compliance purposes. In short, nothing in AB 327 requires the Commission to further limit a fixed charge, already subject to a limit of $10 per month for non-CARE customers, by including it with the baseline rate to determine an appropriate

183 D.11-05-047, p. 29 (“As noted above, the Commission has previously recognized fixed customer charges as being inseparable from the Tier 1 usage-based rate for purposes of calculating and measuring bill impacts of tier differentials.”)
184 Id., pp. 31-32.
gradual differential or whether the baseline and nonbaseline rates are inverted. It would make little sense for the Legislature to have given the Commission the authority to establish a meaningful but limited fixed charge but at the same time limit the Commission’s authority to determine how it establishes an inverted tier structure or how it can reduce the tier differentials from a broken rate structure. In any event, the last time the Commission spoke on the issue (in reference to a now-repealed law), it rejected TURN’s call to set a 10% minimum on the composite tier differential, and yet TURN here proposes to double that value even in the absence of a statutory mandate.

(2) **Even if the Commission were to adopt a composite tier rate ratio, 20% is unprecedented and inconsistent with utilities across California.**

The second reason the Commission should reject TURN’s 20% composite tier rate proposal is because the Commission has never adopted a composite tier differential benchmark at that level, by Mr. Marcus’s own admission, nor has it consistently applied a composite differential benchmark to the utilities it regulates. In this respect, the 20% composite tier differential should at most be a ceiling, not a floor, should the Commission elect to make it a benchmark for all electric IOUs.

Mr. Marcus was asked during cross-examination whether he was “aware of any Commission decision that [has] assigned an actual target composite tier ratio of 20 percent” and he answered “No.” In his direct testimony, Mr. Marcus had cited D.00-04-060 for the proposition that the Commission in the past rejected increases to fixed charges because they would have violated Section 739.7. However, Mr. Marcus admitted during cross-examination that, in the same case, the Commission adopted a composite tier rate ratio of only five percent inclusive of the then-existing fixed charge, which is only one quarter of the composite tier differential that TURN arbitrarily proposes in this case.

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185 TURN/Marcus, Tr. 22/3303:2.
186 Exh. TURN-201/Marcus, p. 53.
187 D.00-04-060, p. 107.
Indeed, the Commission has been inconsistent in its application of composite tier rate ratios. PacifiCorp has a simple tier ratio of 1.12 to 1.00 and a composite tier ratio of 1.04 and Liberty Utilities has a simple tier ratio of 1.27 to 1.00, with a composite tier ratio of 1.12.\footnote{Exh. SCE-106/Garwacki, p. 26. Pacific Power-California Price Summary in effect as of August 22, 2014 for Schedule D (Standard Residential), combined effective rates. Domestic Service (D-1) Rate Schedule of Liberty Utilities, California. Available at http://www.libertyutilities.com/west/customer_support/rates_schedules.html [as of October 17, 2014].} Based on these current two-tiered rate structures with fixed charges—which have been approved by the Commission and obviously thus comply with Section 739.7—TURN’s recommended 20% composite differential is out of line with current practices of the Commission for electric utilities. Moreover, while the policy asserted by Mr. Marcus should logically also apply to gas utilities with fixed charges (who are also bound by Section 739.7), Southern California Gas Company has a simple tier differential of 1.3, a fixed charge of $5 per month and a composite tier differential of 1.04.\footnote{Exh. SCE-106/Garwacki, Appendix B, B-3.} Table II-3 of Exhibit SCE-106, as modified by Exhibit SCE-111, provides information regarding the simple tier and composite tier ratios for residential customers served by various electric, gas, and water utilities relative to SCE’s Proposal. TURN ignores the wide gulf between its proposal and these other utilities’ composite tier rate ratios, even though Mr. Marcus is the only witness proposing to roll back SCE’s current nominal fixed charges in service of an “overall statewide rate recommendation” for “statewide consistency”.\footnote{TURN/Marcus, Tr. 22/3299:3-16.}

(3) **TURN’s proposed calculation methodology is unreasonable on its face.**

In addition to proposing a composite tier differential that is double what the Commission found was reasonable to comply with 739.7, and despite its failure to recognize that the Commission has approved vastly lower composite tier differentials for other utilities it regulates, TURN’s proposal is flawed because Mr. Marcus invents a new and restrictive way of calculating composite tier rate ratios that is unjustified, contradicts the Commission’s past practices, and stands at odds with TURN’s prior positions on the very same issue.
First, TURN urges the Commission to set the composite tier rate ratio using the smallest average annual baseline quantity.\(^{191}\) On cross examination, Mr. Marcus admitted that “there isn’t a Commission precedent for that” and, in fact, for at least SoCalGas, the Commission had used system-wide baseline quantities instead.\(^{192}\) However, Commissioner Florio, then an attorney for TURN, testified in A.10-03-014 that the Commission has historically calculated the composite tier result on a system-wide basis, not based on a single climate zone.\(^{193}\) By doing so in accordance with this approach and system-wide average baseline usage, the simple tier differential of 20% proposed by SCE, which is roughly a 3.5 cent per kWh differential under SCE’s Proposal and the illustrative rates for 2018, would grow to about 40%, with a 7 cent per kWh differential.

Second, TURN evaluates SCE’s Proposal by calculating the composite rate for non-CARE customers only, and at the maximum fixed charge level. That is too narrow a view of the entirety of SCE’s Proposal. At a minimum, TURN’s calculation should reflect a composite representing both non-CARE and CARE customers, which will provide a composite tier in line with several other utilities, as shown in Mr. Garwacki’s rebuttal testimony (as modified by Exhibit SCE-111). SCE’s calculations of other utilities’ composite tier rate ratios is consistent with the methodology TURN used to calculate the tier rate ratio in PG&E’s 2011 GRC Phase 2 proceeding.\(^{194}\)

Finally, TURN’s proposed calculation is wrong to the extent that it urges the Commission to measure the composite Tier 1 rate against the Tier 2 rate only (instead of against all non-baseline rates, to the extent there is more than one non-baseline tier). As the Commission has already held, “compliance with the inverted rate structure requirement of Sec. 739.7 is a comparison of

\(^{191}\) Exh. TURN-201/Marcus, p. 58.
\(^{192}\) TURN/Marcus, Tr. 22/3309:4-28.
\(^{193}\) Exh. SCE-106/Garwacki, p. 25, n. 53. See A.10-03-014 (PG&E 2011 GRC Phase 2 proceeding), Tr. 3/494-495, November 10, 2010. In response to a question about calculating composite tier differentials, Witness Florio responded, “Usually it is done on a systemwide basis taking the customer revenues and dividing by baseline sales.” In further questioning, Witness Florio could not recall an instance in which the composite tier ratio was calculated using just one baseline zone.
\(^{194}\) SCE/Garwacki, Tr. 19/2696:1-5.
the baseline rate (Tier 1) to the average of all non-baseline rates.” Mr. Marcus recognized this when he testified that the composite tier rate ratio compares “the upper tier rate or rates with the first tier plus any revenue from customer charges,” in contrast to his direct testimony, in which he had defined it as “comparing the second tier to the customer charge revenue plus the first tier revenue divided by first-tier kWh.” The former definition is significant to the arguments SCE makes in the next section.

c) The Difference Between TURN’s Two Proposals Is Unexplained and Illogical

For the reasons explained above, TURN’s composite tier differential proposal of “at least 20%” is arbitrary, higher than any target composite ratio the Commission has ever intentionally set, and is based on an invented methodology that the Commission has never before used. It is a significant proposal, however, because it exposes the arbitrariness of TURN’s primary proposal, which does not include fixed charge. According to Mr. Marcus’s direct testimony, the whole point of urging the Commission “to adopt at least a 20% COMPOSITE tier differential” is to make sure the IOUs’ proposals “comply with the law” that requires an appropriate inverted rate structure under Section 739.7. However, determining the “degree” of incline or inversion of a tiered rate structure should be and is, by Mr. Marcus’s own admission, a computation that is indifferent to the size of the fixed charge, or even the existence of one. Because that is the case, TURN’s 40% “incline” under primary proposal (simple-tiered, no customer charge) cannot be squared with TURN’s insistence that a 20% composite tier proposal in the alternative is also reasonable.

As Mr. Marcus testified during cross examination, a 20% composite tier differential could be obtained in two of many ways under a two-tiered structure. First, if there was a fixed charge of $10, the simple volumetric tier rate ratio would have to be larger than 20% such that,

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195 D.11-05-047, pp. 31-32.
196 TURN/Marcus, Tr. 22/3300:24-28 (emphasis added).
197 Exh. TURN-201/Marcus, p. 2 (emphasis added).
198 Id. (emphasis in original).
199 Although TURN’s alternate proposal is “at least 20%,” TURN does not specify which combination of volumetric rates versus fixed charges is sufficient at a value closer to 20% versus higher (or much higher) than 20%.
taken together, the composite tier ratio equals 20%. “That’s just mathematics,” as Mr. Marcus testified. By the same token, Mr. Marcus correctly testified that “[i]f there were no customer charge, the simple and composite tier ratios are the same” meaning that a two-tiered rate with no customer charge would require a simple tier ratio of only 20%.

Mr. Marcus offered no credible reason why a 20% composite tier differential at a $0 or nominal fixed charge level would be unreasonable given that, as a matter of math, the degree of “incline” in the “appropriate inverted rate structure” (Section 739.7) is the same as it would be under TURN’s vague alternate proposal. Instead, during cross-examination, Mr. Marcus said that for a rate structure with a $1 fixed charge (SCE’s status quo), “you probably would want to keep a [tiered] rate structure that looks fairly close to what TURN has proposed with a $1 customer charge on it because that would be -- you know, that would be more consistent with our recommendation.” For the first time, he testified that “if you bring in a significant customer charge, you have to look at these things and deal with them.” However, Mr. Marcus did not, in his direct testimony, define what a “significant” customer charge is, much less when along the spectrum of $0 fixed charges to $10 fixed charge the “composite” tier rate ratio requirement would be triggered. On cross-examination, he attributed that oversight to hasty testimony drafting: “I will tell you I was actually writing very quickly.” But even then, Mr. Marcus did not offer a fixed charge level at which a 20% composite tier rate ratio would be acceptable to TURN as a minimum value or at all. Worse, when asked what TURN would consider to be a reasonable differential in a two-tiered rate structure, if the Commission were to adopt one, Mr. Marcus opined that “it would probably be somewhere between composite tier differential [of] 40 and 50 percent.” In making that recommendation, Mr. Marcus did not even assume a particular level of fixed charge. The distance between that off-the-cuff proposal and the 20% composite tier differential

\[ \text{TURN/Marcus, Tr. 22/3305:13-19.} \]
\[ \text{Id. 3306:20-27 (emphasis added).} \]
\[ \text{Id. 3308:3-12.} \]
\[ \text{Id. 3308:9-12.} \]
\[ \text{Id. 3308:16-18.} \]
\[ \text{Id. 3322:19-23.} \]
is so vast as to be unreasonable, particularly when the degree of incline to comply with Section 739.7 is the whole reason for accounting for customer charge revenues within the Tier 1 rate. It makes no sense to make the incline even steeper without a customer charge.

The arbitrariness of TURN’s proposal reveals itself in two additional ways. First, in D.14-06-007, the Commission rejected a $5 customer charge for gas customers of SDG&E, which meant that it approved an effective composite tier rate ratio of only 15%, which is considerably lower than TURN’s 42% simple tier ratio for its three-tiered structure. This is significant because the Commission’s finding that a fixed charge in that context would “dilute” conservation and energy efficiency price signals, reveals that the Commission effectively approved a 15% rate ratio as reasonably protective of conservation and energy efficiency interests and in compliance with Section 739.7.

Second, Mr. Marcus did not explain, either in oral or written testimony, why TURN’s primary proposal (three tiers, with rate ratios of 1.6 and 1.35 to 1.0 and no customer charge) provided the appropriate conservation and energy efficiency incentives to customers. However, Mr. Marcus testified that “it’s reasonable as a matter of policy to have significant conservation incentives, and the 20 percent [composite] tier differential would be the way to do that.” Thus, if a 20 percent composite tier differential appropriately incentivizes conservation, the only reasonable conclusion to be drawn from TURN’s primary proposal is that the incline in TURN’s proposed three-tiered rate is steeper than what is required and “reasonable as a matter of policy to have significant conservation incentives.”

B. Baseline Quantities

SCE proposes to reduce the baseline percentage from its current level of 53% to the statutory minimum of 50% beginning in 2016 for the following reasons:

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206 Id. 3304:1-4.
207 Id.
208 Exh. SCE-101/Garwacki, pp. 55-56; Appendix D.
• Over the last 30 years, the combination of high-efficiency appliance standards and building codes has resulted in a dramatic decline in the percentage of household energy used for these core “lifeline” end-uses. Figure VII-3 of Exhibit SCE-101 shows a graph depicting that change over time, concluding that the percentage of household usage consumed by the top seven end-uses has declined from 91% to just 57%;

• A similar analysis of the California Energy Commission’s Residential Appliance Saturation Survey (RASS) data cites evidence of a higher saturation as well as greater expansion of discretionary devices relative to essential appliances from 2003 to 2009;

These facts regarding the increase in non-essential load, undisputed by any party, supports a modification of the statutory range (which is not possible to accomplish in this proceeding), or, at the very least, setting the baseline percentage to 50%.²⁰⁹ UCAN supports the same proposal made by SDG&E, and TURN does as well (on the condition that no increased fixed charges are adopted). Mr. Chernick (NRDC) proposed a Tier 1 rate equal to fifty percent of average usage, and, when asked about the difference between 53 and 50 percent, he explained that “that’s the kind of thing I didn’t worry about in my [proposed] design . . . if you move things around a few percent one way or the other, it was not particularly important. And I don’t know of any strong reason for preferring 50 percent over 53 and a half percent or vice versa. And it just didn’t seem to be worth a lot of effort to even talk about.”²¹⁰

ORA and SEIA support setting the baseline percentage at or near the “mid-point” of the statutory range but do not provide any analysis to support their conclusion.²¹¹ ORA reasons that “it would be better to limit the total number of rate design changes coming from this rulemaking” and that tier flattening is more important than reducing the baseline percentage in reducing intra-class subsidies.²¹²

²⁰⁹ As Mr. Garwacki testified, the statutory range of 50-60% was set when 91% of usage was consumed by the top 7 “essential” end-uses. This trend also supports an increase to the baseline rate levels. Exh. SCE-106/Garwacki, p. 39, n. 94.

²¹⁰ NRDC/Chernick, Tr. 17/2255:18-2256:4. See also Exh. SCE-113, p. 6.

²¹¹ SEIA simply states that “[i]f an IOU’s current rates use a different percentage of average rates as the baseline quantity (for example SCE is not at 53%), they should transition gradually to the 55% midpoint,” but does not explain why. Exh. SEIA-101/Beach, p. 48.

²¹² Exh. ORA-101/Khoury, p. 4-11.
However, especially given ORA’s indeterminate position on rate reform, SCE’s 2016 baseline reduction proposal is reasonable and timely, and should be adopted.213

IV.

FIXED CHARGE OR MINIMUM BILL

For the first time since 1996, the Commission has the authority to increase fixed charges for residential customers of SCE, PG&E, and SDG&E because many of the legal restrictions that had applied to these three large IOUs under AB 1890 (from 1997 through January 2001), AB 1X (February 2001 through December 2009) and SB 695 (January 2010 through December 2013) have now been explicitly lifted by AB 327.214 Section 739(e) allows new or increased fixed charges effective January 1, 2015 “for the purpose of collecting a reasonable portion of the fixed costs of providing electric service to residential customers.”215 The Commission’s authority is limited by Section 739.9(f) to a maximum fixed charge for non-CARE customers beginning January 1, 2015 of $10 per month and a maximum $5 per month fixed charge for CARE customers.216 As other parties who oppose fixed charges point out, Section 739.9(g) “does not require the commission to approve any new or expanded fixed charge.”217

While SCE, PG&E, and SDG&E and UCAN either propose or support fixed charges, opponents of fixed charges generally prefer substituting a minimum bill, permitted by Section 739.9(h), for any fixed charges.218 Fixed charges should be approved for the following reasons:

213 ORA also opposes reducing the baseline to 50% based on its concern that “[i]f average residential consumption were to increase [over a three-year period], baseline allowances set initially at 50% of average consumption would become out of compliance if average consumption increased while baseline allowances remained the same.” Exh. ORA-101/Khoury, p. 4-12. Under ORA’s logic, even though the law permits the baseline percentage to be set at 50%, the Commission could never do so because of a “compliance” risk that, in ORA’s view, cannot be mitigated. This position is unsubstantiated by the record.

214 The AB 1X restrictions and SB 695 did not apply to the three small IOUs. However, the new restrictions of AB 327 apply to all six electric IOUs.


216 Section 739.9(f). Beginning January 1, 2016, the maximum allowable fixed charge may be adjusted by no more than the annual percentage increase in the Consumer Price Index for the prior calendar year.

217 Section 739.9 (a) defines a fixed charge to mean “any fixed customer charge” as well as other charges that are independent of consumption. However, the last phrase makes it clear that it includes “any other charge not based upon the volume of electricity consumed.”

218 Id. Section 739.9(d) states that “the commission may consider whether minimum bills are appropriate as a substitute for any fixed charges.”
The proposed fixed charges, along with restructuring of tiers, will bring SCE’s residential rate structure more in line with its costs to serve, will help reduce intra-class subsidies, reduce bill volatility and improve stability while sending customers an important pricing signal that there are fixed costs of service;\(^\text{219}\)

Fixed charges will make SCE’s rate structure more consistent with the fixed charges approved by the Commission for California’s small electric IOUs, consistent with fixed charges applied to all other SCE customers, and with other municipal and IOU electric utilities in California and across the nation;

SCE’s proposed phase-in of fixed charges follows the same implementation approach recommended by the ED Staff Proposal;\(^\text{220}\) and

Because SCE’s proposed fixed charges will recover no more than 8% of the residential class revenue requirement, they do not unreasonably impair conservation or energy efficiency incentives.

As Mr. Garwacki stated, “Because customers want simplicity in addition to stability, a monthly fixed charge in combination with the revisions to the current tiered rate structure would combine to more appropriately collect fixed costs, reduce intra-class subsidies, and provide more stable monthly bills.”\(^\text{221}\)

For the reasons discussed below, the Commission should authorize SCE’s requested increase to its existing CARE and non-CARE fixed charges.

A. **SCE’s Fixed Charge Proposal is Consistent With Longstanding Commission Precedent**

SCE proposes to increase over a three-year period its $0.94 non-CARE fixed charge to $10 per month and its $0.73 CARE fixed charge to $5 per month.\(^\text{222}\)

The ED Staff Proposal, while agnostic

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\(^{219}\) The Commission found in D.93-06-087 that a fixed charge “would collect revenues more closely in proportion to cost causation thereby reducing subsidies, better inform customers of the system costs their consumption causes, and promote greater overall economic efficiency”

\(^{220}\) The ED Staff Proposal recommended implementing either a fixed charge or a minimum bill.

\(^{221}\) Exh. SCE-101/Garwacki, p. 25:19-22.

\(^{222}\) The current values are the SCE Basic Charges specified in its tariffs, effective January 2014. SCE’s fixed charges were initially adopted in 1996, not long after fixed charges for Liberty Utilities and PacifiCorp were adopted. However, any material increases in SCE’s fixed charges were trumped by the legislative constraints

Continued on the next page
about the choice between fixed charges or minimum bills, recommends the same phase-in process as SCE does for fixed charges to the maximum statutory limits of Section 739.9(f), with annual increases thereafter at the rate of inflation. SCE’s proposed increases to its existing fixed charges are revenue neutral. The revenues collected by fixed charges would incrementally reduce volumetric tiered rates, assuming no change to other components of the residential rate structure. At the maximum fixed charge levels, the percentage of SCE’s residential revenue requirement collected by fixed charges would increase from a level of only 1% to a very modest level of about 8% by 2018—remaining less than the percentage of revenues collected by fixed charges for SCE’s most comparable rate group of small commercial customers.

Other parties recognize that the utilities incur fixed costs. They must necessarily concede that the Commission has adopted fixed charges for some of the six electric IOUs regulated by the Commission and that fixed charges serve a valid purpose of collecting fixed costs through a fixed charge. For example, Mr. Beach testified that “marginal customer costs are costs that do not vary with the customer’s kilowatt-hour usage” and that “these costs exist whether the customer uses electricity or not.” He also acknowledged that if marginal customer costs are recovered volumetrically, “then I would agree that there is some degree of subsidy from higher-usage customers to low-usage customers.” Mr. Chernick acknowledged that “various views of fairness would say they [customers] should pay something [in the form of fixed charges] for being hooked up,” and that, considering services such as billing, “you can often justify a customer charge” in the same range as the $6.85 applied to PacifiCorp.

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223 Exh. SCE-106/Garwacki, p. 40.
224 SEIA/Beach, Tr. 24/3789:15-3790:11.
225 Id. 3790:21-26.
226 NRDC/Chernick, Tr. 17, 2277:11-24. However, Mr. Chernick maintained that “fixed charges do not track well the real drivers of utility costs.” When SCE asked Mr. Chernick what he meant by real drivers of utility cost, he simply referred SCE to Section VIII of Exhibit NRDC-101, which provides no such explanation. See Exhibit SCE-113, p. 4.
Nonetheless, most parties prefer minimum bills, asserting that fixed charges “reduce customers’ control over their bills,” inhibit conservation, or that they extend payback periods for customers who have invested in energy efficiency upgrades or distributed generation. ORA contends fixed charges have no place in a competitive market, which is an underlying premise for marginal-cost based pricing, and urges the Commission to abandon its longstanding support for fixed charges. ORA asks the Commission to undertake an entirely “fresh look” at the development of fixed charges for residential customers due to a change in ORA’s policies from the past.

As discussed below, no intervenor has succeeded in providing a coherent or consistent rationale for rejecting residential electric fixed charges, which are cost-based, used and accepted by all other electric customer groups, applied to residential customers of gas and water utilities, commonly adopted by municipal utilities for their residential electric customers, and widely used throughout the United States.

B. Opponents Of Fixed Charges Ignore Established Commission Support For Fixed Charges And The Widespread Use And Acceptance Of Fixed Charges

In 1993, the Commission stated its longstanding support for residential fixed charges as follows:

The Commission is clearly on record as supporting a residential electric customer charge. Indeed, the Commission has referred to its level of support as enthusiasm which is dampened only by customer acceptance concerns…. We find that a residential customer charge is consistent with and supported by our well-established principle of marginal cost-based rate design. It would collect revenues more closely in proportion to cost causation thereby reducing subsidies, better inform customers of the system costs their consumption causes, and promote greater overall economic efficiency.

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227 Exh. TURN-201/Marcus, p. 4.
228 Id., p. 4.
229 See e.g., SEIA/Beach, Exhibit SEIA-101, p. ii; “minimum bills do not have the same adverse bill impacts on low-usage and low-income customers and does not impair customers’ incentives to conserve energy or to invest in renewable distributed generation (DG).”
230 Exh. ORA-101/Danforth, pp. 2-2 to 2-4; ORA/Danforth, Tr. 21/3242:14-3243:5.
231 D.93-06-087, p. 27 (Exhibit SCE-116).
There is considerable Commission precedent for including a fixed charge in the residential rate structure—the fact that fixed charges are cost-based, the fact that fixed costs do not vary with consumption, the fact that collection of fixed costs through fixed rates would reduce cross-subsidies that are improperly reflected in a rate structure where fixed costs are recovered almost exclusively through volumetric rates, and the fact that conservation goals and energy efficiency can be achieved in parallel with the use of fixed charges. The Commission has long held that fixed costs should be recovered through fixed charges, as now allowed under Section 739.9(e)4, instead of through tiered volumetric rates that create an unfair subsidy paid by higher-usage customers to the benefit of lower-usage customers. In particular, the Commission held that “a customer charge is fairer to customers because it reduces the subsidies built into the current energy charge method of collecting residential customer costs.” In D.93-06-087, the Commission cited DRA’s position that a residential customer charge is superior to a minimum bill, is an appropriate way to accurately reflect marginal costs customers impose on the system, helps customers better understand the costs they impose on the system even when they use no electricity, and reduces subsidies among residential customers.

Fixed charges also provide some measure of bill stability to residential customers (as discussed in Chapter VI.B.3). Under SCE’s Proposal, the percentage of SCE’s residential revenue requirement collected by fixed charges would increase from only 1% to about 8% by 2018. This percentage of revenues collected by fixed charges is very modest and would remain less than what SCE collects via fixed charges for any other SCE customer rate group, including the rate group most analogous to residential customers.

232 Id., pp. 42-43.
233 D.96-04-050, pp. 107-108 (Exhibit SCE-115). See also D.88-07-023, p. 3, which states “We believe that customer charges are an accurate way to identify certain fixed costs associated with a customer being connected to the utility’s system.”
234 D.93-06-087, page 26, cites DRA’s position that a residential customer charge is superior to a minimum bill, is an appropriate way to accurately reflect marginal costs customers impose on the system, helps customers better understand the costs they impose on the system even when they use no electricity, and reduce subsidies among residential customers.
Despite the passage of time from the 1980s and early 1990s, the Commission decisions and rate design principles that support adopting fixed charges have not changed dramatically. In D.11-05-047, which rejected PG&E’s proposed $3 per month customer charge primarily based on legal restrictions, the Commission reiterated its fundamental support for a fixed charge, stating that “[a] fixed customer charge would more closely reflect cost causation and would more closely align PG&E’s retail rates with costs[.]” Support for fixed charges is consistent with rate design principles adopted in this proceeding relating to cost causation and bill stability.

There have been no decisions revising the Commission’s policies in favor of adopting residential fixed charges for electric utilities after D.11-05-047 or after enactment of AB 327. In light of the broad authority and definition of fixed costs provided to the Commission by AB 327, the Commission precedent and support for fixed charges should be reaffirmed by the Commission in this proceeding.

Other parties essentially ignore this background and instead recite rationales that the Commission has already rejected time and again. For example, ORA relies on a recent SDG&E gas decision, D.14-06-007, which included a finding that a proposed SDG&E gas customer fixed charge “dilute[s] the price signals for conservation and energy efficiency.” There are good reasons why the Commission should not give this finding—about the relationship between fixed charges and conservation—any weight with respect to policies for residential electric fixed charges. First, AB 327 provides specific statutory requirements that apply to fixed charges for electric utilities (discussed below in Chapter IV.F.2), but not to gas utilities. Second, there is an unexplained tension between the conclusion drawn in D.14-06-007 regarding fixed charges and the reality for SDG&E’s sister utility, Southern California Gas Company, which has applied and continues to apply a $5 per month customer charge to its residential gas customers, many of whom are SCE electric customers. Third, D.14-06-007 contains no discussion of any record developed in that proceeding to consider the net effect on conservation and energy efficiency of rate design proposals that would include changes to tiered,

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236 Exh. ORA-101/Danforth, p. 2-16.
volumetric rates as well as the addition of a fixed charge. In fact, the entire fixed charge discussion in D.14-06-007 consisted of a single paragraph that was not even included in the ALJ’s proposed decision, but was only added in response to comments on the ALJ’s proposed decision. Finally, that decision was not a part of a Commission policy-making proceeding such as this OIR.

In contrast to D.14-06-007, the Commission has long recognized the competing concerns of conservation, equity, and the fundamental principles of rate design and continues to employ fixed charges with respect to residential and nonresidential customers for small electric utilities, gas utilities, and water utilities other than for residential customers of SCE, PG&E, and SDG&E. The plain fact is that fixed charges are applied to residential customers for most services they encounter, including equally essential use of natural gas and water. Their use in all of these contexts is consistent with the Commission’s past decisions.

1. **Contrary to ORA’s Testimony, The Commission Has Long Been Able To Reconcile Fixed Charges With Marginal Cost-Based Principles**

Despite raising a number of technical issues regarding fixed charges, ORA’s policy witness on fixed charges, Mr. Danforth, made his position quite clear: “I don’t think the whole idea is appropriate to start with, and so I would want to keep the level as small as possible.” On cross-examination, Mr. Danforth testified that although the purpose of a fixed charge is to collect fixed costs under Section 739.9, the Commission’s marginal cost based ratemaking principles are hard to reconcile with a fixed charge. In fact, the Commission’s policies in favor of marginal cost rate design were in

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237 D.14-06-007 rejected the fixed charge proposal, but it approved a simple tiered rate ratio of 15 percent, which is lower than any simple tier proposal made by the IOUs in this proceeding notwithstanding that Section 739.9 (requiring an appropriate inverted tier structure) applies equally to gas and electric utilities. The net effect of SCE’s Proposal on conservation and energy efficiency is discussed in Chapter VI.B.

238 See Exhibit SDGE-106, Table CF-3, for list of service fee ranges applied by California water utilities. Note that the inclining block rate structure is not mandatory for water utilities, but that it is being adopted more frequently as a conservation measure. See also D.12-10-048, where the Commission approved collection of 30% of SCE’s Catalina Island’s water revenues via fixed charges differentiated by the service line pipe diameter.

239 ORA/Danforth, Tr. 23/3499:4-9.

240 ORA/Danforth, Tr. 21/3187:18-27.

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place in the 1980s when the Commission adopted fixed customer charges and the Commission has consistently been able to reconcile fixed charges with its marginal cost-based principles. In D.93-06-087, the Commission stated that a residential customer charge “is consistent with and supported by our well-established principle of marginal costs-based rate design,” and that it would “collect revenues more closely in proportion to cost causation thereby reducing subsidies” and “better inform customers of the system costs their consumption causes, and promote greater overall economic efficiency.”

Mr. Danforth testified that the 1987 and 1988 decisions used the “rental method” for determining marginal customer costs and therefore those decisions have no value because the Commission has more recently approved the new customer only (NCO) method for determining marginal customer costs. However, whatever value might be placed on that distinction in marginal customer cost methodologies was erased by D.96-04-050, which applied the NCO method and still adopted fixed charges for SCE’s residential customers. Despite the fact that the Commission by 1996 had adopted customer charges using either the NCO or the RECC method for purposes of establishing marginal customer costs, Mr. Danforth testified that he didn’t know how any kind of customer charge could be adopted in this proceeding until the methodological debate has been settled. According to Mr. Danforth, it would be better to delay tiered rate differential reductions over a longer period of time than to reflect a fixed charge in the residential rate structure.

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241 D.93-06-087, p. 27.
242 The “rental” method is generally described as the Real Economic Carrying Cost (RECC) method by the Commission and the IOUs.
243 ORA/Danforth, Tr. 21/3192:20-27; 3146:7-17.
244 D.96-04-050, p. 189 (Exhibit SCE-115).
245 ORA/Danforth, Tr. 21/3246:13-27. The Commission should reject ORA’s suggestion that before it can adopt a fixed charge, the Commission first needs to “take a fresh look at how marginal costs are calculated and how that impacts residential rate design.” Id., 3203:15-24. This proceeding is not the place to approve some new basis to calculate fixed charges, i.e., whether marginal customer costs should be established based on the NCO, RECC method, or otherwise. In this proceeding, the Commission has sufficient evidence to approve fixed charges, consistent with its longstanding policies, and, as discussed below, it is a place where the evidentiary record provided sufficient support for the Commission to adopt fixed charges at the maximum levels allowed by Section 739.9(f).
246 Id. 3262.
These arguments exalt form over substance, ignoring the Commission’s prior conclusions that higher-usage customers subsidize lower-usage customers in the absence of any fixed charge – regardless of whether a fixed charge is based on the NCO method or the RECC method. It ignores the Commission’s longstanding support for residential fixed charges and it also ignores the provisions of AB 327, which establish a sufficient basis for the Commission to adopt fixed charges and to do so by January 2015, not some date far into the future and contingent on the outcome of a future debate.

2. **TURN And Other Opponents Made No Effort To Reconcile Their Opposition To Fixed Charges With Commission Precedent**

While ORA at least tried to reconcile its position with Commission precedent, TURN directly conceded in response to an SCE data request, that “Mr. Marcus does not rely upon specific prior Commission decisions in making his policy recommendation that fixed charges not be adopted.”247 This admission is ironic in light of the fact that TURN clearly reviewed many prior Commission decisions in forming its opinion that the IOUs’ proposals violated the statutory requirement for an inclining block rate structure based on a composite tier differential calculation.248 TURN’s proposal is also inconsistent with the status quo for the smaller electric IOUs, discussed below in Chapter IV.C, below. There is no indication in SEIA’s testimony that Mr. Beach reviewed any Commission decisions on fixed charges other than D.11-05-047 either, although he does recite the same points made by others, which have been rejected in favor of adopting fixed charges in prior decisions.

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247 Exh. SCE-122, p. 1 of SCE DR 3: “Mr. Marcus does not rely upon specific prior Commission decisions in making his policy recommendation that fixed charges not be adopted. To the extent that TURN intends to rely upon specific Commission precedents in support of its proposals in this proceeding, any such reliance will be identified in TURN’s policy and legal briefs.”

248 See e.g., Exh. TURN-201/Marcus, at pages 52-54, which cites numerous Commission decisions over several decades related to the composite tier differential. Yet, in TURN’s response to SCE DR2, Question 1, TURN asserted that it had not conducted a “comprehensive” review to determine whether the Commission had ever established a composite tier ratio based on an individual climate zone and that topic would be discussed in TURN’s brief. Exh. SCE-122, p. 8.
3. **Opponents Of Fixed Charges Fail To Recognize The Widespread Use And Acceptance Of, And The Cost Basis For, Fixed Charges**

Another reason why opponents of fixed charges urge the Commission to reject the IOUs’ proposals is that they are allegedly disfavored or not preferred by customers. However, fixed charges are in common use in California and across the country. The Commission has previously held that customers’ aversion to customer charges could be overcome and should be adopted in the absence of a showing of widespread and persistent lack of acceptance by residential customers. The experience of other electric utilities shows that proper customer education and outreach, along with a reasonable phase-in of new charges, has worked well in implementing and achieving acceptance of residential fixed charges. As discussed above, during periods where fixed charges were not prohibited by law, the Commission has consistently endorsed the use of fixed charges for residential customers and has continued to do so for other electric utilities not subject to legal restrictions, residential customers of gas and water utilities, and all other nonresidential customers. Finally, the real world evidence for SCE, and other CPUC-regulated electric utilities such as PacifiCorp and Liberty Utilities shows that electric utility residential customers accept fixed charges with no evidence of any adverse reaction, even when they are set at $7 per month.

One reason TASC, for example, opposes fixed charges is because of its view that customers “have frequently expressed their opposition to fixed charges.” Yet TASC’s witness, Mr. Friedman presented no evidence outside of the customer survey data collected in this proceeding to substantiate his conclusion that there is allegedly “sustained customer opposition to fixed charges over the course of decades.” Nor did TASC conduct any independent survey or research that demonstrates that customers of SCE or customers of utilities under the Commission’s jurisdiction who pay fixed

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249 See e.g, Exh. SEIA-101/Beach, pp. 16-17.
251 Exhibit SCE-106/Garwacki, Appendix D, Response from PacifiCorp to SCE data request.
252 Exh. TASC-105/Friedman, p. 8.
253 Exh. SCE-128, p. 4.
charges do not “accept” them. When asked whether customer reactions to fixed charges would differ based on where customers live in California, Mr. Friedman opined that customer reactions to fixed charges differ by location and by “who they are, their demographics, and other factors.” However, no opponent of fixed charges has stated why location, demographics, diversity, or other reasons explain why residential customers of publicly-owned utilities accept fixed charges (such as customers of the City of Riverside, which operates inside the boundaries of SCE’s service territory and has a residential fixed charge of $8.06 per month, and Anaheim, Pasadena, Burbank, and Glendale, who are also completely surrounded by SCE’s service territory) whereas residential customers of SCE allegedly will not.

The Commission shared its wisdom on customer acceptance of fixed charges in D.93-06-087, with the help of DRA, who at the time supported one:

A customer charge is more fair to customers because it reduces the subsidies built into the current energy charge method of collecting residential customer costs. On that basis alone we believe many customers would accept a customer charge willingly. We believe that a customer charge can be made acceptable to most residential customers if it is properly presented and explained. We also would expect much of the opposition to be transitory in nature. Implementation of a customer charge would in itself result in information to customers.

Among the 50 largest electric utilities nationwide, monthly customer charges are prevalent. Among electric utilities in California (both IOUs and POUs), 70 percent have residential fixed charges. Of particular note, the Sacramento Municipal Utility District (SMUD) in 2014, adopted a residential customers charge of $14 per month and is on track to increase it by $2 each year over a five-year period.

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254 TASC/Friedman, Tr. 24/3765:4-10.
255 Exh. SCE-106/Garwacki, p. 49.
256 D.93-06-087, p. 41 (emphasis added).
258 Exh. SDGE-106/Fang, p. CF-14.
(2013-2017) to $20 per month by 2017. SMUD’s 2013 Annual Report referred to customers being “supportive” of restructured rates, which in 2013 reflected a $12 customer charge.\textsuperscript{259}

C. **TURN And ORA Advocate Inconsistent Fixed Charge Policies For Residential Customers Of CPUC-Jurisdictional Electric Utilities**

The Commission has continued to maintain fixed charges for the purpose of collecting fixed costs for residential customers of electric utilities other than SCE, PG&E and SDG&E, both prior to and after the enactment of AB 1890, AB 1X and SB 695. This includes the residential electric customers of CPUC-jurisdictional electric utilities such as Liberty Utilities (formerly Sierra Pacific Power Company) and PacifiCorp, to whom the restrictions of AB 1X and SB 695 did not apply and who have employed fixed charges and maintained reasonable tier differentials similar to those SCE proposes without any notable customer discontent nor significant concerns related to the effect of the fixed charges on conservation, EE, or DG since the 1990s. In fact, PacifiCorp and Liberty Utilities currently apply monthly non-CARE fixed charges of $6.85 and $7.05 per month, respectively, which is close to 70% of the maximum non-CARE fixed charges permitted by Section 739.9(f), with mild tier ratios.\textsuperscript{260}

Nothing in AB 327 provides an exemption for small IOUs from its fixed charge or other requirements. Moreover, the OIR itself states that the outcome of this rulemaking applies to all jurisdictional electric IOUs, \textit{even if they do not participate}. It is mandated by Ordering Paragraph 3 of OIR 12-06-013, which states:

\begin{quote}

\textsuperscript{259} Exh. SCE-106/Garwacki, p. 58.
\textsuperscript{260} For Liberty Utilities, D.06-08-024 increased its non-CARE residential customer charge from $4.50 per month to $6.00 per month, and set the ratio of nonbaseline to baseline rates at 1.18 to 1.00. Liberty now has a non-CARE customer charge of $7.05 per month, a CARE customer charge of $5.64 per month, and a simple tier ratio of 1.27 to 1.00. The current Liberty Utilities CARE fixed charge slightly exceeds the statutory limit beginning in 2015.

PacifiCorp’s residential fixed charge was increased from $3 to $5 per month in 1996, with an agreement to raise the fixed charge over the next several years. PacifiCorp has a $6.85 per month non-CARE customer charge, a $5.48 per month CARE customer charge, and a two-tiered rate structure for its California customers with a 20% CARE discount and a simple tier rate ratio of 1.12 to 1.00. The current CARE fixed charge for PacifiCorp also slightly exceeds the statutory limit beginning in 2015.
\end{quote}
Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, PacifiCorp, and other jurisdictional electric utilities set forth in Appendix A are named respondents to this Order Instituting Rulemaking. The outcome of this rulemaking will be applicable to all investor-owned utilities that are required to obtain Commission approval for residential rates, even if they do not participate.\(^{261}\)

Nonetheless, ORA suggests a policy to keep fixed charges where they exist for small electric utilities, e.g. Liberty Utilities and PacifiCorp, because eliminating them would have bill impacts,\(^{262}\) presumably on higher-usage customers whose bills would increase. Without even considering the possible use of a phase-out period to achieve a consistent policy, Mr. Danforth testified that “Maybe they shouldn’t have customer charges. I don’t know. All I can say is that they’re inconsistent with each other and that’s unfortunate.”\(^{263}\) Nonetheless ORA recommends keeping SCE’s current fixed charges.\(^{264}\)

On the other hand, Mr. Marcus inconsistently proposes removing SCE’s existing fixed charges “for statewide consistency” while at the same time proposing to keep fixed charges for small electric IOUs.\(^{265}\) Either way, ORA and TURN propose an inconsistent statewide Commission policy on fixed charges. This is entirely at odds with Mr. Danforth’s testimony as a policy witness that one goal of a rulemaking is to try to achieve consistency to the extent possible among the regulated electric utilities, even though when trying to distinguish the small electric IOUs, Mr. Danforth erroneously assumed that

\(^{261}\) OIR 12-06-013, p.27 (emphasis added). Appendix A includes PacifiCorp, California Pacific Electric Company (now Liberty Utilities), and Bear Valley Electric. On September 10, 2012, these utilities filed a joint motion to be dismissed from any further obligations in this proceeding. At the October 24, 2012 prehearing conference, at PHC-1, Tr. 38:21 – 27, ALJ Sullivan clarified that these IOUs would be exempt from active participation but that they would remain parties and would be subject to the Commission’s decision in this proceeding. As a result, these respondents were not required to submit rate design proposals.

\(^{262}\) ORA/Danforth, Tr. 21/3239:18-3240:5. At the same time, ORA’s witness, Mr. Khoury, rejects the adoption of new or increased fixed charges for the large IOUs because such charges would have adverse bill impacts on lower-usage customers. In effect, ORA relies on adverse bill impacts, which clearly can be moderated through a phase-in or phase-out period to reject any changes to current fixed charges. This simply perpetuates the inconsistencies that now exist.

\(^{263}\) ORA/Danforth, Tr. 21/3238:17 – 21.

\(^{264}\) Exh. ORA-101/Khoury, p. 4-6 reflects SCE’s current monthly service fee.

\(^{265}\) TURN/Marcus, Tr. 22/3299:12-3300:2.
the three smaller electric IOUs were not a part of this rulemaking.\textsuperscript{266} In fact, they remain parties and respondents, who need not participate, but who will nonetheless be held to the outcome of this proceeding as mandated by the OIR itself.\textsuperscript{267} Consistency among all electric IOUs for policies to be applied to residential rate design is more than a goal to be rued as “unfortunate” when not achieved. The net result of ORA’s position and TURN’s recommendations would be a continued lack of a consistent Commission policy for fixed charges for \textbf{all} electric IOUs.

In prepared testimony, Mr. Danforth incorrectly asserted that the Commission had established a policy of “having fixed charges for the small IOUs” years ago, “and the policy has been to slowly increase those charges with inflation.”\textsuperscript{268} However, in response to an SCE data request, ORA admitted that it was unaware of any decision that states that the Commission’s “policy on fixed charges should differ based on the size of the utility.”\textsuperscript{269} That should not be surprising because it was and still is the Commission’s policy to favor the adoption of fixed charges for all residential customers. On cross-examination, Mr. Danforth admitted he could not think of any policy reason for having fixed charges for small IOUs but not for large IOUs.\textsuperscript{270} Thus, neither ORA nor TURN offered a reasonable explanation why the Commission should maintain fixed charges for small electric IOUs,\textsuperscript{271} but reject any fixed charges for PG&E, SDG&E, and SCE.

\textbf{D. The Commission Has Routinely Adopted Fixed Charges For All Electric Non-Residential Customers Including Small Commercial Customers Who Are Most Analogous To Residential Customers}

Another inconsistency revealed by the policy recommendations of ORA, TURN, and SEIA relates to their different treatment of residential and small commercial customers with respect to fixed

\textsuperscript{266} ORA/Danforth, Tr. 21/3238:8-16.
\textsuperscript{267} OIR 12-06-013, Ordering Paragraph 3.
\textsuperscript{268} Exh. ORA-101/Danforth, p. 2-7:16-17.
\textsuperscript{269} Exh. SCE-118, p. 1.
\textsuperscript{270} ORA/Danforth, Tr. 21/3240:23 – 3241:10.
\textsuperscript{271} Bear Valley Electric Services Division or BVES (a division of Golden State Water Company) provides electric service in resort communities in the San Bernardino Mountains and does not apply a customer charge. D. 14-12-003, p. 4.
charges. For revenue allocation and rate design matters, ORA has a statutory mandate under Section 309.5(a) to primarily consider the interests of residential and small commercial customers. With respect to rate design matters, ORA has routinely accepted fixed charges for nonresidential customers, including the smallest commercial customers, whose fixed customer charges are based on marginal cost rate design principles. SCE’s customers in the GS-1 rate group, with electric demands ranging from 0 to 20 kW, pay a fixed customer charge of $24 per month. Mr. Danforth testified that SCE’s GS-1 commercial customers are the most analogous customers to residential customers and that he could not provide any rate design principle or policy to explain why small commercial customers should pay fixed charges but residential customers should not. He explains ORA’s indifference to small commercial customers paying fixed charges (even though he would reject them for residential customers) by stating that “there we have a situation where fixed charges have existed for years. And ORA’s general policy in going into proceedings is to try to get them from not being increased. But to do away with them completely creates bill impacts” on the higher-usage customers that would concern ORA. However, the bill impacts of reducing the current customer charge for higher-usage small commercial customers would be just the opposite of the bill impacts of increasing the current customer charge for higher-usage residential customers that ORA opposes in this proceeding.

There is an obvious inconsistency between the adoption of fixed charges for small commercial customers and TURN’s recommendation to reject fixed charges for residential customers. In response to an SCE data request, Mr. Marcus stated

Thus in the GS-1 customer class, while TURN would rather see lower customer charges, our typical recommendation has been to freeze them on policy grounds (or decrease them if called for by traditional cost-of-service analyses) in the face of utility requests for increases.  

272 ORA/Danforth, Tr. 21/3256:18 - 24.
273 Id. 3257:20-3258:1.
274 Id. 3202:17-3203:3.
275 Exh. SCE-122, TURN response to SCE DR 3, Q. 1(c).
TURN explains this inconsistency, or its own indifference to the inconsistency, by stating that it opposes fixed charges in principle.\textsuperscript{276} The fact remains that TURN accepts fixed charges for \textit{small} commercial customers—the customers who are most analogous to residential customers and the second largest SCE rate group in terms of number of customers. These SCE customers pay a fixed customer charge of $24 per month, with 17\% of small commercial customer class revenues recovered through fixed customer charges, whereas only 8\% of residential revenues would be recovered by SCE’s proposed fixed charges at the maximum levels now allowed under Section 739.9.\textsuperscript{277} On average, the revenue impacts of SCE’s fixed charge proposal on residential customers are less than one-half of the impacts of the fixed charge already applied to SCE’s small commercial customers that TURN accepts. Moreover, TURN’s typical recommendation to freeze fixed charges for small commercial customers in the face of utility requests for increases is also inconsistent with Mr. Marcus’s recommendation to eliminate SCE’s current fixed customer charges.\textsuperscript{278}

In attempting to rebut SCE’s point that fixed charges are a common component of other IOU rate class structures, SEIA’s witness, Mr. Beach, contended that a $10 fixed charge would represent a significant component of a monthly bill for a low-usage residential customer relative to the amounts paid by commercial customers.\textsuperscript{279} However, Mr. Beach had noticeably omitted the C&I group most comparable to the residential class, \textit{i.e.}, small commercial customers, who pay a $24 per month customer charge.\textsuperscript{280} On cross-examination, Mr. Beach admitted that “in retrospect, I think I probably should have dealt with the small commercial class as well.”\textsuperscript{281}

\begin{footnotesize}
\begin{enumerate}
\item[276] Id.
\item[278] TURN/Marcus, Tr. 22/3298:17 – 22, “TURN proposes to remove the basic charge and assign everybody zero customer charges. And we have also stated that we are not averse to adopting a minimum bill in the range of $8 to $10 ….” Mr. Marcus also described TURN’s proposal as an “overall statewide rate recommendation” and that it was intended “for statewide consistency” but in the next breath, Mr. Marcus creates exceptions for small IOUs that are also part of California and would retain their fixed charges under TURN’s proposal. Tr. 22/3299:3-3300:14.
\item[279] Exh. SEIA-101/Beach, p. 16.
\item[280] Exh. SCE-106/Garwacki, pp. 51-52.
\item[281] SEIA/Beach, Tr. 24/3797:3-7.
\end{enumerate}
\end{footnotesize}
### E. A Fixed Charge Provides More Customer Bill Stability, Not IOU Revenue Stability

Mr. Danforth, suggested that the widespread practice of electric utilities employing fixed charges may be the result of a desire to stabilize revenue collection, and that revenue decoupling may reduce utility incentives to employ fixed charges. On cross-examination, Mr. Danforth stated that ORA does not know whether that is actually true, but under that theory, Mr. Danforth asserts that utilities who do not employ decoupling have a greater need than California utilities to achieve revenue stability and thus a greater need for fixed charges. That theory is debunked by the widespread and near universal use of residential fixed charges by electric IOU and POU utilities, regardless of whether they employ decoupling. Moreover, even SEIA concedes that “revenue stability is not an issue for the California IOUs.”

Contrary to ORA’s speculative views, SCE does not support fixed charges because SCE seeks to maximize or to stabilize its fixed revenue stream. Fixed charges are revenue neutral and do not increase the revenues SCE will ultimately collect. Moreover, on a total system basis, the maximum amount of revenues collected by SCE’s proposed residential fixed charges is not terribly significant, i.e., 8% of residential revenues alone. Fixed charges are reasonable and desirable because they do reduce the variation in bills incurred by higher-usage customers in hot climate zones who have limited ability to reduce their usage in the summer, especially with steeply-tiered rate structures such as those that currently exist. These customers are the intended beneficiaries of SCE’s Proposal, and they include both non-CARE and CARE customers, as discussed in more detail in Chapter IV.B.

### F. Cost Basis And Legal Requirements For Fixed Charges

According to the January 6, 2014 ACR, “Passage of AB 327 demonstrates the legislature’s desire to lift constraints on residential rate design and move toward rates that are more closely aligned with

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282 ORA/Danforth, Tr. 21/3199:12 – 3200:22.
283 Id. 3225:15-20.
284 See Exh. SDGE-106/Fang, pp. CF-15 through CF-20, including Table CF-5, which shows that 97% of IOUs utilize a residential fixed charge.
285 Exh. SEIA-101/Beach, p. 16. SEIA may have erroneously assumed that PacifiCorp was subject to a revenue decoupling mechanism, which it is not.
costs.” One of the ways to align rates more closely with costs is to implement fixed charges to recover a portion of the fixed costs incurred by electric utilities. Prior sections of this Chapter IV discuss the history, policy, and other reasons for why fixed charges should be adopted. The following sections discuss the cost and legal bases for SCE’s proposed fixed charges.

1. **Cost Basis For SCE’s Proposed Fixed Charges**

Section 739.9(e) provides that fixed charges may be adopted for the purpose of “collecting a reasonable portion of the fixed costs of providing electric service to residential customers.”

The plain definition of fixed costs, which is reflected in Section 739.9(a) (“charge not based upon the volume of electricity consumed”) means *costs that do not vary with usage or consumption.* Thus, under Section 739.9(e), the Commission may choose to review some fixed costs and fixed charges in the context of marginal cost theories that have been used in the past to establish a fixed customer charge, or distinctions suggested by ORA between marginal costs and embedded or sunk costs. However, Section 739.9(a) does not limit fixed costs collected by fixed charges *solely* to marginal customer costs even though this is the erroneous assumption made by TURN, ORA, SEIA and others who oppose fixed charges. Given the broad definition of fixed costs in Section 739.9(a) as costs that do not vary with usage, and the broad application of the definition in Section 739.9(e) to fixed costs of providing electric service, it is entirely inappropriate to assume that the only fixed costs of serving customers that matter for purposes of establishing fixed charges are marginal customer costs that are defined to include only a final line transformer, a service drop, and a meter. These total fixed costs, when properly identified,

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287 This phrase is also consistent with Section 739 (d)(3), which states that “[a]t least until December 31, 2003, the commission … shall prohibit any charges on residential consumption that are independent of consumption.” A residential fixed customer charge would be one of several types of charges that are independent of consumption.
288 This erroneous assumption was incorporated into the testimony of Mr. Danforth and Mr. Marcus. Mr. Marcus testified that a fixed charge should only include “customer-related costs” if the Commission adopts one. TURN/Marcus, Tr. 3374:16-21. Mr. Beach testified that “… the definition of fixed cost in the statute are those costs that do not vary with usage. And I think the Commission has said that that is marginal customer costs.” SEIA/Beach, Tr. 24:3792.
unquestionably exceed the $10 per month statutory limit of Section 739.9(f) for non-CARE fixed charges regardless of the customer’s size.

2. **Fixed Customer Costs Alone Exceed $10 Per Month**

SCE presented several methods of determining fixed costs collected via fixed charges, which “should reflect customer, and portions of generation/transmission capacity and grid-related fixed costs of service, *i.e.*, costs that do not vary with customer usage.”289 However, as only one component of fixed costs, “[c]ustomer costs, including call center, billing, service drop, and final line transformer, are 100% required because they do not vary with consumption.”290 In Exhibit 119-A, SCE demonstrated that a marginal customer cost, including the cost of the final line transformer, service drop, meter and panel, and customer services (*i.e.*, call center) based on SCE’s proposed RECC method and using data in SCE’s 2012 GRC, results in a unit marginal customer cost of $13.30 per month. In a settlement adopted in D.13-03-031, the parties agreed to a marginal customer cost value of $9.60, which was an average of $12.10 (RECC) and $7.18 (NCO) per month results. After applying successive EPMC scalars to the RECC settlement marginal customer cost, as of January 2014, the residential customer fixed cost value would be $17.30 per month, which is the fixed customer cost value shown in Table V-11 of Mr. Garwacki’s direct testimony.291

3. **Other Marginal Costs Also Contribute To A Reasonable Fixed Charge Within The Statutory Limits**

SCE employs a variety of balancing accounts to ensure that SCE ultimately collects its authorized base rate revenue requirement regardless of actual sales.292 Many of SCE’s costs remain unchanged and may accurately be characterized as “fixed” from year to year. One example of this type

289 Exh. SCE-101/Garwacki, p. 27.
290 Id., p. 28.
291 The EPMC markup is used to establish fixed charges just like marginal cost-based customer charges are EPMC-adjusted for all other rate groups today. In D.93-06-087, the Commission noted that DRA’s witness testified that the full EPMC level “could be viewed as a target for the residential customer charge.” D.93-06-087, pp. 28, 30. Exh. SCE-119A/Garwacki, p. 1; Exhibit SCE-101/Garwacki, p. 27; Tr. 20/2863-2864.
292 Fuel and purchased power costs are treated as pass-through variable costs.
of fixed cost would be the financing costs associated with the distribution grid but there are many others, including the cost for components of the distribution grid such as poles, conductors, transformers that are required to serve customers, even customers at very low or no load service levels. SCE incurs fixed costs to provide these upstream components of its grid just as SCE incurs fixed costs reflected in marginal customer costs for the final line transformer, service drop and panel, to provide customer access to electricity. SCE estimated these total fixed costs for the average usage residential customer to be $76/month.293

In an effort to differentiate very small from average usage customers, in Appendix A of Exhibit SCE-101, SCE estimated the fixed costs for a small, or minimal usage customers (designated “low/no load” through a regression analysis of usage on coincident and non-coincident peak demands such that costs for distribution service, generation capacity, and transmission costs could be separately identified). While witnesses for TURN and SEIA did not agree with SCE’s estimate of fixed costs for small customers, neither TURN nor SEIA provided any alternative. Based on SCE’s analysis, the three fixed cost components needed to provide the first kWh to a “low/no load,” i.e., small customers, are (1) fixed customer costs of $17 per month; (2) fixed distribution service costs of $10 per month; and (3) fixed generation capacity/transmission costs of $8 per month.294 This total would exceed $30 per month, which is less than one-half of the $76 per month fixed costs of serving average-size customers, but remains far in excess of the $10 per month and $5 per month fixed charge limits that are codified in Section 739(f) for non-CARE and CARE customers.

With respect to differences in marginal cost methodology, page 3 of Exhibit 119-A illustrates differences between SCE’s and TURN’s proposed marginal distribution and subtransmission costs adjusted for line losses and diversity factors in SCE’s 2012 GRC. These results show that using TURN’s marginal cost methodologies and SCE’s analysis applied to TURN’s unit marginal costs, the

293 Exh. SCE-101/Garwacki, p. 27, Table V-11.
294 Exh. SCE-119A/Garwacki, p. 3.
total fixed cost values for low load/no load and average usage customers are $23 and $60 per month, both of which exceed the maximum fixed charge limit for non-CARE customers.\textsuperscript{295}

4. **Legal Issues Relating To Commission Approval Of Fixed Charges**

Section 739.9(e) provides as follows:

The commission may adopt new, or expand existing, fixed charges for the purpose of collecting a reasonable portion of the fixed costs of providing electric service to residential customers. The commission shall ensure that any approved charges do all of the following:

(1) Reasonably reflect an appropriate portion of the different costs of serving small and large customers.

(2) Not unreasonably impair incentives for conservation and energy efficiency.

(3) Not overburden low-income customers

These provisions are discussed below.

a) **Reasonably Reflect An Appropriate Portion Of The Different Costs Of Serving Large And Small Customers**

Though SCE did not directly differentiate its fixed cost proposal by customer size, that does not mean its proposal did not “reasonably reflect an appropriate portion of the different costs of serving large and small customers.” It simply means that the limit of Section 739.9 (e)(1) is so low relative to the level of fixed costs SCE incurs as to make any such distinction unreasonable.

Because Section 739.9(e)(1) does not define “small” or “large” customers, in the context of fixed charges, large or small customers could be based on usage or demand, with “small” customers being customers with lower demand or usage than “large” customers.\textsuperscript{296} A simple measure of

\textsuperscript{295} Mr. Marcus admitted that he reviewed and did not directly dispute SCE’s “no load/average non-coincident peak” numbers from SCE’s direct testimony (TURN/Marcus, Tr. 22/3292:10-28) but Mr. Marcus elsewhere stated that he doesn’t agree with the no load scenario because of the billing determinants that SCE used. \textit{Id.}, pp. 3286:18-3297:19.

\textsuperscript{296} SCE’s tariff Rule 1 defines a small business customer for some purposes in compliance with Commission decisions as “a non-residential customer with either a demand of 20 kW or less during the previous calendar
customer size would be the amount of energy consumed \textit{i.e.}, “larger” customers consume more electricity than small customers. As usage increases, larger customers will be paying more fixed costs than lower-usage customers because only a minority of all fixed costs can be recovered from customers, even the lowest-usage customers, at the maximum fixed charge levels permitted by AB 327. Thus, the majority of fixed costs will be recovered from variable energy rates and higher-usage customers will continue to pay more fixed costs through energy rates than lower-usage customers. Similarly, while Section 739.9(f) does not \textit{require} differentiation of fixed charges for non-CARE and CARE customers, subject to the fixed charge limits, SCE proposes to differentiate fixed charges by providing a 50\% fixed charge discount to CARE customers, regardless of the usage characteristics of the individual customer. Because CARE customers generally use less electricity than non-CARE customers, providing a lower fixed charge for CARE customers is a reasonable and practical means of complying with the “appropriate portion of different costs of serving” requirement of Section 739.9(e)(1).

In interpreting a statute such as Section 739.9(e)(1), the Commission often considers practical considerations, and courts have deferred to such Commission interpretations. Mr. Danforth testified that a demand-differentiated customer charge for small and large customers would be complicated for residential customers.\textsuperscript{297} TURN proposes that multi-family dwellings should receive a discount of at least 25\% on any fixed charges not based on individual customer demand or usage, but asserts that the fixed costs of serving multi-family dwellings are less than the fixed costs of serving single-family dwellings.\textsuperscript{298} Under TURN’s proposal, customers would benefit or be hurt based solely on the type of dwelling they occupy, not based on their actual usage. None of the small IOUs with fixed charges currently differentiate their fixed customer charges by dwelling type, and neither PG&E nor SDG&E currently have records that differentiate single-family and multi-family dwellings that could be used to implement TURN’s proposal. Thus, TURN’s recommendation, which would

\textsuperscript{297} ORA/Danforth, Tr. 21/3257:4 -14.
\textsuperscript{298} Exh. TURN-201/Marcus, p. 51.
complicate customer understanding of fixed charges by continuing (for SCE) to require four different fixed charges (CARE, non-CARE, single-family, and multi-family) for a relatively small component of bills, is neither practical nor immediately available to be implemented across all California IOUs.

b) **Not Unreasonably Impair Incentives For Conservation Or Energy Efficiency**

Section 739.9(e)(2) provides that the Commission shall ensure that fixed charges “not unreasonably impair incentives for conservation and energy efficiency.” Prior Commission decisions have not evaluated the effect of fixed charges based on this new statutory provision. The language of Section 739(e)(2) that fixed charges “not unreasonably impair conservation and energy efficiency” requires more than a finding that fixed charges “impair,” “dilute,” or have “any adverse impact” on conservation or energy efficiency—the Commission must find “an unreasonable impairment.”

The Commission has previously addressed conservation- and energy-efficiency related issues raised by parties related to fixed charges and generally concluded that the rate design principles of cost-causation and avoidance of cross-subsidies trump the arguments opposing fixed charges. By themselves, fixed charges would reduce volumetric rates, but cause bill increases for lower-usage customers and bill decreases for higher-usage customers. Thus, as described in Chapter VI.C, the overall effect of SCE’s Proposal on conservation is slightly positive or slightly negative depending on the methodology and elasticity assumptions used in the analysis. None of these results rise to the level of “unreasonable impairment” of conservation incentives.299

Past Commission decisions have also been quite clear that fixed charges do not unreasonably impair energy efficiency program incentives and that rejection of fixed charges suspends

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299 In D.14-06-007, the recent SDG&E residential gas customer charge matter, discussed above and cited by ORA, the Commission rejected a $5 fixed charge, by itself, without any apparent consideration of the impact of the related changes to volumetric charges, finding that it “dilutes” incentives for conservation and energy efficiency. That is not the finding required by the Commission under AB 327 since it does not find the “impairment to be unreasonable.”
movement toward cost-based pricing, the Commission’s fundamental pricing concern, while using the artifice of high energy rates to provide uneconomic incentives for energy efficiency.

Our fundamental approach to cost-based ratemaking is premised on economic theory which holds that the optimum allocation of resources is yielded by marginal cost pricing. In effect, **TURN asks us to suspend movement towards marginal cost-based pricing by holding the customer charge at zero and keeping the energy charges at levels above what they should otherwise be in order to promote DSM [Demand Side Management] program goals. We find insufficient basis for doing so.**

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Economically efficient reductions in energy rates to levels that are closer to their EPMC basis may indeed affect the cost-benefit ratios underlying various rebate programs, but we do not see that as a reason to retreat from such cost-based rates. Nor, as indicated, do we believe that it inappropriately undermines DSM goals to set cost-based prices. Indeed, **TURN’S approach, using the artifice of high energy rates to make rebate programs more valuable than they would be under more economically efficient rates, would require that we elevate a specific DSM program goal above economic efficiency goals of rate design.**

Moreover, a proposal to reject fixed charges on the basis that they would reduce volumetric rates from 100% recovery of the revenue requirement to something less than 100%, thereby “adversely affecting” conservation and energy efficiency cannot be reconciled with AB 327. That would mean that any impairment of conservation or energy efficiency incentives would *per se* be unreasonable, thereby nullifying the authority provided to the Commission under Section 739.9(e)(2). Even Mr. Chernick conceded on cross-examination that if the Commission were to adopt a fixed charge at a level that would require the utility to collect 91% of the residential revenue requirement via

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300 D.93-06-087, pp. 42-43.
301 See e.g., Sierra Club/Barsimantov, Tr. 23/3593:1-5, “Sierra Club did not think that any fixed charge minimum bill or a customer charge is a good idea because it will reduce customer incentives to do energy conservation.”
volumetric rates, he would not recommend appealing such a decision on the basis that it was unreasonable because “in terms of legal unreasonableness, it probably doesn’t rise to that level.”  

That conclusion makes Mr. Beach’s assessment that “fixed charges would remove an appreciable fraction of the utility revenue requirement from the ability of customers of any size to impact” extreme on its face given that at the statutory maximum fixed charge levels of $10 and $5, only eight percent of the total residential revenue requirement would be collected via fixed charges.

The Commission should also consider applying Section 739.9(e)(2) evenly or consistently. ORA’s and TURN’s proposals would allow some small IOUs to continue employing fixed charges at levels of nearly 70% of the non-CARE fixed limit and even above the CARE fixed charge limit but reject them for large IOUs. Neither TURN nor ORA, nor any other party, has provided any basis for the Commission to conclude that fixed charges unreasonably impair conservation and energy efficiency for the three large IOUs but do not for the small IOUs. Dr. Faruqui’s testimony in fact concludes that SCE’s customer charge proposal would have a modest, but not unreasonable, impact on conservation:

[TEXT]

303 Exh. SEIA-101/Beach, p. 15.
304 Exh. PGE-111/Faruqui, p. 27.
In any event, SCE’s fixed charge proposals are still well below actual cost, as demonstrated in Chapter IV.F.2. This means that the non-baseline volumetric rates still remain above cost, thereby still providing enhanced, though not necessarily transparent, incentives towards conservation, customer generation, and energy efficiency. SCE’s proposed fixed charges thus cannot reasonably be characterized as an “unreasonable impairment” of these incentives.

c) **Not Overburden Low-Income Customers**

Section 739.9(e)(3) requires the Commission to ensure that any fixed charges it approves do not overburden low-income customers. Given the connection between low-income and CARE customers, for the purpose of interpreting this provision, the Commission should interpret “low-income” to mean CARE customers giving due to consideration to the proposed level of the fixed charge, the discount on the fixed charge provided to CARE customers, the phase-in process for the fixed charges, the electricity energy burdens of CARE customers, and the fact that the impact of a fixed charge addition depends on the usage level of a customer.

For CARE customers, SCE proposes a fixed charge at a discount of 50% from the fixed charge for non-CARE customers. For 2015, that would result in a CARE fixed charge of $2.50 per month, with annual increases thereafter until a $5 per month fixed charge is implemented in 2017. This three-year phase-in process follows the same implementation approach recommended by the ED Staff Proposal and is an approach the Commission has used in the past to mitigate bill impacts resulting from fixed charge implementation.\(^{305}\) In addition, SCE proposes to establish CARE volumetric rates for Tiers 1, 2, and 3 at a discount of 30% off the corresponding non-CARE tiered rates. As a result, CARE customers will receive an average effective discount relative to non-CARE customers of about 32% or 33%, which is squarely within the range of 30% to 35% required by Section 739.1(c)(1).\(^{306}\)

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\(^{305}\) For example, in D.96-04-050, SCE had proposed a $5 per month customer charge to be phased in at $1 per year over five years. The Commission phased in the implementation of its adopted customer charge of $2 per month for SCE’s residential customers over a six-month period from $1 to $2 per month. D.96-04-050, p. 116 (Exhibit SCE-115).

\(^{306}\) Exh. SCE-101/Garwacki, p. 38.
Because low-usage customers generally receive bill increases under SCE’s Proposal, it is important to evaluate the impact of these increases. In fact, the dollar impacts of the fixed charges, as well as all other components of SCE’s Proposal, are modest for low-usage CARE customers, less than $3.60 per month.\textsuperscript{307} Moreover, the electricity energy burden statistics for low-usage CARE customers before and after SCE’s proposed rate changes are the lowest in comparison to other SCE residential customers. At the same time, higher-usage, higher energy burden customers, who are having the most difficulty paying their electric bills,\textsuperscript{308} receive some relief under SCE’s proposed fixed charges. Because the effect of a fixed charge, along with tier reductions, is to help reduce the energy burden for those customers with the highest current energy burdens, SCE’s fixed charge proposal actually improves affordability for the segment of low-income customers that is most in need.

G. **Minimum Bill Proposals As A Substitute For Fixed Charges And Related Legal Issues**

1. **A Minimum Bill Is Not An Appropriate Substitute For Fixed Charges**

   Section 739.9(h) provides that the Commission “may consider whether minimum bills are appropriate as a substitute for any fixed charges.” The three large IOUs propose fixed charges at the maximum allowed levels under Section 739.9(f), with minimum bills essentially rendered moot if the fixed charge proposals are adopted. The ED Staff Proposal stated that “Staff believes that either higher minimum bills or a fixed charge is consistent with the Commission’s rate design principles. The key difference between the two is that with minimum bills, the residential revenue requirement is still primarily recovered on a volumetric basis.”\textsuperscript{309} The Commission determined in 1986 that

   … use of a minimum bill rather than a customer charge presents a problem since the minimum bill disappears with increased use. Minimum bills

\textsuperscript{307} Tables V-12 and V-14 of Exhibit SCE-106/Ramirez, as modified by Exhibit SCE-125, demonstrate that the bill increases for CARE customers with usage below 300 kWh would be $3.59 per month on average, with no revenue requirement changes, and $4.07 per month on average with a 2.1% revenue requirement increase in the first year of the transition (with each subsequent year bringing more moderate monthly increases).

\textsuperscript{308} Exh. SCE-101/Garwacki, p. 39.

\textsuperscript{309} ED Staff Proposal, p. 72.
would only recover customer costs from customers with very low usage, although all customers impose those costs on the system.\textsuperscript{310}

The flaws of a minimum bill still remain today as a reasonable basis for the Commission to continue to prefer fixed charges over minimum bills. Currently, minimum bills do apply in conjunction with fixed charges for three of the six electric IOUs (SCE, PacifiCorp, and Liberty Utilities) while PG&E, SDG&E, and BVES have minimum bills with no fixed charges. SCE has both a minimum bill applied to non-generation charges and fixed charges that are lower than the minimum bill. In D.14-06-037, the Commission recently adopted the same methodology SCE uses for PG&E and approved a minimum bill of $3.50 per month.\textsuperscript{311} SDG&E customers pay a minimum bill of $5.00 per month, which applies to non-generation charges only. PacifiCorp and Liberty Utilities apply minimum bills to residential customers that are equal to their fixed charges for non-CARE and CARE customers. BVES has a minimum bill of about $6.40 per month and, notably, a $26 per month minimum bill that applies to non-permanent resident customers that far exceeds the minimum bill BVES applies to permanent residents.\textsuperscript{312}

Section 739.9(h) does not define a minimum bill. SCE’s tariffs currently employ a non-CARE minimum charge of about $.059 per day (about $1.80 per month) for single-family dwellings that is applied only to non-generation charges when the sum of delivery service charges plus the applicable fixed customer charge ($0.94 per month) is less than the minimum charge. At August 2014 rates, this current minimum charge applies to only about 17 kWh of delivery service for a non-CARE single-family dwelling, when accounting for the customer charge. Thus, any SCE single-family dwelling customer using less than about 17 kWh would pay $1.80 per month minimum charge, plus actual usage

\begin{quote}
\textsuperscript{310} D.86-12-097, p. 23. This decision adopted a customer charge of $2 per month for the test year, increasing by $1 in each of the next two attrition years for PacifiCorp.

\textsuperscript{311} Ordering Paragraph 1, D.14-06-037 states that, while the new methodology is approved, “PG&E shall defer implementation of this change until after a decision is issued in R.12-06-013.” PG&E had requested this language in comments on the proposed decision because, given its proposal in this proceeding to implement a fixed charge in lieu of a minimum bill, PG&E did not want to implement the new minimum bill methodology in 2014 only to have to remove it shortly thereafter.

\end{quote}
multiplied by the generation rate, with the sum of the minimum charge and actual generation revenue equaling the customer’s bill. For any usage above 17 kWh, the minimum charge does not apply and the non-CARE customer is billed like any other residential customer. By applying the minimum charge to non-generation rates, this methodology is competitively neutral to direct access and CCA customers, who separately pay their generation charges to their provider. As can be seen by the usage distributions in Exhibit SCE-104, at page 3, far fewer than one percent of non-CARE customers have usage of less than 25 kWh per month.

Substituting a minimum bill for proposed fixed charges at the levels recommended by parties who oppose fixed charges would still only apply to limited percentage of bills and would have an extremely limited impact on reducing subsidies paid by higher-usage customers or on moving volumetric rates closer to cost. In reviewing the substitution of a minimum bill for fixed charges, the Commission must consider the reasonableness of that substitution in the context of the intent of AB 327 and the Commission’s intent to make progress toward more cost-based volumetric rates and to collect fixed costs through fixed charges, discussed above in Chapter IV. While there are always competing goals that can be achieved through different approaches, a minimum bill that applies only to a small minority of customers would not reasonably replace a statutorily-limited fixed charge that is applied to all customers.

The limited application and value of a minimum bill is illustrated by Exhibit SCE-121, which was prepared by Mr. Marcus and assumes a $10 per month non-CARE, minimum non-generation bill, the maximum level proposed by TURN. For a non-CARE SCE customer, the $10 per month minimum bill would apply up to 178 kWh of usage at SCE’s August 2014 rates, including SCE current customer charge in the calculation. This is a relatively small percentage of total non-CARE usage,

\[313\] ORA concedes that “[i]mplementing minimum bill provisions near the $5 and $10 caps that ORA recommends would have a relatively small impact on the rates we present.” Exh. ORA-101/Danforth, p. 2-1.
approximately 8% at 2014 rate levels, and would collect less than $30 million annually from non-CARE customers.\textsuperscript{314}

This drawback to a minimum bill gets worse as baseline delivery rates increase in the future under SCE’s Proposal through redistribution of distribution revenues. By 2018, significantly fewer customers would qualify for the $10 minimum bill than they do under current rates because fewer kWhs could be billed for less than $10 per month. The revenues collected in 2018 by a non-CARE $10 per month minimum bill and a $5 per month CARE minimum bill as proposed by TURN, ORA, and SEIA would probably be less than the revenues (1% of total residential revenues) that are collected by SCE’s current fixed charges. In essence, the benefits of fixed charges recognized by the Commission—to reduce intra-class subsidies and to provide some measure of customer bill stability during harsh weather conditions instead of the relative instability of all-volumetric rate—would be completely lost. This analysis confirms that the Commission’s preference for fixed charges over minimum bills should apply today as it did in 1986 and that the Commission should reject a minimum bill as an unreasonable substitute for fixed charges.

2. **Minimum Bill Proposals Lack Sufficient Specificity, Would Be Impractical To Implement, And Should Not Be Subject To Statutory Conditions Applied To Fixed Charges**

Most parties who advocate for minimum bills are not specific about their proposals\textsuperscript{315} or would have the Commission defer consideration of a minimum bill to a future proceeding.\textsuperscript{316} Sierra Club takes the extreme position that no minimum bill should be permitted.\textsuperscript{317} ORA proposes to continue

\textsuperscript{314} About 8% of SCE’s non-CARE residential customers, or about 220,000 customers, use less than 175 kWh per month. If all paid a $10 minimum charge, on an annual basis, this would produce less than $30 million of revenue. Calculation based on Table X-13, corrected, Exh. SCE-104/Garwacki, pp. 3-4.

\textsuperscript{315} NRDC/Chernick, Tr. 17/2253:14-16 (Q: “Do you have a minimum bill proposal for SCE, a specific one for this case? A: No, I don’t.”)

\textsuperscript{316} ORA/Danforth, Tr. 23/3489:5 -3491:4.

\textsuperscript{317} Sierra Club/Barsimantov, Tr. 23/3593:1-5 (“Sierra Club did not think that any fixed charge minimum bill or a customer charge is a good idea because it will reduce customer incentives to do energy conservation.”) (Emphasis added.)
use of current minimum bills but would propose a new embedded cost methodology (as opposed to a marginal cost methodology) to recover stranded costs to determine minimum bills in a future GRC proceeding as well as provide a 50% discount to CARE customers.318

There is no requirement in AB 327 that minimum bills be subject to the fixed charge restrictions and requirements of Section 739.9(e) or (f). If that had been the intent of the Legislature, a “minimum bill” would have been explicitly included in the definition of fixed charges in Section 739.9 (a). As illustrated by Exhibit SCE-121, the minimum charge is one component of a minimum bill that clearly does vary within the range where the minimum non-CARE, non-generation charge would apply. The kWhs of usage that are encompassed by the minimum charge will also vary every time delivery rates increase or decrease. These variations distinguish a minimum bill from a fixed charge and demonstrate why it should not be subject to the statutory limits that now apply to fixed charges under Section 739.9.319

TURN and SEIA recommended minimum bills or endorsed a minimum bill as an alternative to a fixed charge, but their proposals lack specificity.320 For example, TURN does not make a specific proposal, but only provides a rough description and a range for a minimum bill.

… it would be reasonable to set a minimum non-generation bill in the range of $8-$10 for non-CARE customers, and 50% off that amount for CARE, plus recovering all generation costs from the customers. This would collect about 100-150 kWh of non-generation costs at baseline rates from non-CARE customers, thus assuring that a larger contribution is

318 ORA/Danforth, Tr. 23/3489:5-3491:4.
319 Contrary to limits on fixed charges, all IOUs, both large and small, have employed residential minimum bills throughout the period when fixed charges have either been unrestricted, barred, or subject to statutory restrictions. In D.14-06-037, the Commission did not consider the minimum bill changes to be restricted by Section 739.9.
320 While TASC proposed a specific minimum bill, Exh. TASC-105/Friedman, p. 21, Mr. Friedman could not explain the basis for TASC’s $10 minimum bill proposal, and acknowledged that he relied on an analysis by SEIA that Mr. Friedman could not describe. Tr. 24, 3765:22-3766:5. Mr. Chernick did not have a minimum bill proposal, but testified that a minimum bill of $12 would be preferable to a fixed charge. NRDC/Chernick, Tr. 17:2253.
made by solar net metering customers, vacant homes, and similar unusually small customers.”

SEIA proposes to allow the three large IOUs to establish non-CARE minimum bills of $5 per month beginning in 2015, with CARE minimum bills at a 50% discount, contending that “consistent with AB 327, the minimum bill should recover a reasonable portion of IOU costs which do not vary with usage, i.e. marginal customer costs.” The $5 per month level is the current minimum bill level for SDG&E non-CARE residential customers. During cross-examination, Mr. Beach proposed a confusing minimum bill applied to a customer’s entire bill of $5 per month, instead of applying to delivery only (as established for SCE, PG&E, and SDG&E), but stated that he intended “to talk to my client about [it] and figure out what our position is on whether it should just apply to the distribution cost.” SEIA’s proposal would have even less value than TURN’s proposal, is inconsistent with the way minimum charges work today for SCE and SDG&E, and should be rejected.

Subject to that uncertainty, Mr. Beach made two minimum bill proposals: One is to establish a non-CARE minimum bill of $5 per month in 2015, but to revise it in future Commission proceedings to equal Commission-adopted marginal customer costs, subject to the caps that apply to fixed charges. Alternatively, Mr. Beach proposed to establish a minimum bill of $5 per month in 2015, but escalate it by $1 per year until it reaches $10 per month by 2020, with adjustments for inflation compared to 2015. SEIA contends that the minimum bill is subject to the fixed charge limits for CARE and non-CARE customers in Section 739.9(f). While both proposals should be rejected for other reasons discussed above, the second alternative is less burdensome than the first option and more feasible to implement.

321 Exh. TURN-201/Marcus, p. 51. Mr. Marcus testified that he had not considered whether an MB would be subject to the limits of Section 739.9. TURN/Marcus, Tr. 22/3310:26-3311:8.
322 Exh. SEIA-101/Beach, p. 18.
323 SEIA/Beach, Tr. 24/3800.
324 Exh. SEIA-101/Beach, p. 18; Tr. 24/3801:14 – 20.
325 Exh. SEIA-101/Beach, p. 18.
V.

CARE, FERA AND MEDICAL BASELINE PROPOSALS

A. CARE Proposal

SCE proposes to establish each CARE volumetric tiered rate at a discount of 30% off the corresponding non-CARE volumetric tiered rate and the CARE fixed charge at a discount of 50% off the non-CARE fixed charge. This approach “results in no changes to the average effective CARE discount calculated to be in the range of 32% to 33% over the Phase 1 Rate Period[.]”\textsuperscript{326} No party opposed SCE’s CARE proposal, yet TURN proposed instead that CARE Tier 1 customers obtain a 40% rate discount. That proposal should be rejected because the February 13, 2014 \textit{Assigned Commissioner’s Ruling Requiring Utilities to Submit Phase 1 Rate Charge Proposals} (ACR) states clearly that the scope of Phase 1 will not include consideration of CARE rate restructuring, \textit{i.e.}, changes to the provision of the discount by such means as: “(a) providing greater discounts for the lowest income households and smaller discounts for higher-income CARE-eligible customers, (b) \textit{different rates of discount for each tier of usage}, and (c) a flat 35% credit applied to a CARE customer’s monthly bill.”\textsuperscript{327} TURN’s proposal to offer a 40% rate discount for CARE Tier 1 violates the ACR’s explicit guidance, which was not amended by subsequent ACRs or any other ruling.

B. FERA Proposal

SCE’s Family Electric Rate Assistance Program (FERA) currently offers a discount to large, low-income households who are ineligible for the CARE program and who also reside in the service territories of the large IOUs.\textsuperscript{328} Currently, the discount is applied not on a percentage basis, but by billing Tier 3 usage at the Tier 2 rate. Thus, the current FERA program (a) offers no discount on usage in Tiers 1, 2 and 4; and (b) is available only to the extent customers incur usage above Tier 2 in any

\textsuperscript{326} Exh. SCE-101/Garwacki, pp. 42-43.
\textsuperscript{327} ACR, pp. 5-6 (emphasis added).
\textsuperscript{328} The FERA program is not a statutory requirement. When the FERA program was first adopted, the Commission exempted the small electric IOUs from the FERA program because they did not have steeply-tiered rate structures.
given month. Because SCE’s Proposal would modify the current usage tier definitions and render the complicated FERA discount structure moot,\textsuperscript{329} SCE proposes to retain the FERA program, and to simplify it such that under the redesigned program, SCE would provide FERA customers a flat 10% discount off the entire non-CARE monthly bill. ORA finds that SCE’s Proposal offers “greater understandability” and acknowledges that it “rewards FERA customers uniformly at all usage levels.”\textsuperscript{330} However, ORA proposes an arbitrary, increased discount of 20% and TURN proposes a similarly arbitrary discount, but at a level of 15%, both of which the Commission should reject.

SCE’s proposed 10% FERA discount, based on the average discounts over the five-year period 2009 through 2013, is more generous than the current FERA discount. That is because these discounts were calculated for the period when SCE’s rate structure had historically high differentials between rates for Tiers 2 and 3. FERA customers currently enjoy an average discount of only 8% at the rates in effect as of August 2014,\textsuperscript{331} because the Phase 2 decision has begun to reduce the differential between rates for Tiers 2 and 3.\textsuperscript{332} Second, even setting aside the FERA customers’ current average discount, the yellow highlights on Exhibit SCE-124 show that the highest FERA discount is currently enjoyed by customers in the 600-800 kWh-month usage bands, and, for this narrow slice of the FERA customer base (14%) enjoying the highest discount rate, the discount is currently a \textit{maximum} of 10%. Thus, SCE’s Proposal would extend that same \textit{current maximum discount} to all FERA customers.

\textsuperscript{329} Specifically, as Mr. Garwacki testified, “[t]he current FERA program must be modified because it is premised on currently-defined usage tiers and could no longer be applied in the same manner to a revised three-tiered rate structure with redefined usage in Tier 2 (101% to 200% of baseline), and with Tier 3 usage redefined as all usage in excess of 200% of baseline.” Exh. SCE-101/Garwacki, p. 45.

\textsuperscript{330} Exh. ORA-101/Irwin, p. 6-14.

\textsuperscript{331} Exh. SCE-124.

\textsuperscript{332} TURN and others make much of the fact that SCE’s average FERA discount rate includes customers whose usage does not reach Tier 3 (and for whom no discount is applied in some months). This concern is overstated, however. When the Commission adopted the FERA program in 2004, it, too, acknowledged that the average discount reflects customers who may not receive the discount: “The utilities’ estimates . . . of average yearly savings per customer, while informative, do not convey adequately the relief that individual customers may realize due to a Tier 3 exemption. . . . The averages also include customers who may seldom reach Tier 3 usage levels along with customers who routinely have Tier 4 and Tier 5 usage.” D.04-02-057, p. 52. Thus, the Commission focused principally on the “Tier 3 exemption,” which, at its maximum today, is 10% for SCE’s customers.
Both TURN and ORA seek an even higher discount than what SCE proposes because of their view that a 10% FERA discount is too low relative to the CARE discount. This logic assumes that the Commission, when it established the FERA program, sought to put FERA customers on the same footing as CARE customers, which is not true. When the Commission established the FERA program in 2004, in D.04-02-057, it was designed as a “tier exemption” program—for the three largest electric IOUs only—that would spare certain low-income customers from high Tier 3 rates. The Commission described the program as “reasonably targeted” to Tier 3 customers only. At the time the FERA program was adopted in 2004, the maximum percentage discount for SCE’s FERA customers was only 4.4 percent, and that maximum discount rate applied only to customers who used exactly up to, but did not exceed, their Tier 3 usage level. Because the three small electric IOUs who are respondents to this OIR did not have “upper tier rates comparable to those that burden customers of PG&E, SCE and SDG&E,” the Commission designed the program in 2004 to provide rate relief for only the three largest electric IOU customers with usage in the upper tiers. Thus, none of the other three electric IOUs regulated by the Commission have a FERA program. The Commission also found that “[t]he record does not contain evidence regarding the prevalence of Tier 4 usage by large households,” leading it to conclude that no rate relief was needed for Tier 4 usage. The Commission also recognized that “[b]ecause eligible customers with little or no Tier 3 usage would see minimal benefit from a Tier 3 exemption, we would not expect participation to ever be as large as for the CARE program, nor would that be our goal.”

These conclusions from the Commission decision establishing the FERA program are significant because they show that the Commission never intended the FERA discount to be commensurate with CARE, as the latter program offers a discount on all usage (not just Tier 3 usage). With that history in

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333 D.04-02-057, p. 51.
334 Id., p. 53.
336 D.04-02-057, p. 52.
337 Id., p. 53.
338 Id., p. 54.
mind, and given that the OIR applies the outcome of this proceeding to all CPUC-regulated electric IOUs, if the revised rate structures proposed by the IOUs are adopted, the original basis for the FERA program will have been substantially diluted. Rather than increasing the FERA discount, the Commission should adopt SCE’s proposed 10% FERA discount because it can be implemented expeditiously, if only as an interim measure, until the Commission reviews the entirety of the FERA program and whether it should continue (and, if so, in what form) in an appropriate low-income customer proceeding, to achieve a consistent and fair approach among all the CPUC-regulated electric IOUs.

ORA’s witness, Mr. Irwin, opposed SCE’s proposed 10% FERA discount because of the “disparity between the FERA and CARE discounts,” notwithstanding that ORA “is sensitive to the fact that such a discount increase runs counter to the direction of the CARE effective discount.” But Mr. Irwin offered no sensible policy reason for bringing the two discount percentage levels closer together despite that the program eligibility is based on different criteria and different statutory mandates. On cross examination, Mr. Irwin was asked if he was aware whether the Commission, when it adopted the FERA program, concluded that the FERA discount should be established at a percentage level in proportion to the CARE discount, he could not answer yes or no. Instead, he relied on his view that there should be “consistency” between the FERA and CARE discounts. By consistency, he elaborated with this unhelpful and inapt analogy: “[I]n the public arena, the National Football League, the commissioner is just getting called on to the carpet by having inconsistent policy between domestic and sexual abuse. So you want to have fair consistency between policies. It’s a good goal.” While SCE agrees with the need for consistent policies, ORA’s policy rationale to double the FERA discount from its current maximum, as applied to only a slice of SCE’s population, is arbitrary and relies on

339 Exh. SCE-101/Garwacki, p. 46.
340 Exh. ORA-101/Irwin, p. 6-14.
341 ORA/Irwin, Tr. 23/3619:4-16.
342 Id. 3619:17-24.
unsubstantiated claims that the Commission must establish the FERA discount in some proportion to the CARE discount for only three of the six electric IOUs under the Commission’s jurisdiction.

SCE also proposed to have the costs of the FERA discount funded through the residential class only because, unlike the CARE discount, there is no statutory mandate to have it funded by non-CARE commercial and residential customers. This proposal was unopposed by any party and should be adopted as reasonable.343

C. Medical Baseline

SCE does not propose to modify its medical baseline program in this proceeding. Unlike PG&E, SCE does not currently give medical baseline customers a discount on usage in excess of 200 percent of baseline. Rather, SCE provides medical baseline customers an additional 16.5 kWh per day (or about 500 kWh per month), and maintains that many medical baseline customers receive the increased baseline allowance based on their use of equipment that requires substantially less electricity to operate than the additional allowance they obtain through the medical baseline program. On that basis, SCE recommends that the Commission review this issue in a future proceeding to determine whether differing levels of additional allowances are warranted based on the particular type of need, or on the electrical consumption of the type of equipment being used.344

VI. IMPACT CONSIDERATIONS OF RATE DESIGN PROPOSALS

Redesigning residential rates to bring them closer to cost has inevitable impacts on consumers who benefited from the distorted rate structure, including low-usage customers for whom Tier 1 and 2 rates were effectively frozen for over a decade, and solar customers who have the financial means to invest in technology that allows them to avoid upper-tier penalties, which the Commission found results in a situation where “[t]hese customers are then allowed to avoid paying transmission, distribution and generation costs, putting increased cost pressure on all non-solar customers whose usage extends into...

343 Exh. SCE-106/Ramirez, p. 98.
344 Exh. SCE-101/Garwacki, pp. 46-47.
Tiers 3 and 4.345 Before SCE addresses the impacts of its rate reform proposal on various customer classes (including low-usage, high-usage and solar customers), it describes the reasonableness of its phase-in proposal relative to that of intervenors.

A. Phase-In Schedule

1. SCE’s Phase-In Schedule Is Reasonable

Section 739.9(b) mandates that increases to rates, and changes in residential rate design, be reasonable and subject to a reasonable phase-in schedule relative to rates and charges in effect prior to January 1, 2014. Rate Design Principle 10 provides that “Transition to new rate structures should...minimize[] and appropriately consider[] the bill impacts associated with such transitions.” SCE’s Proposal complies with both the law and Rate Design Principle 10 because it reflects a reasonable, balanced plan that will facilitate achieving the Commission’s policy goals while appropriately accounting for inevitable bill impacts. As shown at the start of Chapter III.A.1., SCE’s transition proposal moves in lock step with the ED Staff Proposal with respect to the timing and degree of tier-consolidation, and mirrors the ED Staff Proposal’s staged reduction in the tier ratios from 2015 through 2018. Moreover, SCE also proposes a phase-in plan for non-CARE and CARE fixed charges that is essentially identical to the phase-in plan contained in the ED Staff Proposal, while at the same time preserving the average effective CARE discount at a historically-high level for SCE.

Through a lengthy transition process, SCE’s Proposal will achieve in four years a comprehensive, fair, and understandable transition to a reasonable, two-tiered rate structure, as permitted under AB 327. SCE’s Proposal are consistent—directionally and temporally—with the pace of reform contemplated by the ED Staff Proposal. SCE recognizes the statutory requirement of Section 739.9(b) to avoid unreasonable bill impacts for customers as a result of rate changes, and thus proposes a four-step, four-year transition process that prevents unduly harsh bill impacts on residential customers who will see rate increases resulting from SCE’s Proposal. An immediate transition of residential customers from the current four-tiered rate structure to a two-tiered structure with a fixed charge and revised tier

differentials would be difficult and impractical. SCE’s Proposal implements structural changes over four years to produce reasonable increases for the residential customers who have been substantially shielded from sharing the burden of cost increases for many years, and reasonable but modest bill reductions for customers who have substantially borne the bulk of such revenue requirement increases. Thus, any examination of one-time or annual bill impacts must be considered in the context of the extended period of restrictions on rate increases for lower-usage non-CARE customers, and the even longer period of no rate increases for lower-usage CARE customers, explained in further detail in Chapter VI.B., below.

For the many customers who benefit under current rate structures, there are a smaller number of customers who have been shouldering the responsibility to pay for revenue increases and have been doing so for many years, and that reality should temper any requests to moderate further SCE’s four-year road map over the OIR Period. As Ms. Caroline Winn, SDG&E’s Vice President of Customer Services, testified, upper-tier customers have been waiting years for the overdue changes proposed here, making even the hint of a two-year extension of time perilous for them:

You would also be asking our customers and Tiers 3 and 4 that have been burdened by all of the rate increases for the past 13 years to wait another two years to fix our rates . . . I get a chance to talk to lots of customers as part of my job. And, you know, we have customers that are severely affected by the disproportionate price signal that we have today. These are working families. These are seniors where temperatures are 10 to 15 degrees warmer in the summer. And they need air conditioning. Their bills are over $400. And they are on fixed incomes.346

In any event, as SCE described in Chapter II, the four-year road map to be adopted in this proceeding should be put in its proper historical context and be viewed as a continuation of reforms begun by the Legislature in 2009 with the passage of SB 695, limited as its impact was, which means that the 2018 end-state would cap a nearly decade-long effort to reform rates, and will continue to better position the IOUs to offer cost-based TOU rates that are attractive to customers on a wider scale.

346 SDG&E/Winn, Tr. 13/1594:16-1595:3.
A Phase 1 decision is not expected to issue until the Spring of 2015, which is a few months later than the originally anticipated date of December 2014 on which SCE’s original phase-in proposal was based. However, SCE does not propose to alter or delay implementation of its four-year reforms because progress towards Step 1 was already made in Phase 2 of this proceeding such that, for SCE, by January 1, 2015, its tier rate ratio between the upper-most and baseline tier is anticipated to be 2.1 to 1.0.\textsuperscript{347} At the time SCE filed its Phase 1 proposal, on February 28, 2014, that number was 2.3 to 1.0.\textsuperscript{348} Thus, a move towards a three-tiered rate with a ratio of 2.0 to 1.5 to 1.0 is reasonable and moderate. Indeed, SCE, ORA, TURN, NRDC and CUE agreed to set a cent-per-kilowatt-hour differential between Tiers 3 and 4 at 5.5 cents instead of 4 cents in connection with a January 1, 2015 rate change under the Phase 2 settlement, and they did so in order to push the rate for Tier 3 closer to Tier 2 in recognition of “a common desire to bring the Tier 3 rate closer to Tier 2 to facilitate the collapsing of those tiers, a move that reflects at least a minimal consensus of these parties about longer-term residential rate changes being evaluated in Phase 1 of R.12-06-013.”\textsuperscript{349}

2. **Intervenors’ Phase-In Schedules Are Non-Existent Or Unjustifiably Protracted**

In contrast to the reasonable phase-in schedule of SCE and the other IOUs, intervenors’ phase-in schedules are either non-existent or are unjustifiably protracted. For example, ORA’s piece-meal approach, described in more detail in Chapter III.A.3.a, is pinned to indeterminate revenue requirement adjustments occurring in other proceedings, which will impact the rate design of SCE’s commercial customers as well. NRDC, which conceded that its proposal is substantially similar to the status quo, acknowledged that it has no phase-in proposal.\textsuperscript{350} The other two solar advocates, Sierra Club and EDF, also offered no end-state date or phase-in schedule. Mr. Fulmer, who asserted that IREC’s proposal does not even differ substantially from the status quo 2.0 to 1.0 tier rate ratio, chose 2018 as the

\textsuperscript{347} AL 3155-E, p. 14.
\textsuperscript{348} Exh. SCE-101/Garwacki, p. 4.
\textsuperscript{349} AL 3155-E, p. 14.
\textsuperscript{350} NRDC/Chernick, Tr. 17/2257:5-11.
end-state phase-in date “was consistent with other parties who were setting it as their end state. So it struck me as reasonable also.”

TURN did not even include a phase-in proposal in its testimony. In response to a data request from SCE, TURN offered little additional detail, indicating that it “proposes to move existing rates to the proposed 1.6:1.3:1.0 tier differentials in 2017” and that it “would support adjustments to current rates in 2015 and 2016 that transition towards this end-state with a switch to a three tier structure beginning in 2016.” TURN provided no phase-in schedule at all for its alternate proposal—of an at least 20% composite tier ratio—which could of course be achieved with two tiers or three tiers and any level of customer charge within the statutory range.

The only other intervenors with a semblance of a phase-in schedule, CALSEIA and SEIA (and, by extension, TASC, who, despite not having a tiered rate proposal, indicated general support for SEIA’s), move too slowly. Chapter II.A explains the chief weaknesses of CALSEIA’s and SEIA’s steep tier proposals. In addition to those shortcomings, the proposals should be rejected because they take too long to accomplish—until 2020, with weighted average non-baseline to baseline rate ratios (1.64 to 1.0 for CALSEIA and 1.49 to 1.0 for SEIA) that are not appreciably different after 5 years from today’s ratio for SCE of 1.77 to 1.00). Specifically, under SEIA’s proposal, by 2018, i.e., the end of the OIR Rate Period, the ratio between the upper-most tier and baseline rate is still 2.1:1, which is the same as today’s 2.1 to 1 ratio for SCE. This proposed reform is too slow (non-existent, in fact, between now and 2018)—and with an unacceptable end-state to be meaningful—particularly considering the objective

351 IREC/Fulmer, Tr. 24/3830:23-3831:1.
352 Exh. SCE-122, Response to SCE Question 6 of SCE Data Request 3.
353 The tier rate ratio from AL 3155-E dated December 24, 2014, shows an anticipated tier rate ratio of 2.1:1.7:1.3:1.0, which, on a weighted average basis, yields a rate ratio between the baseline and nonbaseline tiers of 1.77.
354 See Exh. SEIA-101/Beach, p. 40. The other solar party whose tier flattening proposal ends in 2020 is TASC. Although TASC did not include a specific proposal in its testimony, it indicated in a data request response that it supported SEIA’s proposed tier rate ratios. Exh. SCE-106/Garwacki, p. 30.
of this Rulemaking to adopt “residential rates that are more reflective of cost, in keeping with the Commission’s principle that rates should be based on cost-causation.”

B. **Affordability/Bill Impacts/Energy Burdens**

In addition to the statutory provisions governing residential rate design that were already listed in Chapter II.C., the following are specific either to the phase-in of reformed residential rate structures or to the affordability of electric service:

- Section 739.9(b) provides that “[i]ncreases to electrical rates and charges in rate design proceedings, including any reduction in the California Alternate Rates for Energy (CARE) discount, shall be reasonable and subject to a reasonable phase-in schedule relative to the rates and charges in effect prior to January 1, 2014.”
- Section 739.1(g) states that “[i]t is the intent of the Legislature that the Commission ensure CARE program participants receive affordable electric and gas service that does not impose an unfair economic burden on those participants.”
- Section 382(b) provides that low-income ratepayers should not be jeopardized or overburdened by monthly energy expenditures.
- Section 739.1(c)(1) mandates that the average effective CARE discount remain within a range of 30% to 35%.
- Section 739(d)(2), which applies to establishing residential electric rates, including baseline rates, requires the Commission to “ensure that the rates are sufficient to enable the electrical corporation or gas corporation to recover a just and reasonable amount of revenue from residential customers as a class, while observing the principle that electricity and gas services are necessities, for which a low affordable rate is desirable and while observing the principle that conservation is desirable in order to maintain an affordable bill.”

Rate Design Principle 10, adopted within the context of this proceeding, further provides that “Transitions to new rate structures should emphasize customer education and outreach that enhances

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355 D.14-06-029, p. 5.
customer understanding and acceptance of new rates, and minimizes and appropriately considers the bill impacts associated with such transitions.”

SCE’s Proposal appropriately considers these laws and principles in five contexts, discussed below: (1) affordability for low-income customers; (2) affordability for low-usage customers; (3) affordability, including relief from bill volatility, for high-usage customers; (4) energy burden metrics; and (5) bill impacts.

1. Affordability For Low-Income Customers

Chapter V, above, addresses the reasonableness of SCE’s Proposals for its two income-qualified residential rate programs, CARE and FERA. SCE’s Proposal complies with Section 382(b), which requires that low-income ratepayers are not jeopardized or overburdened by monthly energy expenditures. CforAT’s witness, Mr. Contreras, repeatedly testified that he has no expertise in rates or rate design, and that his testimony focused on “affordability, energy burden and bill impacts” only “[a]s it affects people with disabilities—low income people with disabilities.” Mr. Contreras also testified that the exclusive focus of his testimony was the impact of rate changes and rate design changes on those with disabilities, but not on customers without disabilities who may be low income. He defined “low-income” as “[p]eople who are eligible for various programs, SSI, SSDI, being a good example, MediCal, food stamps, things of that nature.” Because enrollment in the programs listed by Mr. Contreras confer categorical eligibility for the CARE program, Mr. Contreras’s testimony is thus limited to assessing the adequacy of SCE’s CARE proposals, which CforAT did not specifically oppose, as indicated in Chapter V, above.

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356 January 6, 2014 ACR, p. 8, citing Rate Design Principles (emphasis added).
357 PUC §382(b) states: “In order to meet legitimate needs of electric and gas customers who are unable to pay their electric and gas bills and who satisfy eligibility criteria for assistance, recognizing that electricity is a basic necessity, and that all residents of the state should be able to afford essential electricity and gas supplies, the commission shall ensure that low-income ratepayers are not jeopardized or overburdened by monthly energy expenditures. Energy expenditure may be reduced through the establishment of different rates for low-income ratepayers, different levels of rate assistance, and energy efficiency programs.”
358 CforAT/Contreras, Tr. 22/3389:1-8.
359 Id., 3390.
360 Id., 3399:19-22.
Low-income customers are provided many sources of protection that, in total, support a conclusion they are not jeopardized or overburdened by monthly energy expenditures.\textsuperscript{361} For example, under SCE’s Proposal, low-income customers will receive a 30% discount off the corresponding non-CARE volumetric rates and 50% off the non-CARE fixed charge. When the CARE discount was first implemented (under what was known as the Low-Income Ratepayer Assistance program), it provided a discount at a level of 15% off the non-CARE rates. Through a transition process occurring over many years, the CARE average discount grew both due to Commission action and ultimately because the non-CARE rates for Tiers 3 and above continued to increase under AB 1X and SB 695, while CARE rates essentially remained frozen. As a result of these changes, as well as the increase in the number of CARE customers, the CARE subsidy increased to approximately $360 million by 2013. For SCE, the proposed 30% rate discount and 50% fixed charge discount would provide SCE’s CARE customers an effective CARE discount that is thus set at a historical high, far in excess of the 20% discount that was in effect in June 2001 (and even further in excess of the original discount of 15%).\textsuperscript{362}

Related to this point, the current CARE income-qualifying criteria provide a conservative threshold for treatment of low-income customers as all California counties have cost of living indices well below 200% of the national average. Moreover, the utility cost index for these areas is close to the national average.\textsuperscript{363} The baseline structure and the FERA program provide accommodations to those customers who do not qualify for the CARE program at the 200-250% of federal poverty guideline level. The combination of a modest baseline and conservative CARE income qualifications provide sufficient accommodations for affordability, especially when viewed in light of the energy burden metrics described in subsection 4 below, where it is clear that higher-usage customers are overburdened by monthly energy expenditures under today’s rate structures relative to the burdens of lower-usage customers, whose energy burdens are only a fraction of higher-use customers. AB 327 also included one change to CARE eligibility criteria to provide that for one-person households, program eligibility

\textsuperscript{361} Exh. SCE-101/Garwacki, pp. 43-45. SCE refers to monthly expenditures for electric bills in this discussion.\textsuperscript{362} Exh. SCE-101/Garwacki, Appendix E, p. E-3.\textsuperscript{363} Id., pp. E-2 to E-3.
shall be based on the income guidelines for two-person households, thus expanding the low-income program to more customers who are now eligible for the low-income protections.\textsuperscript{364}

With the exception of intervenor groups’ opposition to SCE’s CARE fixed charge proposal, no party disputed SCE’s Proposal for maintaining the average effective CARE discount solidly within AB 327’s mandated range of 30-35\%. For high-usage CARE customers, SCE’s Proposal, which includes a $5 per month fixed charge, will result in overall lower bills.\textsuperscript{365} For lower-usage CARE customers, SCE’s Proposal may increase customers’ bills, but the maximum increase as a result of the fixed charge alone is less than $2 per month, on average, for each year of SCE’s three-year phase-in. That is because single-family (S/F) and multi-family (M/F) CARE customers currently pay a fixed charge of $0.73 and $0.55, respectively, and SCE’s Proposal would phase in the following modest annual fixed charge increases through 2017:\textsuperscript{366}

- 2015: $1.77 increase for S/F, $1.95 increase for M/F CARE customers;
- 2016: $1.25 increase for all CARE customers;
- 2017: $1.25 increase for all CARE customers.

These nominal increases owing to the fixed charge are modest and are appropriate in light of the table below (reproduced from Table V-17 of Exhibit SCE-106), which shows that low-usage\textsuperscript{367} CARE customers pay 49\% and 54\% lower rates than SCE’s average residential rate and non-CARE rate, respectively:

\textsuperscript{364} Section 739.1(a)
\textsuperscript{365} Exh. SCE-106/Ramirez, p. 97.
\textsuperscript{366} Id.
\textsuperscript{367} Low-usage customers are defined as having average monthly usage in the range of 0-400 kWh. This table reflects data from customer usage and bills from October 2013 through September 2014 (for customers with at least 90 days of usage data).
Rate Levels Relative To Average and Non-CARE Rates

<table>
<thead>
<tr>
<th>Group</th>
<th>Average Rate</th>
<th>% of Average Rate</th>
<th>% of Average Non-CARE Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Customers</td>
<td>17.12</td>
<td>n/a</td>
<td>-10%</td>
</tr>
<tr>
<td>All Low-Usage Customers</td>
<td>11.69</td>
<td>-32%</td>
<td>-38%</td>
</tr>
<tr>
<td>All Non-CARE Customers</td>
<td>19.00</td>
<td>111%</td>
<td>n/a</td>
</tr>
<tr>
<td>Low-Usage Non-CARE Customers</td>
<td>13.23</td>
<td>-23%</td>
<td>-30%</td>
</tr>
<tr>
<td>All CARE Customers</td>
<td>12.35</td>
<td>-28%</td>
<td>-35%</td>
</tr>
<tr>
<td>Low Usage CARE Customers</td>
<td>8.79</td>
<td>-49%</td>
<td>-54%</td>
</tr>
</tbody>
</table>

In addition to specific income-qualifying programs, low-income customers, like all other residential customers, receive a baseline allowance, which provides a lower-than-cost-based rate for 50% to 60% of the average residential usage in each climate zone, consistent with Section §739 (b) which requires the Commission to designate a baseline quantity of electricity and gas “to supply a significant portion of the reasonable energy needs of the average residential customer.” Under SCE’s current residential rate structure, the baseline allowance is established at 53% of the average residential customer’s usage in each of SCE’s baseline zones. SCE proposes to make no change to the baseline allowance for 2015, but would reduce the baseline allowance to 50% in 2016, which is the statutory minimum. Because a higher percentage of CARE customers’ usage is in Tier 1 relative to non-CARE customers (62% for CARE versus 50% for non-CARE), CARE customers receive a compounded protection due to the baseline usage allowance in addition to the protection provided via the CARE discounts relative to non-CARE rates.³⁶⁸ Approximately 70,000 medical baseline customers also receive an increased baseline allowance for equipment critical to maintaining their health.

Finally, the impacts of SCE’s Proposals on fixed income customers, to the extent these customers are low-usage, should be placed in proper context. Since the 2001 energy crisis, customers

³⁶⁸ Exh. SCE-101/Garwacki, p. 44.
receiving Social Security benefits have seen an average cost of living increase of 2.5% annually (over 40% since 2000), as depicted in the table below (reproduced from Exhibit SCE-106, Table V-9):

**Social Security Cost of Living Adjustments (COLA)**

<table>
<thead>
<tr>
<th>Year</th>
<th>COLA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>3.5%</td>
</tr>
<tr>
<td>2001</td>
<td>2.6%</td>
</tr>
<tr>
<td>2002</td>
<td>1.4%</td>
</tr>
<tr>
<td>2003</td>
<td>2.1%</td>
</tr>
<tr>
<td>2004</td>
<td>2.7%</td>
</tr>
<tr>
<td>2005</td>
<td>4.1%</td>
</tr>
<tr>
<td>2006</td>
<td>3.3%</td>
</tr>
<tr>
<td>2007</td>
<td>2.3%</td>
</tr>
<tr>
<td>2008</td>
<td>5.8%</td>
</tr>
<tr>
<td>2009</td>
<td>0.0%</td>
</tr>
<tr>
<td>2010</td>
<td>0.0%</td>
</tr>
<tr>
<td>2011</td>
<td>3.6%</td>
</tr>
<tr>
<td>2012</td>
<td>1.7%</td>
</tr>
<tr>
<td>2013</td>
<td>1.5%</td>
</tr>
<tr>
<td>AVG</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

In contrast, volumetric rates forecast to be paid in 2018 by non-CARE customers under SCE’s Proposal for usage in Tiers 1 and 2 (using a constant revenue requirement) would be about five percent lower than they were 22 years earlier, in real terms. The forecast 2018 volumetric rates to be paid by CARE customers would be about 21% lower than they were 22 years earlier, in real terms.

### 2. Affordability for Low-Usage Customers

Restrictions that have been imposed on non-CARE and CARE Tier 1 and Tier 2 rates since 2001 have resulted in large deviations from the cost of service, and have caused the 25% of higher-usage residential customers to pay for 70% of the residential class’s share of increased costs associated with utility infrastructure and renewable energy requirements—costs that are incurred for the benefit of all customers. As demonstrated in Section VI.B.3, below, it is clear that lower usage customers will be only moderately impacted by bill increases of a few dollars per month, per year—which account for only minor increases of these customers’ energy burdens, and which continue to be a

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369 Exh. SCE-106/Ramirez, Table V-10, p. 90.
370 Exh. SCE-101/Garwacki, p. 2.
fraction of the energy burdens of high-use customers. Further, in D.14-06-029, the Commission found that “because Tier 1 rates continue to be set using the baseline quantity, the settlements ensure that the per kWh rates for an essential amount of electricity remains affordable.”371 Under SCE’s Proposal, this continues to be the case because SCE’s Proposal preserves baseline protections and continues to offer prices at below-average cost for a majority of low-usage customers’ usage.

Non-CARE customers whose usage is limited primarily to less than 130% of baseline allowances have been largely protected from rate increases for 13 years. CARE customers with similar usage patterns were completely protected from any rate increases for the 13-year period from February 2001 until January 1, 2014. It would be unfair to exclude from an affordability assessment the cumulative benefit of 13 years of limited rate increases for these customers while nearly all increases in revenues have been absorbed in upper-tiered rates. As shown in the table below, volumetric rates forecast to be paid by non-CARE and CARE customers for usage in Tiers 1 and 2 in 2018 (using a constant revenue requirement) would be about five percent and 21 percent lower than they were 22 years earlier, in real terms.372

371 D.14-06-029, p. 25
372 Exh. SCE-106/Ramirez, p. 90, reproducing Table V-10.
Comparison of SCE’s Proposed 2018 Rates to Inflation-Adjusted 1996 Rates

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 (0-100%)</td>
<td>12</td>
<td>18.6</td>
<td>17.58908948</td>
<td>-5%</td>
</tr>
<tr>
<td>Tier 2 (101-130%)</td>
<td>14.2</td>
<td>22.01</td>
<td>21.10690737</td>
<td>-4%</td>
</tr>
<tr>
<td>Tier 3 (131-200%)</td>
<td>14.2</td>
<td>22.01</td>
<td>21.10690737</td>
<td>-4%</td>
</tr>
<tr>
<td>Tier 4 (&gt; 200%)</td>
<td>14.2</td>
<td>22.01</td>
<td>21.10690737</td>
<td>-4%</td>
</tr>
<tr>
<td>Basic Charge ($/month)</td>
<td>$1.00</td>
<td>$1.55</td>
<td>$10.00</td>
<td>545%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 (0-100%)</td>
<td>10.1</td>
<td>15.655</td>
<td>12.31236263</td>
<td>-21%</td>
</tr>
<tr>
<td>Tier 2 (101-130%)</td>
<td>12</td>
<td>18.6</td>
<td>14.77483516</td>
<td>-21%</td>
</tr>
<tr>
<td>Tier 3 (131-200%)</td>
<td>12</td>
<td>18.6</td>
<td>14.77483516</td>
<td>-21%</td>
</tr>
<tr>
<td>Tier 4 (&gt; 200%)</td>
<td>12</td>
<td>18.6</td>
<td>14.77483516</td>
<td>-21%</td>
</tr>
<tr>
<td>Basic Charge ($/month)</td>
<td>$0.85</td>
<td>$1.32</td>
<td>$5.00</td>
<td>280%</td>
</tr>
</tbody>
</table>

3. **Affordability, Including Relief From Bill Volatility, For All Customers**

Under the current residential rate structure, the goal to set affordable rates has been largely sacrificed for residential customers who are not CARE, FERA, medical baseline, or who cannot restrict usage to 130 percent of the baseline allowance. The appropriate starting point for any discussion on “bill impacts” and “affordability” is that affordability is a concern that applies to all customers. D.14-06-029 found that “. . . because Tier 1 rates continue to be set using the baseline quantity, the settlements ensure that the per kWh rates for an essential amount of electricity remains

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affordable.” While CforAT witness Contreras concluded that the Commission should not consider energy burdens for high-usage customers when evaluating affordability of the IOU proposals, application of other rate design principles, such as reducing subsidies and bringing rates closer to cost will improve affordability for higher-usage customers, particularly those with the highest electricity energy burdens under the current rate structure.

a) **Bill volatility affects high-usage customers, many of whom are families.**

While there is some correlation of consumption with household income, there are many low-income households with high electricity consumptions and many wealthy customers with low consumption, as the ED Staff Proposal recognized, relying in part on the CEC’s Residential Appliance Saturation Study to conclude that there is an “imperfect income-consumption correlation”:

> Despite the positive correlation between electricity use and income, all levels of electricity use are observed at every income level. For instance, 8 percent of the low income households are categorized as high energy users (over 8,350 kWh per year), whereas 11 percent of high-income households are low energy users (less than 3,360 kWh per year).

The more accurate correlation for purposes of evaluating the impact of tiered rates on high-usage customers is *household size to high usage*, not high income to high usage. This was illustrated by Exhibit PG&E-116, which used 2009 Residential Appliance Saturation Survey (RASS) Sample data to show PG&E’s average annual usage by household size. As the number of persons residing in a dwelling increased, the annual kWh usage increased as well. Fourteen percent of the sample data reflected households with five or more persons whose usage was double that of the baseline allowance, which of course is derived without regard to household size. PG&E witness Quadrini concluded that there is “a great deal of correlation” between household size and usage, and that “the way

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375 D. 14-06-029, p. 40.
376 CforAT/Contreras, Tr. 22/3400:15-22. “[i]t’s my understanding this proceeding is not designed to do that. It’s specifically focused on vulnerable customers ….”
377 ED Staff Proposal, p. 41.
the baseline is set up, it’s essentially rewarding people for living alone. And it’s penalizing families.”

He also testified that the larger the household is, the more efficient its use of electricity, notwithstanding that single-person households derive the greatest benefit from the baseline allowance.

The Commission long ago recognized the issue Mr. Quadrini raised in D.04-02-057, where it found that:

[T]he average electricity use of households with three or more occupants is higher than the average usage of smaller households that are similar in other respects, with usage typically exceeding 130% of baseline quantities year-round and with higher use in peak summer months. Large households are unlikely to be able to conserve as much as other households as a means of maintaining affordable energy bills.

These concerns are significant and underscore the point that the intended beneficiaries of the IOUs’ proposals are not high-usage “energy hogs with sprawling estates and money to burn” as described by TURN. They are the large families, the “working families,” the “seniors where temperatures are 10 to 15 degrees warmer in the summer” about whom Caroline Winn (Vice President of SDG&E’s Customer Service) testified. These are the fixed income customers with high bills who participated at the inland city public participation hearings.

PG&E’s testimony showed how its rate reform proposal, similar to SCE’s, will ameliorate the bill volatility problem during summer months. Figure 2-1 of Exhibit PGE-101 is reproduced here to show the disproportionate increase in bills resulting from increases in usage under the current broken rate structure, and how that volatility will be ameliorated by a move to a two-tiered structure with a more gradual differential between tiers.

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379 D.04-02-057, p. 51.
380 Exh. PG&E-135 (letter signed by TURN’s executive director, Mr. Mark Toney, urging customers to come to public participation hearings for this proceeding and stating that “PG&E, Edison and SDG&E want to penalize you for conserving energy so that a small number of energy hogs with sprawling estates and money to burn can get a break”).
381 SDG&E/Winn, Tr. 13/1594:16-1595:3.
SDG&E provided an illustration of what its similar rate reform proposal would have done to ameliorate bill volatility in the 2008-2009 time period. Families with upper-tier usage, many of whom are not wealthy, would see relief from bill volatility as a result of the fixed charge and tier-flattening under SCE’s Proposal. When fixed costs are collected through fixed charges and tier differentials are reduced, customers are protected from bill volatility caused by from collecting all costs through volumetric rates:

[W]hen we put all of these costs in a volumetric rate, [the result] is actually the potential for significant bill volatility because [for] any change in usage, you’re looking at a higher rate than is actually reflective of the cost of that change in usage.

Lastly, with regards to bill volatility, the Commission should be mindful of its own conclusions reached in D.93-06-087 that “as the tier differential widens[,] we move away from our goal of cost-based rates, and we begin to reintroduce the volatility problems that led to the enactment of SB987. . . . widening the tier differential to 24.8% would work against rate stability and understanding

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382 Exh. SDG&E-106/Fang, Chart CF-3, p.CF-33.
383 SDG&E/Fang, Tr. 25/1756:15-24.
among customers.” The Commission is presented with the same issue in this proceeding, and it should learn from this historical experience and not repeat the mistakes of the past.

b) **High-usage customers, especially CARE customers, seek bill payment assistance the most.**

SCE demonstrated that higher-usage customers have the greatest need for relief from the current rate structure based on data for customers who call and receive bill payment extensions and payment arrangements as a function of average monthly bill levels and CARE status. This evidence was cited both in the ED Staff Proposal and in D.14-06-029, where the Commission found that “high usage customers, both CARE and non-CARE, are the most likely to contact their utility to ask for payment extensions and arrangements”. While SCE’s analysis showed that CARE customers more frequently request payment extensions and payment arrangements than non-CARE customers across all levels of monthly bills, it is these **higher-usage** CARE customers who have a greater need for immediate relief as high-usage CARE customers request payment arrangements and bill extensions at a significantly higher rate than non-CARE customers with the same bills. The figure below draws from billing data from August 1, 2013 to July 31, 2014 and depicts the percentage of customers, by CARE status and bill range, who contacted SCE at least once for payment arrangements or bill extensions.

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384 D.93-06-087, p. 56.
385 Exh. SCE-101/Garwacki, p. 66.
386 ED Staff Proposal, p. 72. The same section of the ED Staff Proposal has a relevant discussion about the imperfect income-usage correlation, and observes that many high-usage customers “are paying higher electric bills than they would pay under flat rates” and are “harmed by tiered rates” even though one cannot summarize conclude that their usage in those upper tiers is discretionary rather than essential.
388 Exh. SCE-106/Ramirez, pp. 84-86
The figures above show that CARE customers more frequently request payment arrangements and bill extensions than non-CARE customers across all levels of monthly bills.\(^{389}\) Thus, low-usage customers should not be the sole focus of the impact of IOU rate proposals on affordability.

\(^{389}\) Appendix E of Exhibit SCE-106 shows data about bill payment extensions/payment arrangements by baseline zone.
The pleas of high-usage, high-bill customers were also heard at SCE’s public participation hearings in Palmdale, where customers offered gripping accounts of their struggles to reduce bills and control bill volatility:

- A grandmother taking care of her two grandchildren and an ill husband experiences bills of $463 per month even after convening a “family meeting,” about conservation, which reduced her bills from $600 per month. She expressed a concern about being “penalized” under the current rate structure.390
- A customer cited a recent summer bill as $450 per month and described it by saying, “it’s just too high,” noting that his income has not increased significantly over the past 25 years.391
- Reading a written letter from her disabled mother, who had bills as high as $400-$600 per month and a total of over $1,600 outstanding to SCE, one woman misunderstood SCE’s Proposal to seek an increase in her bill, not realizing that it would help customers like her mother to reduce unreasonably high summer bills.392

c) **The higher the customers’ bills, the more likely they are to need assistance.**

SCE provided data about the propensity for customers to call in for payment arrangements and bill extensions during the August 1, 2014 to mid-September 2014, which is a period post-dating (a) a rate increase in June 2014, and (b) the July 7, 2014 rate changes implemented by the Phase 2 decision.393 On the y-axis of the bar graphs below, SCE shows the percentage of customers with bill increases who called in for payment arrangements or bill extensions from August 2013 to August 2014, broken out by bill amount (x-axis). The color coding in the bar graphs, reproduced from

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390 Mary Maddox, PPH Tr. 7/798-800.
391 Karl Chan, PPH Tr. 7/824-825.
392 Veronica Fields, PPH Tr. 7/832-833.
pages 83-84 of Exhibit SCE-106, corresponds to blocks of percentage bill increases from August 2013 to August 2014 and the percent of customers within those groups who requested and were granted assistance through payment arrangements or bill extensions. The graphs demonstrate two things. First, the higher the customers’ bills, the greater the likelihood that they call in for payment arrangements or bill extensions. Second, the proportion of customers experiencing various percentages of bill increases is relatively constant within each bill group, meaning that a given annual “spike” in bills is less important than the overall bill amount in influencing the propensity of customers to seek payment assistance.

*Non-CARE Requests For Payment Arrangements and Bill Extensions Relative to Customer Bill Amounts*
4. **Energy Burden Metrics**

ORA recognized that “[t]he concept of ‘energy burden’ is central to policy discussions,” especially for “utility customers with high bills and/or low income,” and correctly defined “energy burden” as a statistic that reflects the ratio of energy bills to income.\(^{394}\) SCE developed electricity energy burden metrics to evaluate affordability because percent and dollar impacts alone cannot be used to uniformly measure impacts of reform on all customers.\(^{395}\)

SCE’s Proposal directly benefits those customers with the greatest level of need as measured by electric energy burden statistics. It would be misleading to focus solely on relatively high percentage bill increases resulting from SCE’s Proposal for customers whose electricity usage is predominantly in Tiers 1 and 2, as opposed to the relatively low dollar impacts and very small changes to the average energy burdens of such customers.\(^{396}\) The Phase 2 decision echoed this sentiment:

> [E]valuation of rates should consider both the percentage increase and the actual dollar increase. For customers with lower tier usage, and CARE customers, the percentage on their already lower bills appears higher than

\(^{394}\) Exh. ORA-101/Irwin, p. 6-1.

\(^{395}\) SCE/Ramirez, Tr. 20/2955.

\(^{396}\) Exh. SCE-101/Garwacki, p. 68.
the percentage impact on customers with high usage. The actual dollar amount of increases in lower tier and CARE rates, however, is modest.\(^\text{397}\)

Electric energy burdens, together with nominal dollar amounts, are good measures of the impact of SCE’s Proposal on affordability:\(^\text{398}\)

Electricity bills continue to make up only a small proportion of overall household expenses. As demonstrated by state-wide metrics and values specific to SCE, the percentage of household income applied to electricity bills is generally quite small relative to other household budget items, ranging from 1% to 2%. In addition, over the last 15 to 20 years, the increase in SCE’s system average rate has remained below the rate of inflation. The relatively low rate of growth in average rates combined with electricity’s low percentage of total household budget combine to help alleviate affordability concerns.

California’s Electricity Energy Burden Metric is Among the Lowest in the Country. California’s residential IOU consumers have among the lowest electricity energy burden statistics in the nation. Using 2011 data, electricity burden figures across all states range from about 1.5% to 4%. However, California IOU customers on average pay less than 2% of their income toward electricity bills, which ranks ninth lowest in the country and is much closer to the results for states with the lowest electricity energy burden.\(^\text{399}\)

SCE’s Phase 1 Proposal has only a modest impact on low income customers’ energy burden. Although reversing the current inequities will necessarily lead to some increases for low-usage and some low-income customers, SCE’s analyses do not indicate significant energy burden impacts.

Bill impact percentages alone are misleading. Some low-usage customers experience relatively high percentage bill impacts (but low dollar impacts) in this assessment. However, the resulting bills still reflect an electricity energy burden metric of 2% or lower for SCE’s customers. More importantly, the higher-usage CARE customers, who shoulder the greatest energy burden, remain relatively unaffected by SCE’s Phase 1 Proposals.

TURN does not even mention, much less address, SCE’s energy burden data, which shows that higher usage customers (whether they are CARE or non-CARE) have higher energy burdens.

\(^{397}\) D.14-06-029, p. 49.
\(^{398}\) Exh. SCE-101/Garwacki, pp. 68-69.
\(^{399}\) Appendix C in Exh. SCE-101/Garwacki lists the energy burden data for all states.
SCE showed that energy burdens are the highest for higher-usage CARE and non-CARE customers.\textsuperscript{400} Tables V-7 and V-8, reproduced below,\textsuperscript{401} show that although reversing the current inequities will necessarily lead to some bill and energy burden increases for low-usage and some low-income customers, SCE’s analyses do not indicate significant energy burden impacts relative to the very low energy burdens currently seen by low-usage customers. Rather, SCE’s Proposal directly benefits those customers with the greatest level of need as measured by energy burden statistics, yet still keeps an inclining energy burden relationship across increasing usage ranges.

\textit{SCE’s Proposal’s Year-By-Year Impact On Energy Burden, by Usage Group}  
(Non-CARE, Assuming Constant Revenue Requirement)

<table>
<thead>
<tr>
<th>Non CARE Usage</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>LE 100</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>100 to 300</td>
<td>0.5%</td>
<td>0.6%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>300 to 500</td>
<td>0.9%</td>
<td></td>
<td></td>
<td></td>
<td>1.1%</td>
</tr>
<tr>
<td>500 to 700</td>
<td>1.3%</td>
<td>1.3%</td>
<td>1.3%</td>
<td>1.4%</td>
<td>1.4%</td>
</tr>
<tr>
<td>700 to 900</td>
<td>1.9%</td>
<td>1.8%</td>
<td>1.8%</td>
<td>1.8%</td>
<td>1.8%</td>
</tr>
<tr>
<td>900 to 1100</td>
<td>2.3%</td>
<td></td>
<td></td>
<td></td>
<td>2.0%</td>
</tr>
<tr>
<td>1100 to 1300</td>
<td>3.0%</td>
<td></td>
<td></td>
<td></td>
<td>2.6%</td>
</tr>
<tr>
<td>1300 to 1500</td>
<td>3.3%</td>
<td>3.1%</td>
<td>2.9%</td>
<td>2.7%</td>
<td>2.7%</td>
</tr>
<tr>
<td>GE 1500</td>
<td>5.0%</td>
<td>4.7%</td>
<td>4.2%</td>
<td>3.8%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Group Total</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

\textsuperscript{400} Exh. SCE-106/Ramirez, p. 87.  
\textsuperscript{401} Id., p. 87-88, with the titles modified per Exhibit SCE-109.
These data show that some low-usage customers will experience relatively high percentage bill impacts but modest dollar impacts. However, the resulting bills still reflect an electricity energy burden of 2% or lower for low-usage SCE customers. More importantly, the higher-usage CARE customers, who shoulder the greatest energy burden, will also see a minor decrease in energy burden as a result of SCE’s Proposals.402

The Commission should give little weight to ORA’s complaints about the methodology SCE used to derive its energy burden metrics.403 As explained in Exhibit SCE-109, SCE uses a variation of the “overall energy burden method,” which derives ratios using separate kWh usage groups (not individual customers, and not the total population) and accounts for the bias described by ORA where higher income customers could “wash out the results of the customers with less income.”404 SCE’s method addresses the bias of income distribution alleged by ORA by capping the maximum income for high income customers and by selecting the mid-point income level for customers in all other income ranges.

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403 Mr. Irwin also testified that he had analyzed energy burdens specific to FERA customers, but when pressed on cross-examination, he conceded that his analysis was not included in his testimony for this proceeding.
404 ORA/Irwin, Tr. 23:3622-3623
405 ORA-101/Irwin, p. 6-8.
Before learning about how SCE’s methodology accounted for income outliers, ORA witness Mr. Irwin asserted that the overall energy burden was inferior to the customer-specific energy burden because the former methodology assigned undue weight to high-income customers. But when asked on cross-examination whether that concern could be addressed by appropriately accounting for outliers in the way SCE did (described above), Mr. Irwin offered a confusing response that did not address SCE’s specific modifications, and instead, on the one hand, criticized “outlying data extreme values . . . that . . . can quite often be inappropriate or bogus,” and, on the other hand, criticized “modelers [who] fall into the habit of always getting rid of extremes of data.” When asked to clarify his response, by opining about whether “there [is] any way at all in your view that the overall energy burden could be used to moderate or address the main criticism you have of that methodology, which is [giving undue weight to] outliers in come,” Mr. Irwin did not answer, and instead maintained that he “would prefer just to stay to the real data.”

Exhibit SCE-109 compares the results of the ORA method and the SCE method, which lead to similar directional results and does not change the fact that, regardless of energy burden methodology employed, the conclusion is the same: Higher-usage customers experience higher energy burdens. Indeed, the Commission has already made this finding of fact, in the Phase 2 decision: “[H]igher usage customers have, on average, higher energy burdens than lower usage customers.”

5. **Bill Impacts**

Although in its direct testimony, ORA declined to provide clearly defined parameters for what it describes as “unacceptable” or “harsh” bill impacts, it is fair to deem, as presumptively reasonable, annual bill impacts approximating those that ORA and TURN supported in the Phase 2 settlement adopted by the Commission. Those impacts, which, for the majority of customers, are comparable to some future years in SCE’s four-year transition plan, did not result in customer outcry.

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405 ORA/Irwin, Tr. 23:3615.
406 Id., 3616:6-3617:11.
408 Exh. SCE-106/Ramirez, pp. 92-95 (as revised by Exh. SCE-110A).
To the contrary, very few customers called SCE’s dedicated line in response to targeted Phase 2-related mailings, despite that during the period between November 2013 and July 2014, non-CARE customers with usage between 700-900 kWh received average monthly increases of 9.8%, or approximately $16 per month on average, while customers using between 100-300 kWh per month (comprising 20% of all non-CARE customers), experienced increases of 15.4%, which represent approximately a $4.53 average increase per month.409

ORA’s witness, Ms. Tan, testified in Phase 2 that while ORA disagreed with SCE’s energy burden metrics, it nonetheless approached the settlement with “bill impact[s] especially for low income and low usage customer[s]” in mind.410 ORA noted that under the settlement it joined, “about 60 percent of the customers under CARE will face less than [a] $5 monthly impact.”411 ORA also stated that, for non-CARE, Tier 1 customers, bill impacts under the settlement would be less than $4 per month on average.412 As shown in the four tables below—reproduced from Tables V-11, V-12, V-13 and V-14 of Exhibit SCE-106 as modified by Exhibit SCE-125—a year-by-year analysis of SCE’s gradual phase-in generally comports with the specific parameters ORA used in evaluating the reasonableness of the Phase 2 settlement that it joined. The tables show average percentage and dollar bill impacts for non-CARE and CARE customers on an annual basis, with the lowest usage level group comprised generally of Tier 1 customers.

<table>
<thead>
<tr>
<th>Year-Over-Year Monthly Average Bill Impacts of SCE’s Proposal (Non-CARE), Constant Revenue Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-CARE -Monthly Average Percent and Dollar Charge, Year-by-Year, Assuming No Rev Req Increase</strong></td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Low</td>
</tr>
<tr>
<td>Medium</td>
</tr>
<tr>
<td>High</td>
</tr>
</tbody>
</table>

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409  SCE/Lim, Tr. 19/2837.
410  ORA/Tan, Phase 2 Tr. 1/77 (March 25, 2014).
411  Id., 1/78.
412  Id., 1/79.
Taking Ms. Tan’s Phase 2 assessment as a guide, even assuming a 2.1% revenue requirement increase (the two tables immediately above, for non-CARE and CARE, respectively), the bill impacts on an aggregated basis are within the range ORA and TURN accepted for Phase 2. Namely, non-CARE, Tier 1 customers will see an average increase of $5.23 per month in the first year of the four-year transition plan, with each subsequent year bringing more moderate monthly increases. The group consisting of half of CARE customers see a $4.69 average monthly increase, and, high-usage customers (those with the largest energy burdens), actually see relief beginning in the second year of the transition.

For most low- and medium-usage customers, the first year of SCE’s Proposal—when SCE moves from Summer 2014 to Summer 2015—brings the largest percentage and dollar impacts of
the four-year transition, but those impacts should be placed within the context of energy burden analyses, which are shown in the tables below.413

**Aggregate Assessment of non-CARE Bill Impacts**  
(July 2014 to June 2015)

<table>
<thead>
<tr>
<th>Percent of Customers</th>
<th>Usage Level (kWh)</th>
<th>Weighted Bill Impact ($)</th>
<th>Weighted Bill Impact (%)</th>
<th>Weighted Change in Energy Burden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest 50%</td>
<td>&lt; 500</td>
<td>$4.52</td>
<td>11%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Highest 50%</td>
<td>&gt; 500</td>
<td>(6.47)</td>
<td>-2%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Highest 15%</td>
<td>&gt; 900</td>
<td>(16.04)</td>
<td>-5%</td>
<td>-0.1%</td>
</tr>
</tbody>
</table>

**Aggregate Assessment of CARE Bill Impacts**  
(July 2014 to June 2015)

<table>
<thead>
<tr>
<th>Percent of Customers</th>
<th>Usage Level (kWh)</th>
<th>Weighted Bill Impact ($)</th>
<th>Weighted Bill Impact (%)</th>
<th>Weighted Change in Energy Burden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest 50%</td>
<td>&lt; 500</td>
<td>$4.12</td>
<td>14%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Highest 50%</td>
<td>&gt; 500</td>
<td>(0.89)</td>
<td>0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Highest 15%</td>
<td>&gt; 900</td>
<td>(4.13)</td>
<td>-2%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

During cross-examination, Ms. Kao, ORA’s witness, offered an additional view of the bill impacts ORA would find acceptable for Phase 1, i.e., that she would apply a “criteria” that asked, “What do the potential bill impacts look like? Are they more than roughly 10 percent for any bin of usage? And I would also look at what the preceding 12-month bill impacts had been in considering whether the cumulative impacts are significant.”414 Ms. Kao further clarified that these particular bill impact thresholds were “kind of a rough guidance. We're not holding fast and fierce to any particular rule.”415 Using more granular “buckets” of usage data than those presented in the aggregated tables above, Exhibit SCE-110A shows that for the first year of the transition plan (involving the most notable bill impacts), from 2015 to 2016, non-CARE customers in the 300-500 kWh usage band—who represent more than a quarter of SCE’s non-CARE customers—are expected to experience under a 10% average monthly bill increase (even assuming a 2.1% revenue requirement increase), which translates to a $6.64

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413 Tables are reproduced from Exhibit SCE-106, Table V-15 and V-16 as modified by Exhibit SCE-125.  
414 ORA/Kao, Tr. 22, 3472:7-15.  
average monthly bill increase. Every other usage band on a system-wide basis will see more moderate impacts except those with usage below 300 kWh, who, despite seeing average monthly percentage increases above 12%, nonetheless will continue to have energy burdens well below 1%, unlike every other customer grouping. The numbers for CARE customers are similar, with only the very low-usage CARE customers experiencing greater than 10% bill impacts, and still enjoying energy burdens in the range of 0.3% to 0.6% (the lowest overall). For each subsequent year of the road map, the percentage and dollar impacts are more moderate still, with no average bill for customers with usage above 300 kWh seeing an increase, even on a percentage basis, in the range that Ms. Kao testified was unreasonable (over 10%). Thus, under SCE’s Proposal, a majority of non-CARE customers will experience increases of less than 10%, and those customers experiencing increases greater than 10% will see smaller dollar increases compared to those customers seeing a 10% increase.\footnote{Exh. SCE-110A.} Regardless of Ms. Kao’s 10% bill impact threshold, the Commission rightly concluded in its Phase 2 decision that actual dollar impacts, not percentage impacts alone, are relevant in any analysis of the reasonableness of a reform proposal.\footnote{D.14-06-029, p. 49.}

Finally, SCE had a rate change on January 1, 2015 where Tiers 2 and 3 were brought even closer together, making the first step of SCE’s proposed transition to collapse tiers 2 and 3 in 2015 even more modest.\footnote{See AL 3155-E, effective January 1, 2015, with tier rate ratios of 1.0, 1.3, 1.7 and 2.1 (Table 5, page 14), compared to SCE’s proposed tier rate ratios in 2015 of 1.0, 1.5 (for Tiers 2 and 3) and 2.0.}

C. Conservation Impacts

1. The Commission’s Balancing Of Rate Design Principles Should Not Start With A Clean Slate

Rate Design Principle 4, adopted by the Assigned Commissioner’s ruling in November 2012, states that “[r]ates should encourage conservation and energy efficiency.”\footnote{Scoping Memo and Ruling of Assigned Commissioner, November 26, 2012, p. 6.} Importantly, Section 739.9(e)(2), which was enacted in October 2013 and became effective January 1, 2014, requires...
the Commission to ensure that any approved fixed charges do not “unreasonably impair incentives for conservation and energy efficiency.” The statutory standard is clearly less restrictive than Rate Design Principle 4 because it allows for some impairment of conservation incentives. However, the statutory standard is very much in line with the language and the guidance the Commission provided in D.14-06-029—after the enactment of AB 327—about assessing the effect of rate reform proposals on conservation and energy efficiency:

In Phase 1 of this proceeding, where reduction in the number of tiers and the differential between tiers is under consideration, we will consider whether flattening of tiers would unreasonably discourage conservation and energy efficiency.

When the Commission has been confronted in the past with assessing the effect of proposed tier reductions or fixed charges on conservation and energy efficiency, it has balanced the encouragement of conservation and energy efficiency principle against other rate design principles. It should do so again by balancing Rate Design Principle 4 with the other six principles which deal with moving rates closer to cost, reducing subsidies, encouraging economic efficiency, improvement in accuracy of price signals, and customer understanding. When the Commission was free of statutory restrictions in the 1980s and 1990s, it approved tier flattening and fixed charges in the absence of evidence that conservation and energy efficiency goals could not be met. And as D.14-06-029 appropriately recognized, “[a]lthough rates should encourage conservation and energy efficiency (Principle 4), they should also minimize cross-subsidies and send accurate price signals so that customers can make economically efficient decisions.”

In considering Rate Design Principle 4, as well as the language in Section 739.9(e)(2) and D.14-06-029, the evidence reveals that (1) SCE’s Proposal can be expected to maintain or even improve, rather than unreasonably impair or discourage, the conservation gains already realized in California;

420 D.14-06-029, p. 15 (emphasis added).
421 See e.g., D.93-06-087, pp. 53-54, cited in Chapter IV.F.4.b., above.
(2) customers respond more to average prices and not to tier differentials set above marginal cost; and
(3) building and appliance standards, and direct incentives, can achieve more tangible results than steeply-tiered rate structures.

2. **SCE’s Proposal Encourages, Or At Least Maintains, Incentives For Conservation.**
   a) **Increasing Rates For Lower-Usage Customers Provides Conservation and Energy Efficiency Incentives**

   Any inclining block tiered rate structure does not provide conservation incentives equally to all customers. The problem with SCE’s current rate structure is that the majority of customers whose usage remains in Tiers 1 and 2 were largely shielded from any conservation incentives for more than a decade until D.14-06-029 was implemented. Should the Commission adopt SCE’s proposed modifications, by 2018, the smaller number of higher-usage customers may increase usage in response to a lower average price, but the larger number of lower-usage customers are expected to decrease their consumption in response to their resulting higher bills resulting in a net reduction in usage for SCE’s residential customers.423

   As a result of SCE’s Proposal, lower-usage customers on SCE’s tiered rates will be exposed to more cost-based price signals and may seek additional engagement with SCE through the adoption of energy efficiency and demand response programs.424 The current discounts provided to CARE customers provide little incentive to conserve from the very population that should be the most responsive to pricing signals. In a report completed for SCE in 2011, CARE customers were found to be “significantly less likely to understand they are charged more based on their usage—probably because many of them are in Tiers 1 and 2 and their unit costs do not vary much.”425 In addition, customers who

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423 Exh. SCE-101/Garwacki, p. 37. SCE estimates overall residential rate class reduction in usage of about 1% when moving from a four-tiered rate to a two-tiered rate structure, with a non-CARE $10 per month fixed charge and CARE $5 per month fixed charge. See also Exh. SCE-101/Garwacki, Appendix E, SCE’s response to January 13, 2014 ACR, Question 2, Principle 4.
424 SCE/Horwatt, Tr. 20/3001: 22-26; Exh. SCE-106/Horwatt, pp. 6-10.
adopt SCE’s opt-in TOU rates may have a better foundation to understand and potentially participate on other demand response rate options such as critical peak pricing or Peak Time Rebate (PTR) programs that focus on load reduction in very time-specific peak demand periods. The assumption that higher-usage customers with more discretionary usage will abandon their conservation and energy efficiency efforts under SCE’s Proposal is unsubstantiated. Higher-usage customers will still have the highest energy burdens and these customers will continue to receive the strongest incentives for conservation and energy efficiency. In 2004, the Commission concluded that “the extraordinarily high electric rates, in particular, that the customers of the large utilities face already encourage conservation.”

Increasing bills for customers who have been shielded from rate increases for so long will also provide conservation incentives that were unexplored under the broken tiered system because more usage in the baseline allowance has become discretionary over time. For example, when Mr. Chernick was asked whether he had any basis to dispute SCE’s conclusion that building and appliance standards have made Tier 1 usage more efficient over time and that baseline usage has become proportionately more discretionary than essential, he agreed that would be a reasonable hypothesis. In fact, the assertion by some intervenors that it is impossible to conserve energy in baseline usage (zero elasticity for Tier 1 usage) are unsubstantiated. Mr. Friedman testified that he had relied on a 2005 economic study to support a zero elasticity value for baseline usage and that it is “intuitive” that customers “do not have leeway to reduce consumption on baseline usage.” During cross examination, however, he stated that he has “no basis to agree or disagree” with the conclusion reached by Dr. Fine that even Tier 1 users have an opportunity to conserve. Mr. Friedman also acknowledged that of the five rate design scenarios evaluated in his work papers, four of which showed a net decrease in consumption, the

426 Exh. SCE-106/Garwacki, pp. 63-64 (citing D.04-02-057), p. 31).
427 NRDC/Chernick, Tr. 17/2278:8-22 (“I think that would be a reasonable hypothesis that Tier 1 would be a little bit more like Tier 2 than it used to be” with respect to elasticity.)
428 TASC-105/Friedman, p. 9.
429 TASC/Friedman, Tr. 24/3761:17-26.
only one that appeared to yield an *increase* in consumption (of only 0.7%) was the scenario that used an outlier elasticity value of close to zero (negative 0.01) for Tier 1.430

b) SCE’s Elasticity Studies Support The Conclusion That SCE’s Proposal Will Improve Energy Conservation

SCE assessed the effect of its proposal on the usage of all residential customers, *i.e.*, those seeing bill increases as well as those seeing bill decreases based on an assumed elasticity of -0.20 applied to all customers. That elasticity analysis, which was based on customers’ anticipated reaction to changes in their average bills, showed an overall decrease in consumption each year from 2015 through 2018 compared to SCE’s current rate structure.

TASC contends that the elasticities SCE used for lower-usage and higher-usage customers should have been differentiated.431 However, in 2013, SCE conducted a sensitivity analysis using a price elasticity of -0.10 for Tier 1 usage with a price elasticity of -0.20 for other tiers. That analysis still showed a slight decrease in usage as indicated in Table IV-5 of Exhibit SCE-106. When TASC calculated the effect of PG&E’s proposal using elasticities of -0.08 for Tiers 1 and 2 and -0.20 for Tiers 3 and 4, it also showed a net usage reduction of 0.5%.432 Thus, the use of a lower elasticity for lower-usage customers does not result in a net increase in usage.

c) Dr. Faruqui’s Conservation Assessment Supports Adoption of SCE’s Proposal

In rebuttal testimony, Dr. Faruqui concluded that while there is considerable debate about the best methodology or price elasticities to use to assess the impacts of the IOUs’ rate reform proposals on conservation, the elasticity analyses tend to show little effect of the proposed changes on conservation (or even separately for the effects of fixed charges or reduction in tier differentials), whether the results predict a slightly positive or negative impact on conservation.433

430 TASC/Friedman, Tr. 24/3762:15-3763:8. See also Exhibit SCE-129.
431 Exh. TASC-105/Friedman, p. 9.
432 Id., p. 10.
433 Exh. SCE-106/Garwacki, p. 72.
Dr. Faruqui conducted analyses using three different methodologies, the Tier Specific, Average Price, and Marginal Price methodologies, comparing the current rate structure to SCE’s proposed rate structure for 2018. His results show that annual consumption for SCE’s residential customers will decrease by 0.5 percent using the Tier-Specific methodology, will decrease by 1.1 percent using the Average Price methodology, and will increase by 1.8 percent using the Marginal Price methodology.434 Similarly, the effect of a customer charge alone shows a small decrease in consumption for the Tier-Specific and Average price methodologies, and an increase in consumption of 0.6 percent for the Marginal Price methodology. Putting aside the disputes over elasticity assumptions, the projected results range relatively close to zero change in net usage. Thus, the Commission may reasonably conclude that SCE’s Proposal will have no significant impact on usage relative to today’s rate structure nor will it unreasonably impair conservation incentives. The ED Staff Proposal is consistent with this result, concluding that most evidence indicates that neither tiered rates nor TOU rates induce much, if any, total net reduction in energy conservation.435

3. **Most Customers Respond More To Average Prices Than To Tier Prices Set Far Above Marginal Cost.**

Intervenors’ undue focus on customers’ reaction to marginal tier prices (to make conservation and EE investments) is also unsubstantiated. As the ED Staff Proposal concluded, “it is difficult to pinpoint elasticities at upper and lower tiers let alone the extent to which consumers are aware of the prices of each tier.”436 Rather, as Mr. Beach testified, “what matters to customers are not rates, but bills.”437 Even Mr. Marcus testified that “[t]he right way to calculate elasticity for tiered rates takes into account some combination of average and incremental rates, not each rate tier for a period of time each month. If a customer is not a supercomputer, the customer will react to changes in average

434 Exh. PGE-111, p. 17-18.
435 ED Staff Proposal, p. 49.
436 Id., pp. 53 (citing Professor Ito’s work).
437 SEIA/Beach, Tr. 24/3794:25-27.
bills.” Dr. Fine (EDF) similarly testified that “tiered customers respond to the bottom line of their total amount on their monthly bill.”

This conclusion was corroborated by SCE’s undisputed Anaheim Study, which is an empirical study in which SCE compared actual changes in usage over a 13-year period for residential customers exposed to different rate structures and different rate levels but who are located in adjacent geographic areas with similar climate. The objective was to analyze over an extended time period how customers respond to average rates and tiered structures for customers living in Anaheim, who are not served by SCE, and customers living in two of SCE’s service regions (Northern and Central Orange County) that are immediately adjacent to Anaheim. By comparing usage for the same years and in three geographically and demographically similar regions, SCE was able to assess the impacts of average rate differentials and tiered rate differentials on residential usage.

The analysis of the actual data demonstrates not only that residential customers, as a whole, respond to average prices, but that steeply-tiered rates may produce a net increase in usage. This outcome is important because it supports conclusions that reducing the current, steeply-tiered rate structure could decrease net usage and that steeply-tiered rate ratios actually serve to blunt the conservation signal for the residential population as a whole. This is because higher tiered rate ratios reduce the average price paid by lower usage residential customers, who greatly outnumber the customers with usage in the highest tiers. The effect of the tiered structure on lower-usage customers’ average price and usage causes the net average usage to increase despite the higher price signal faced by higher-usage customers.

Based on the results of the Anaheim study, the Commission should accord no weight to unsubstantiated views that extremely high prices for upper-tiered usage have been linked to increased

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438 Exh. TURN-201/Marcus, p. 39.
440 Exh. SCE-106/Garwacki, p. 67-70 modified by Exh. SCE-109, p. 3-5. See also Table III-1 of Exhibit SCE-109.
441 Exh. SCE-109/Garwacki, pp. 3-4.
conservation and energy efficiency. For example, Mr. Barsimantov maintains that a 2 to 1 tier rate ratio supports conservation and energy efficiency. However, he failed to consider that in 2009 PG&E’s highest rate was set at $0.50 per kilowatt hour, and yet the number of residential solar installations since 2009 has doubled according to the California Solar Statistics’ website even though the $0.50 per kilowatt hour price has declined over the same period.

4. **Building And Appliance Standards, And Direct Incentives, Achieve More Tangible Results Than Steeply Tiered Rates.**

The Commission and the California Energy Commission (CEC) opined in California’s Energy Action Plan II that

For the past 30 years, while per capita electricity consumption in the US has increased by nearly 50 percent, California electricity use per capita has been approximately flat. *This achievement is the result of continued progress in cost-effective building and appliance standards and ongoing enhancements to efficiency programs* implemented by investor-owned utilities (IOUs), customer-owned utilities, and other entities.  

The Commission and the CEC reiterated this observation in the 2008 Energy Action Plan Update:

“[O]ur three most powerful strategies for increasing energy efficiency have been: *building codes, appliance standards, and utility energy efficiency programs.*”

Nowhere in California’s Energy Action Plan II was the issue of tiered rates or the preservation of the existing steeply tiered rates identified as a contributing factor in California’s energy efficiency success. In fact, California’s Energy Action Plan II laments the then existing AB 1X rate restrictions because they were “. . . motivated by a desire to protect vulnerable consumers from potential

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rate increases but instead has had the effect of moving residential tariffs farther away from their relationship to underlying costs."\textsuperscript{444} No evidence nor any studies demonstrate conservation or energy efficiency benefits of a steeply-tiered rate structure. Energy efficiency benefits are typically achieved through incentives or rebates at the time of sale and purchasing decisions usually occur at the end of the life of a household appliance. Mr. Barsimantov agreed that his analyses were “based on the scenario in which a customer replaces an AC unit at end of life. It is not common for customers to replace AC units with higher efficiency units before end of life[.]”\textsuperscript{445} A rate structure with tiered rates may not even be considered by consumers when they make their purchasing decisions. In fact, when discussing bill savings necessary for customers to make energy efficiency investments, NRDC Witness Chernick went so far as to state that “people don’t make investments that would save them money, given their existing rates. Therefore, you have to have conservation programs to overcome various market barriers to get people to conserve.”\textsuperscript{446} Nor is there any evidence of intervenors’ efforts to assess the relative importance of building and appliance standards (\textit{e.g.}, Title 20 and 24), as compared to tiered rates, in encouraging conservation. Mr. Friedman even maintained that “the effect of building and appliance standards on residential conservation is irrelevant to the instant discussion” and that comparative analyses of that nature are “irrelevant.”\textsuperscript{447}

The Commission has long understood that the benefit of direct incentives for energy efficiency upgrades far exceeds the impact of the residential rate structure at the time consumers make purchasing decisions. In D.93-06-087, TURN argued that a wide tier rate ratio “increases the savings a consumer can realize from investing in energy efficient appliances,” and that “tier closure works at cross-purposes to the funding of rebate programs which target energy efficiency.”\textsuperscript{448} TURN and others

\textsuperscript{444} \textit{Id.}, p. 11.
\textsuperscript{445} Exh. Sierra Club-101/Barsimantov, p. 47.
\textsuperscript{446} NRDC/Chernick, Tr. 17/2293:8-12.
\textsuperscript{447} Exh. SCE-128, p. 3.
\textsuperscript{448} D.93-06-087, p. 53.
make similar claims in their testimony in this proceeding.449 The Commission’s response in 1993 rings true now: “[w]idening the tier differential imposes on all residential customers a rate design that would further a rate design goal that affects relatively few customers,”450 i.e., those with the means to invest in energy efficiency or distributed generation technologies. Then, as now, there is no evidence that rate reform would prevent the IOUs from meeting Commission-mandated energy efficiency program goals.

D. Impacts on Solar PV Customers

SCE’s existing net energy metering (NEM) customers, who constitute approximately 3% of all residential customers, are one subset of the over four million customers who will be impacted by SCE’s Proposal. The Commission should weigh the interest solar parties have in maintaining today’s steep tier structure against the rate design policies that favor reduction in cross-subsidies and a return to cost-based rates. This is especially true given that D.14-03-041 grandfathered existing solar customers for a 20-year period on the current NEM tariff.451 The grandfathering benefit will also apply to new solar customers probably until July 1, 2017, which is a regulatory outcome that Mr. Gerza, CALSEIA’s witness, described as the “solar industry . . . bracing for a large surge in demand.”452 D.14-03-041 observed that this OIR “is expected to result in significant changes to the residential rate structure, which may reduce the monthly savings from NEM.”453 That reduction in monthly savings for NEM customers will be an inevitable and intentional result of the Commission’s conclusion—drawn in part from the report it issued on the costs and benefits of the NEM program454—that “the costs of NEM are

449 Exh. TURN-201/Marcus, p. 33.
450 Id., pp. 53-54.
451 The Commission established the 20-year grandfathering period in D.14-03-041 to “ensure that customers who interconnect renewable distributed generation systems under the currently applicable net energy metering program have a reasonable opportunity to recoup the costs of their investment in those systems.” That projection was made notwithstanding the outstanding rate reforms the Commission knew it was undertaking in this proceeding yet the Commission nonetheless determined that 20 years is a sufficient period of time “to achieve full payback for system installation costs in this timeframe.” D.14-03-041, p. 35, Finding of Fact 5.
452 Exh. PGE-142.
453 Id., p. 19.
largely a function of retail rate designs,” and that the resulting cost-shift to nonparticipating ratepayers would reach $370 million to $1 billion per year in 2020 if the residential rate design remained unchanged and the then-existing NEM enrollment cap had been met.455

For future NEM customers, who will be served on the successor tariff being developed in R.14-07-002 (NEM 2.0 proceeding), the Commission acknowledged that “the outcome of this [NEM 2.0] proceeding is likely to affect the analyses of the costs and benefits of possible NEM successor tariff options.”456 However, notwithstanding the parallel procedural path the Commission is taking to address NEM customers’ interests, when this OIR was issued, the Commission made clear that “this Rulemaking will focus on the rate designs currently in place for all residential customers.”457

Solar advocates in this proceeding, who represent nearly half the active parties, overstate the impact of the IOUs’ rate reform proposals on existing and future residential PV customers. The following discussion summarizes evidence that tiered rate reform will increase the market share for residential solar, that the prevalence of solar lease agreements (as opposed to purchases) shifts the focus of customers’ value proposition from payback periods to immediate bill savings, and that tiered rates are not the sole or most significant driver in predicting the future success of residential solar.

1. **The IOU Proposals Will Increase Residential Customer Adoption of Solar Generation For Lower-Usage Customers**

Mr. Gerza, CALSEIA’s witness, who at the time he prepared his September 2014 direct testimony was a member of the board of directors of CALSEIA representing Sullivan Solar Power, testified that the IOUs’ rate reform proposals would “deteriorate solar project economics.”458 However, in a blog post that Mr. Gerza authored earlier in June 2014, after the Commission had authorized increases to Tiers 1 and 2 rates (in D.14-06-029), he had a much rosier view of the effect of residential rate reform on solar economics, concluding that:

455 D.14-03-041, p. 7.
458 Exh. CALSEIA-105/Gerza, p. 2.
For solar customers specifically: when the ‘class average rate’ increases[,] the value proposition of going solar improves, meaning the economics become more attractive. This applies to both existing solar customers and potential customers considering going solar . . . The fact that tiers 1 and 2 are increasing the most on a percentage basis, means that low usage customers will be better candidates for solar.\footnote{Exh. PG&E-143.}

On cross-examination, Mr. Gerza agreed with the blog statement he had made: “With the increase of Tiers 1 and 2, lower usage customers marginally will be better candidates for solar.”\footnote{CALSEIA/Gerza, Tr. 24/3878:12-16.}

The Chief Executive Officer of SolarCity (which was represented by three intervenors in this proceeding) addressed investors regarding tier-flattening, and he said, with reference to the Commission, “If they do that, then our customers—homes with smaller energy bills—will see savings as well.”\footnote{Exh. PGE-109, pp. 2-39, 2-40, 2-45, 2-46.}

Another impetus for a potential increase in the market size for solar (in addition to decreasing installation costs, discussed below) may result from regulatory outcomes that operate to reduce the price of solar for customers. Mr. Rive, the Founder and Chief Executive Officer of SolarCity, responded on an earnings call to a Goldman Sachs analyst who queried whether “customer economics get negatively impacted by . . . lower net metering rates,” to which Mr. Rive responded, “if [the regulatory changes are] negative, the way we’d have to address it is we’d have to reduce our price[.]”\footnote{Exh. SDGE-124, pp. 6-7.} In its Form 10-K for 2013, SolarCity included this statement under the heading “Risks Related to Our Operations”:

\begin{quote}
In the United States, governments and utilities continuously modify these regulations and policies. These regulations and policies could deter customers from purchasing renewable energy, including solar energy systems . . . Modifications to the utilities’ peak hour pricing policies or rate design, such as to a flat rate, would require us to lower the price of
\end{quote}
our solar energy systems to compete with the price of electricity from the electric grid.463

Thus, the record evidence suggests that rather than diminishing solar sales, the solar industry will respond to regulatory changes by reducing their prices, to the benefit of consumers.

2. Using Payback Periods For Solar Purchase Agreements Is A Narrow Metric Inapplicable To Most Solar Customers

As a threshold matter, the OIR Rate period extends through 2018, even though the NEM successor tariff should take effect by July 1, 2017 at the latest, meaning that the end-state rate structures used by intervenors for their payback calculations (which presume static NEM tariff structures) will not even be relevant to installations of new solar generation after July 1, 2017. Thus, the existing NEM tariff structure, when coupled with the revised default tiered rate structure proposed by SCE, if adopted by the Commission, may only apply to new solar installations for part of 2015, 2016 and no more than one-half of 2017.464 Moreover, given that a decision in Phase 1 is expected by Spring 2015, customers’ decisions about whether or not to enter into solar lease agreements between now and July 1, 2017 will be informed by knowledge of what the Commission’s adopted rate structures will be, setting clear expectations about the value proposition of their investments.

In general, however, payback periods offer too narrow a metric to evaluate adoption of solar generation because the majority of residential customers do not own solar generation facilities, but instead lease a solar generator or are subject to contracts with third-party owners of the solar generator.465 Mr. Gerza testified that CALSEIA’s payback period calculations “focused exclusively on the cash purchase model,” even though 70-90 percent of new installations in 2013 (in California, Arizona, New Jersey, Massachusetts and Colorado) are owned by third parties, not end-use customers.466 The problem is that residential solar customers who lease their installations obviously do

463 Exh. SDGE-125, pp. 12-13 (emphasis added).
466 CALSEIA/Gerza, Tr. 24:3883.
not make their decisions based on the same expected payback period as they would if they purchased their systems outright. Rather, their behavior is driven more by immediate bill savings and other factors, such as an increase in property value (which CALSEIA acknowledged but did not factor into its payback analyses).

Specifically, customers will compare their levelized cost of solar with the rates they can expect to pay their utility. Figure 4 of Mr. Gerza’s testimony lists levelized dollars per kilowatt-hour for solar costs from a study of 52 residential lease contracts in 2012, only two of which had prices below $0.16 per kilowatt-hour. SCE’s projected non-CARE Tier 1 rate in 2018, even assuming 2.1% revenue requirement escalation, is $0.19 per kWh, meaning that customers who lease their solar panels will realize immediate bill savings even under SCE’s Proposal, including customers in Tier 1, if solar leases have levelized prices of less than that in 2018. That outcome is not implausible given projections by Sungevity’s CEO, Andre Birch, that the levelized cost of electricity from residential installations should reach 10 cents per kilowatt hour within three to five years, down from an average of 15 cents today.

Mr. Gerza testified that a subcommittee of CALSEIA members reviewed his testimony before he prepared it, but could not recall which members participated in the subcommittee and he guessed, incorrectly, that SolarCity was not one of them. After the close of evidentiary hearings, CALSEIA circulated Exhibit CALSEIA-108, listing SolarCity as a CALSEIA member company who “participated in discussions” regarding preparation of the testimony. Lyndon Rive, the Chief Operating Officer of SolarCity stated during the company’s Third Quarter 2014 Earnings Conference Call, that they were going to “hold tight at $0.15 in California” for the levelized cost-per-kilowatt hour for their solar installations. In May 2014, the CEO of Sungevity predicted that the levelized cost of electricity

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469 Exh. SCE-110, p. 4.
470 Exh. SDGE-122.
472 Exh. PGE-145.
from residential solar installation should reach $0.10 per kilowatt-hour within three to five years (relative to today’s average of $0.15), which is below SCE’s current Tier 1 rate of 14.85 for non-CARE customers, a rate that will rise both as a function of SCE’s Proposal and anticipated revenue requirement increases. This demonstrates that the levelized cost of electricity for potential solar customers will continue to drop below SCE’s Tier 1 rate, meaning (a) the market share for solar is increasing; and (b) the payback period assumptions used to calculate the value proposition for the outdated purchase model are not reliable indicators of the impact of SCE’s Proposal on solar PV.

Mr. Barsimantov (Sierra Club) also acknowledged on cross examination that leasing is the most popular financing model, and that “the dominant financing model is not outright purchase.” His payback analyses, however, assumed customer purchase of solar units. He summarily concluded (with no evidence) that he “could have easily performed the same calculations easily enough with a different financing model” and that “we could have seen very similar qualitative results.” That conclusion, however, is belied by the fact that customers who lease solar systems could expect immediate bill savings without any up-front cash outlay, as described above. Moreover, as Mr. Gerza acknowledged on cross examination, the Investment Tax Credit of 10% will be retained for third-party installers in 2017, an important benefit that is removed from payback analyses for the customer-ownership model.

Mr. Barsimantov also erroneously assumed that customers’ solar systems were sized to offset 100% of customers’ demand, even though, in his view, customers typically size their systems at 80-100% of their demand. In fact, using usage data before and after installation of solar generation for nearly 9,000 SCE customers, the average billed usage decreased from 1,114 kWh per month to 549 kWh per month (average displaced energy of 565 kWh/month). That analysis resulted in a load offset of

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475 Sierra Club/Barsimantov, Tr. 23/3584:18-28.
476 Id., 3583:6-21.
477 CALSEIA/Gerza, Tr. 24/3898:21-27 (“Mathematically 10 percent is going to have a benefit.”)
478 Sierra Club/Barsimantov, Tr. 23/3595:8-17.
only 51%, not 100%.\textsuperscript{479} The larger size of installed solar generators assumed by Sierra Club in its analysis thus provides an inaccurate and longer assessment of payback periods because the additional generation offsets lower Tier 1 retail rates instead of higher-tiered rates. Similarly, CALSEIA uses a 75\% load offset at a monthly usage of 750 kWh as its base example, although CALSEIA shows different case scenarios to test sensitivities, including a 50\% load offset that more closely matches SCE’s own analysis.\textsuperscript{480} Using CALSEIA’s analysis on the more correct base case of a 50\% load offset to a 1,000 kWh average usage customer, SCE’s Proposal does extend the payback period from 6.7 to 8.8 years.\textsuperscript{481} However, as VoteSolar notes, “The Commission has found that ‘20 years constitutes a reasonable payback period’ for behind-the-meter NEM solar PV systems.”\textsuperscript{482}

3. **Solar PV Flourishes In Markets Without Broken Tier Structures**

Solar parties provided no evidence showing lack of development of solar generation in utility service territories whose residential rate structures are more similar to the IOUs’ proposed end-states than they are to the present rate structures. PG&E’s highest tier rate came down approximately 18 cents per kilowatt hour in just two years, from 2010 to 2012, but in the same period, solar PV installations skyrocketed from about 9,829 in 2010 to 16,527 in 2012.\textsuperscript{483} In recent years, SMUD has undertaken significant reform to its rate structure by collapsing tiers, reducing the differential between tiers, and introducing substantial increased fixed charges, and yet SMUD saw increased numbers of solar installations over the same period.\textsuperscript{484} CALSEIA introduced an exhibit purporting to show a slowdown in residential solar installation in SMUD’s service territory, coinciding with significant residential rate reforms taking place there. However, its witness acknowledged that the same apparent slight

\textsuperscript{479} Exh. SCE-106/Garwacki, p. 107.
\textsuperscript{480} Id., p. 107.
\textsuperscript{481} Exh. CALSEIA-101/Gerza, p. 16 as modified by Exh. CALSEIA-107/Gerza.
\textsuperscript{482} Exh. VoteSolar-101/Monsen, p. 24 citing D.14-03-041.
\textsuperscript{483} Exh. PG&E-109/Halperin, p. 2-42
\textsuperscript{484} Exh. SCE-106/Garwacki, p. 106, citing SMUD General Manager’s report.
downward trend existed as well for commercial solar installations, concluding that “[i]t’s very hard for me to draw a strong correlation here.”

IREC acknowledged that explicit and transparent subsidies for low-income users, such as “CARE or specifically targeted energy efficiency, weatherization programs would be a better way to deal with income issues” instead of through rate design. However, IREC supports steeply tiered rates as a means of providing incentives for solar customers, who constitute a far smaller slice of SCE’s population than low-income customers. Indeed, Mr. Fulmer testified that “[t]he upper tier should be set at a level on the order of two times the baseline tier,” and that a lower differential “would discourage people from installing solar and other distributed generation systems.” But this abstract contention is belied by the fact, contained in IREC’s testimony, that Arizona Public Service (APS) has a seasonally differentiated standard upper-tiered rate of seventeen cents for high-usage customers, which is a nominal rate that is comparable to SCE’s end-state baseline rate proposal in this proceeding. Further, APS does not even have a tiered rate structure during its winter months. Equally importantly, APS employs usage-differentiated monthly service fees in the range of $9-$15. Significantly, APS ranks fourth behind the California IOUs for cumulative installed megawatts of solar. This evidence refutes IREC’s assertion that all that is needed is a 2 to 1 tier rate ratio to meaningfully encourage DG.

The evidence shows that the broken tier structure exacerbates cost-shifts, not that solar PV relies on steep tiers. Mr. Barsimantov acknowledged that he was unaware that the Commission’s consultant, E3, had concluded that under the current residential tier rate structure, a large portion of the cost shift associated with all NEM generation is due to the current steeply tiered IOU rate structures. He disagreed with the findings but could not cite to any study to the contrary except one performed by his colleagues about NEM in Utah. In fact, Mr. Barsimantov acknowledged during cross examination

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485 CALSEIA/Gerza, Tr. 24/3936:24-26.
486 IREC/Fulmer, Tr. 24/3825:5-15.
488 Id., Exhibit MEF-2, p. 19.
489 Id., p. 21.
that a “host” of factors influence increased adoption of distributed generation, not just steeply tiered rates (which he did not initially list as an important factor in the adoption of solar): “There’s rebates. There’s the cost of solar. There’s customer acceptance. Seeing their neighbors. All kinds of things.”

Finally, the evidence reveals that because the cost of solar is decreasing, it would be inaccurate to assess the viability of solar with reference solely to the design of utilities’ retail rates. Installed costs fell 27% for the first three months of 2014 alone.

VII.

OPT-IN TOU RATES AND OPT-IN TOU PILOTS

A. Opt-In TOU Rate Proposals, Including Treatment of Revenue Shortfalls Between Tariffs

After the close of evidentiary hearings, the Commission issued D.14-12-048, approving SCE’s settlement with ORA, SEIA and NRDC for an opt-in, non-tiered TOU rate schedule, Schedule TOU-D, which had been pending in SCE’s 2013 Rate Design Window Application (RDW Settlement, or A.13-12-015). The newly adopted rate schedule is subject to a 200,000 customer cap and has two options: Option A for lower-usage customers, with a baseline credit and a fixed charge that mirrors the fixed charge then-effective for Schedule D (the tiered residential default rate); and Option B for higher-usage customers, with a $16 fixed charge and no baseline credit. In connection with the settlement, SCE agreed to keep its tiered residential TOU rate, Schedule TOU-D-T, open until at least its 2018 GRC Phase 2. That rate schedule has different TOU periods and rates than Schedule TOU-D.

The RDW Settlement contains the following provision addressing “revenue shortfalls” between the opt-in TOU rates and the default rate: “At least annually, SCE shall re-balance Schedule TOU-D to be revenue-neutral to Schedule D, as explained in Section 4.g., below.” Section 4.g., in turn, provides as follows:

491 Id., 3592:3-6.
492 See, e.g., SDGE-120.
493 Exh. SDGE-121 and SDGE-123.
494 D.14-12-048, Attachment A, p. 12.
When SCE’s authorized revenues change after Initial Implementation of this Settlement Agreement, SCE will first adjust rate levels for the default rate schedule (Schedule D for residential rates, and Rate B of each Rate R customer’s rate schedule, excluding Critical Peak Pricing elements), using a Functional SAPC adjustment. SCE will then rebalance optional rate levels to ensure revenue neutrality between the default rate schedule and the optional rate schedules. For example, generation revenue changes resulting from SCE’s Energy Resource Recovery Account proceedings shall be allocated on a Functional SAPC basis, i.e., the revised SCE generation revenue requirement would be allocated by applying a generation-level SAPC scalar based on the difference between present rate revenues and proposed rate revenues for the default rate schedules. The optional rate schedules will then be adjusted to ensure revenue neutrality on a functional basis.495

Thus, consistent with the Commission-approved RDW Settlement, SCE proposes to address the “revenue shortfall” issue this way.

B. Opt-In TOU Pilot Proposals

SCE proposes to market and study its opt-in TOU rate adopted in D.14-12-048, described in the previous section, in lieu of pursuing a pre-2018 opt-in TOU pilot. Ms. Lim testified about how SCE will be “employing a test and learn approach” to Schedule TOU-D.496

Specifically, SCE will first target the approximately 5,500 customers served on its current Schedule TOU-TEV (whole-house) rate, which will be supplanted by Schedule TOU-D. That initial approach will involve “back-end” rate analyses for those customers to determine which opt-in rate (A or B) is more advantageous to the customer based on prior usage data, while nonetheless giving customers the option to choose a different rate. “However, we’re going to do the heavy lifting for customers and send them a letter with their recommended rate on that letter.”497 Second, SCE would undertake a targeted campaign, using back-end rate analyses, to attract non-electric vehicle (EV) customers, starting with customers who would benefit or be neutrally impacted from the Schedule TOU-D rates.498 Finally,

495 Id., p. 13.
496 SCE/Lim, Tr. 19/2849:25-28. See also Exhibit SCE-102/Lim, pp. A-14 to A-16.
497 SCE/Lim, Tr. 19/2850:14-28.
498 Id., 2850-51.
SCE would attempt to locate customers whom it believes charge EVs, and will promote the new TOU rate on either digital advertising or through EV-based events.

The “learnings” from all three campaigns will then inform a broader campaign, involving additional customers, in Quarters 3 and 4 of 2015. Although Ms. Lim did not testify as to a specific target enrollment number for Schedule TOU-D, she indicated that a prior effort to market Schedule TOU-D-T (the tiered TOU residential rate) yielded a five percent adoption rate even without targeted rate analyses. A targeted campaign would likely enroll more customers, and that SCE plans to test different outreach methods to determine what has the biggest impact. Chapter IX includes SCE’s request for authorization to establish a memorandum account to track incremental expenses involved in marketing, education and outreach of its opt-in TOU rates.

VIII. DEFAULT TOU RATES AND DEFAULT TOU PILOT PROPOSALS

SCE does not propose default TOU rates for residential customers, particularly in light of the exciting launch of its recently approved, non-tiered opt-in residential TOU rates and SCE’s policy preference to permit customers to make affirmative choices about their rates rather than be defaulted to them. Yet SCE recognizes three important principles about default TOU rates. First, to the extent the Commission seeks movement towards cost-based TOU rates on a wider scale within the residential class, the current default tiered rate structure must first be reformed to permit that evolution to happen without harsh bill impacts. Second, any move to large-scale default TOU should not occur before measured default pilots are first undertaken and studied, a view that enjoys general consensus among a majority of active parties in this proceeding regardless of their positions about the merits of default TOU. Third, revenue shortfalls between default and non-default residential tariffs should be addressed consistently with the approach adopted by the Commission in SCE’s RDW Settlement, and, to the extent

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499 Id., 2851:12-27.
500 Id., 2852:5-14.
tier reform precedes large-scale adoption of TOU rates, the revenue deficiency concern will be mitigated.

A. **Tier Reform Should Precede Large-Scale Movement To Cost-Based TOU**

Mr. Beach testified that inclining block rates “should retain significant tier differentials in order to maintain a credible incentive for high-usage customers to switch to TOU rates.”501 This conclusion naturally follows from the fact that today, high-usage customers do not pay tiered rates that align with the utility’s to serve them.502 If the Commission seeks to encourage a *broader base of customers* switching to cost based TOU rates—not just high-usage customers who seek cost-based TOU rates to get out from under the punitive rate structure—it should encourage reform of the tiered rates to make them more cost-based in advance of a larger-scale transition to cost-based TOU rates. Indeed, ORA’s proposal to flatten the tier differentials over time reflects this view. Ms. Kao testified that it is a “fair statement” that “flattening or reducing the differential for residential tiered rates is helpful to prepare for default TOU rates”503 and that “ORA’s perspective on cost of service is default TOU, and that informed [ORA’s] testimony on moving the tiered rates closer to . . . a two-tier structure[.]”504 This position is consistent with Ms. Tan’s statement that “ORA supports TOU because it is more in line with cost to serve principles,”505 which is another way of saying that tiered rates are not based on cost.

By contrast, when IREC’s witness was asked whether tier-flattening would move rates closer to average rates and minimize the problem of self-selection of customers moving to TOU rates, Mr. Fulmer acknowledged that IREC’s tier proposal is independent of TOU rates: “That didn’t enter into my thinking. I did not address TOU rates or the trade-offs between tiered rates and TOU rates.”506 This narrow view, which ignores the relationship between tiered rates and TOU rates, is perilous if the Commission seeks to make broad, cost-based TOU rates attractive to large swaths of residential

501 Exh. SEIA-101/Beach, p. 44.
502 Id.
503 ORA/Kao, Tr. 22/3475:24-28.
505 ORA/Tan, Tr. 20/3075:6-9.
506 IREC/Fulmer, Tr. 24/3831:2-14.
customers (in a default TOU context or not). The tables presented in Appendix A of Exhibit SCE-107 show, for example, much more moderated bill impacts of moving from a two-tiered structure to a cost-based TOU structure versus moving from today’s current structure to a cost-based TOU structure.

B. Default TOU Pilots Are Prudent

1. The Consensus View On The Need For, And Timing Of, Default TOU Pilots Should Be Adopted.

Although the December 2, 2014 joint motion for admission into the evidentiary record of Joint Exhibit Resolving Default TOU Pilot Program Issues was denied, ALJ McKinney indicated in her December 24, 2014 e-ruling that “the parties to the Agreement and this proceeding still have recourse to have their views on the schedule for a default TOU pilot and default TOU heard” and that “[t]hese are matters that are appropriate for inclusion in the upcoming briefs.” The broad consensus among the majority of active parties to the proceeding—including SCE, PG&E, UCAN, SEIA, CforAT, TURN, Vote Solar, CUE, IREC and TASC—remains valid, and SCE continues to support the general approach taken therein. Specifically, SCE supports the following, which align with milestones included in its project timeline testimony (Exhibit SCE-130):

- Conducting a default TOU pilot beginning January 1, 2018, continuing no longer than two years, in order to gather data for purposes of evaluating whether to implement default residential TOU programs, including data to comply with the statutory criteria in AB 327 and SB 1090 for adoption and implementation of default TOU rates;
- Participating in a collaborative process with interested parties and Commission staff to develop the TOU pilots, beginning no later than 30 days after issuance of a Phase 1 decision and concluding on June 30, 2016;

Pilot development involves a number of issues, including how many customers to include in the pilot programs in order to provide statistically significant and meaningful data; the demographic and usage characteristics of customers included in the pilot programs; the role of bill protection; the types of data to be gathered under the pilots; expenditures and budgets for the pilots, including method of recovery of the costs of the pilots; what will be analyzed under the pilots; and other design criteria agreed upon by the parties.
• Filing a Tier 3 Advice Letter (or application, as appropriate) by November 1, 2016 requesting approval of the design of, and cost recovery for, the pilot;
• Beginning the default pilot no earlier than January 1, 2018, and as soon as practicable following resolution of the Tier 3 Advice Letter or application;
• Reporting on interim pilot results by January 2019 in connection with a Phase 3 of this proceeding;
• Reporting on final pilot results within 120 days of completion of the pilots (unless an extension is granted for good cause), with an opportunity for parties to comment on those reports, so that the Commission could consider whether or not to order default TOU programs on a broader scale; and
• Obtaining reasonable cost recovery for the incremental costs of running the pilots, either through the establishment of a memorandum account (subject to review in SCE’s GRC or other appropriate Commission proceeding) or through Commission-approval of an application for cost recovery.

The law requires the Commission to consider “the extent to which hardship will be caused on . . . customers located in hot, inland areas, assuming no change in overall usage by those customers during peak periods [and] [r]esidential customers living in areas with hot summer weather, as a result of seasonal bill volatility, assuming no change in summertime usage or in usage during peak periods.” 508 “Hardship” is not defined in the statute, but the default TOU pilots could collect data to address that issue. At least two categories of customers—medical baseline customers, and customers who cannot be disconnected from service without an in-person visit from a utility representative per Commission order—are categorically exempted from default TOU by statute, should it be ordered for residential customers. The default pilots could also be used to explore the possibility of categorically exempting other customers from default TOU depending on the results of studies.

508 Section 745(d).
2. **ORA’s Introductory Default TOU Proposal Is Ill-Conceived.**

Whereas ORA’s tiered rate proposal is indeterminate and relies too heavily on ill-defined revenue requirement contingencies, ORA’s *default TOU* proposal is inflexible and lacks regard for important learning opportunities that default TOU pilots can bring, and minimizes the perils of rushing to TOU before tiered rates have been reformed.

On one hand, ORA acknowledges that only a minority of customers spend time reviewing or understanding their current electric bills, yet on the other hand, ORA maintains that shifting from a non-time-differentiated tiered rate to a TOU rate would not represent a paradigm shift in residential rate design for the millions of customers statewide who would be defaulted to TOU under ORA’s proposal.⁵⁰⁹

It would be imprudent for the Commission to order default TOU for the vast majority of the state’s residential customers when the biggest proponent, ORA, had not adequately studied in any detail the four large-scale TOU efforts undertaken in other contexts—including Italy, Canada, Washington state, and Connecticut⁵¹⁰—and had only “scan[ned]” the SMUD Pilot Interim Report at the time when the recommendation was made.⁵¹¹ ORA’s big-bang, full roll-out approach is even more imprudent when, of the four contexts above, one default TOU attempt was rolled back within a year of its adoption due to customer discontent (Canada), and one was accomplished under a *staged* rollout—with fifty percent of customers ultimately opting off of the rate (Connecticut).⁵¹²

Rather than support default TOU pilots, ORA proposes an “introductory” default TOU that risks doing more harm than good. Because of its concern about the impact of default TOU rates on vulnerable customers, ORA initially proposes “very mild TOU rates,”⁵¹³ with bill protection, which is consistent with the route taken with SCE’s small commercial customers upon their initial transition to

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⁵⁰⁹ ORA/Tan, Tr. 20/3015:1-3016:3.
⁵¹¹ Id., 3016:4-10.
⁵¹² Id., 3017-3018.
mandatory TOU. However, ORA’s introductory and mild TOU rate would be tiered if by 2018 the Commission has not adopted a sufficiently reformed tiered rate structure.\textsuperscript{514} It would also grow progressively less mild on, potentially, an annual basis, with no known length of the roadmap towards cost-based TOU.\textsuperscript{515} The rate would be a tiered TOU rate “that is an overlay over the existing tiered rate design with a summer on-peak surcharge and a year-round off peak credit.”\textsuperscript{516} The ever-changing rate proposal on its face violates the Rate Design Principle 6 that rates should be “understandable.”\textsuperscript{517}

As stated in the previous section, marching forward with ORA’s big-bang TOU rollout by 2018 would deprive the Commission of the ability to study which customers should categorically be exempt from large-scale default TOU pursuant to Section 745(c)(1) in addition to those already explicitly listed in the statute (third-party notification and medical baseline customers). Although the law permits the Commission to determine, in its discretion, whom to exempt from default TOU, ORA does not acknowledge that a default TOU pilot would help that determination, and instead proposes to “invite parties to provide input” and to “put[,] all the good wisdom” together to make a decision, an approach that is as vague as it is risky.\textsuperscript{518}

3. **Seasonally Differentiated Rates Could Be a Prelude to Larger-Scale Residential TOU.**

For the gap between the end of the OIR Rate Period (2018) and the earliest time the IOUs could undertake default TOU pilots as described above, SCE urges the Commission to authorize or order seasonally differentiated tiered rates, which can be timely litigated and resolved in SCE’s 2018 GRC Phase 2. SDG&E already has, and for the OIR Rate Period continues to propose, seasonally differentiated rates. SEIA supports such a future proposal, as Mr. Beach testified that “[t]he Commission should encourage PG&E and SCE to explore seasonally-differentiated IB [inclining block]

\begin{footnotesize}
\begin{enumerate}
\item Exh. ORA-101/Tan, p. 1-18.
\item ORA/Tan, Tr. 20/3035:2-15.
\item Exh. ORA-101/Tan, p. 1-18
\item November 26, 2012 Scoping Memo and Ruling of Assigned Commissioner, p. 7.
\item ORA/Tan, Tr. 20/3077:17-28.
\end{enumerate}
\end{footnotesize}
rates in future GRC Phase 2 cases,” in part because “the IOUs’ marginal costs have a significant seasonal dimension.”\textsuperscript{519} TURN cites LADWP’s seasonally differentiated rates as well.\textsuperscript{520} Seasonally differentiated tiered rates would moderate seasonal bill impacts that customers would experience under default TOU, should it be ordered. This approach—to reflecting higher rates in the summer and lower rates in the winter—was adopted by the Commission in SCE’s 2009 GRC Phase 2 in advance of the anticipated transition of SCE’s small commercial customers to mandatory TOU rates.\textsuperscript{521}

C. **Treatment of Revenue Shortfall Between Tariffs**

SCE proposes to address revenue shortfalls between domestic rate schedules in any opt-in or default TOU context consistently with the formula adopted in its RDW Settlement and described in greater detail in Chapter VII.A. Revenue deficiency concerns arise most starkly when the cost-based TOU rate differs substantially from the inefficient tiered rate. That is yet another reason why tiered rate reform should be a prerequisite to large-scale adoption of TOU. Dr. Fine (EDF) agreed with this assessment.\textsuperscript{522}

IX. **CUSTOMER EDUCATION AND OUTREACH**

Rate Design Principle 10 provides, in part, that “[t]ransitions to new rate structures should emphasize customer education and outreach that enhances customer understanding and acceptance of new rates.”\textsuperscript{523} The February 13, 2014 Assigned Commissioner’s Ruling stated that “the specific details of outreach programs are likely beyond the scope of Phase 1, but it is necessary to have some information on utility plans in order to make this determination.”\textsuperscript{524} SCE presented sufficient information to satisfy Rate Design Principle 10, as described below.

\textsuperscript{519} Exh. SEIA-101/Beach, p. 48.
\textsuperscript{520} Exh. TURN-201/Marcus, p. 3.
\textsuperscript{521} See D.09-08-028.
\textsuperscript{522} EDF/Fine, Tr. 23/3654:13-22.
\textsuperscript{523} D.14-06-029, pp. 12-13.
\textsuperscript{524} *Assigned Commissioner’s Ruling Requiring Utilities to Submit Phase 1 Rate Change Proposals*, February 13, 2014, p. 5.
A. **SCE’s Summer Rate Reform Outreach Efforts**

SCE’s successful efforts at marketing, education and outreach to customers in advance of summer 2014 rate changes provides a good road map for the Commission as it prepares to authorize longer-term rate changes in Phase 1. Specifically, SCE undertook targeted outreach to customers, including rate analyses, before the Phase 2 rate changes took effect. The letter campaign targeted non-CARE customers who were expected to experience a 10% or $20 monthly bill increase, and CARE customers who were expected to experience a 10% increase or greater than $10 bill increase (relative to bills from the previous summer).\(^{525}\) SCE established a dedicated 800 number to track customer responses to the letter campaign, and created a landing page online providing information about why rates are changing, information on pre-reform and post-reform rates, projected average bill impacts by climate zone and average usage, and projected bill impacts by month—both in terms of dollars and percentage impacts.\(^{526}\) SCE has “a very simple yet effective visual tool on our website where customers can easily get that information,” including a climate zone map that is paired with baseline allocations per zone.\(^{527}\) All customers, not just the targeted customers, received information about the landing page using bill messaging.\(^{528}\)

SCE’s Corporate Communications Department undertook media briefings to inform the media about rate changes. SCE also worked with various community-based organizations and faith-based organizations to provide information about summer rate reform to customers. Ms. Lim described SCE’s tier position report, available to customers who are interested in learning more about how SCE’s tier prices affect their overall bills, including the ability for customers to know their tier position on a given day, the kilowatt hour price in each tier, the projected total cost for the month, etc. Ms. Lim also testified about SCE’s Budget Assistant tool, through which customers can “proactively get a notification based on if you’re going over your budget amount. And it will tell you how many more days in the bill

\(^{525}\) SCE/Lim, Tr. 19/2837-2839.  
\(^{526}\) Id., 2840:5-18.  
\(^{527}\) Id., 2840:25-2841:22.  
\(^{528}\) Id., 2847:9-16.
cycle that you have to do something about mitigating your bills for the remainder of that bill month.”529 SCE also has plans to launch a new tool called “Energy and You” so that customers can, among other things, learn basics about their bill.530

SCE had a very low customer response to its targeted mailing, which Ms. Lim took to signify that SCE was “successful in meeting the communication needs of our customers.”531 When asked by ALJ Halligan whether the low response rate meant that customers hadn’t read the information and had no basis to respond, Ms. Lim testified that while that may be the case for some customers, SCE solicited input from customers about its draft customer messages with an online panel of SCE customers, and 80 percent of them found the information “useful and helpful.”532 Of the customers who were aware of SCE’s rate increases, 73 percent of them had read SCE’s targeted mailing.533

This on-the-ground experience, paired with the marketing, education and outreach plan detailed in Exhibit SCE-102, will help customers understand and accept rate reform changes adopted in Phase 1.

**B. Education Regarding Fixed Charges**

Chapter IV.B.3 explained the prevalence of fixed charges at Commission-regulated utilities other than PG&E and SDG&E, indicating that customers can accept fixed charges even if they do not initially prefer them. In any event, the Commission has previously held that customers’ aversion to customer charges could be overcome with proper education,534 and the experience of other electric utilities shows that proper customer education and outreach, along with a reasonable phase-in of new charges, has worked well for implementing residential fixed charges.

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529 Id., 2842:8-15.
531 Id., 2837:2-22.
532 Id., 2848:23-27
533 Id., p. 2849.
The Commission twice recognized that it would be poor policy to hold rate reform hostage on this basis alone.535 First, in D.93-06-087, although the Commission rejected an ORA (then known as DRA) proposal to implement a fixed charge, it concluded that “[t]o the extent that the customer acceptance issue is one of popularity, we do not believe it lacks importance. At the same time we must emphasize our view that our role is not simply one of establishing rate design by popular vote of ratepayers.”536 Then, more importantly, when the Commission adopted SCE’s fixed charge in D.96-04-050, it found that SCE had addressed the outreach issue to its satisfaction and adopted a fixed charge, concluding as follows:

To achieve our goal we must also ensure that rates are structured so that customers can understand and respond appropriately to those signals. However, this does not mean that customer understanding and acceptance should be valued above cost-based rates. We believe that cost-based rates can be made acceptable to most customers if they are properly presented and explained . . . Our adopted pricing proposals also reflect our firm belief that customers can make reasoned decisions and choices about their energy use, given adequate time and access to information.537

The Commission adopted SCE’s fixed charge proposal, finding that “Edison has adequately addressed the customer acceptance concerns that we have raised in prior decisions.”538 As explained in the previous section, SCE undertook multi-media outreach efforts to describe Phase 2 rate reforms,539 which generally had similar or even larger bill impacts on lower-usage customers than the gradual phase-in of an increased fixed charge.540 Ms. Caroline Winn, SDG&E’s Vice President of Customer

535 TASC’s witness, Mr. Friedman, also testified that “California’s IOUs may be able to overcome customer concerns related to fixed charges if they develop[] an effective customer outreach and education plan concerning fixed charges.”
536 D.93-06-087, p. 31 (emphasis added).
537 D.96-04-050, pp. 20-22 (citing D.93-06-087, 50 CPUC 2d 1, 27) (emphasis added).
538 D.96-04-050, p. 115.
539 In addition to the testimony summarized in the previous section, see Exhibit SCE-103, response to Question 7.
540 Exhibit SCE-125, demonstrates that year-over-year bill impacts of SCE’s Proposal, including fixed charges, are roughly comparable on a phased-in, annual basis to reforms that took place between November 2013 and July 2014. Chapter V.E. explains that most CARE customers’ bills will increase by less than $2 per month as a result of the fixed charge alone.
Service, indicated that although she witnessed customer outrage at SDG&E’s fixed charge proposal at one public participation hearing, in her opinion, their reaction reflected a poor understanding of what the fixed charge was designed to accomplish.\textsuperscript{541} She testified that SDG&E is “developing our customer outreach and education plan to inform customers that the monthly service fee is not a new [or] incremental fee as was described in the public participation hearing and that the monthly service fee will be a reduction in the tiered rate structures.”\textsuperscript{542}

\textbf{C. Implementation of Section 745(c)(5) Bill Comparison Tool}

Section 745(c)(5), from AB 327, identifies one of many conditions precedent before the Commission can authorize or order default TOU:

Each electrical corporation shall provide each residential customer, not less than once per year, using a reasonable delivery method of the customer’s choosing, a summary of available tariff options with a calculation of expected annual bill impacts under each available tariff. The summary shall not be provided to customers who notify the utility that they choose not to receive the summary. The reasonable costs of providing this service shall be recovered in rates.

SCE does not currently have a customer-facing tool for residential customers showing customized calculations of expected annual bill impacts under each available tariff.\textsuperscript{543} However, in Exhibit SCE-130, SCE provided timelines for offering a bill comparison tool even in the absence of a default TOU mandate. Currently, SCE develops customer-specific bill comparisons internally and can then share them with customers upon request. In the subsection below, SCE requests authorization to record in a memorandum account the incremental costs to develop and implement systems necessary to create a customer-facing bill comparison tool, among other costs.

SCE estimates that it would need approximately eighteen months to build systems necessary to create the bill comparison tool for all residential customers. That system would include an on-line tool

\textsuperscript{541} Similarly, numerous customers at the public participation hearings were misinformed about SCE’s Proposal, including customers believing (erroneously) that a fixed charge would add $120 to their bills. SCE/Ramirez, Tr. 20/2875.

\textsuperscript{542} SDG&E/Winn, Tr. 13, pp. 1585-86.

\textsuperscript{543} Exh. SCE-102/Lim, p. A-18.
(likely linked to My Account on www.sce.com) permitting customers to compare their current rate plan to other available rate options, and to submit a request to switch plans. The rate analysis results would also be provided via other channels depending on the determined need, feasibility and benefit to customers.544

D. Request for Authorization To Record Incremental Costs of Marketing, Education and Outreach for SCE’s Rate Reform Proposals (Including Opt-In TOU Rates), And Incremental Costs For New Systems Functionality And Enhancements.

In order to effectively implement SCE’s Proposal and further Rate Design Principle 10’s goal to “emphasize customer education and outreach that enhances customer understanding and acceptance of new rates,” SCE will incur incremental costs for marketing, education and outreach, and system changes. These activities will be new and material, and SCE has not previously obtained Commission approval for or authorized funding for these activities. SCE requests that the Commission explicitly approve in its Phase 1 decision these activities and the establishment of a Residential Rate Implementation Memorandum Account (RRIMA) to record these incremental operations and maintenance (O&M) and capital costs. SCE anticipates that the RRIMA will terminate upon the implementation date of a Commission decision in Phase 1 of SCE’s 2018 GRC. SCE also anticipates that it will seek recovery of costs recorded in the RRIMA in its 2018 GRC application or other suitable application. As with other Commission-approved memorandum accounts, the RRIMA will not guarantee recovery in rates of any of the recorded incremental costs and that recovery of any such costs shall be subject to Commission review and approval.

1. Implementation of Rate Reform Proposals

Rate reform implementation will involve O&M for marketing, education and outreach activities as well as system changes. Marketing activities include general awareness initiatives such as bill messaging, adding and updating content on SCE’s website, and communicating to customers through mass media about changes associated with rate reform. In addition, SCE plans to conduct

544 Exh. SCE-130, p.3.
targeted outreach via direct mail and email to customers projected to be impacted consistent with the criteria used for the Phase 2 rate reforms. The Phase 1 decision will better define the level of activities required throughout the transition process. As rate changes become known, SCE plans to follow the communication approach it used in summer 2014, described above, which was successful in informing customers likely to be impacted by rate reform.

Additionally, SCE will incur incremental costs for various systems changes, including costs to implement bill calculation and bill presentation changes resulting from tier collapsing, tiered rate and fixed charge price adjustments, baseline allocation changes, and income-qualified program pricing changes. These systems enhancements include changes to SCE’s back office systems that support billing calculations, and changes to SCE’s website.

2. **Marketing Of Optional TOU Rates**

SCE has identified available funding to support the limited launch of two new TOU rates approved in D.14-12-048 and implemented on January 1, 2015. However, SCE is hereby requesting authority to record incremental costs in the RRIMA for the planning and execution of subsequent larger-scale optional TOU campaigns to take place between summer 2015 and the end of 2017.

After the limited TOU launch in Q1 of 2015, SCE anticipates that it will focus its ongoing marketing efforts for TOU in the first and fourth quarters of each year. SCE will plan and execute a targeted campaign using back-end rate analyses to attract customers to enroll in the optional rate plan. To communicate customer specific value propositions of the optional TOU rates, SCE currently has the capability to internally develop customer-specific bill comparisons, but does not have a customer-facing tool that permits customers to undertake that analysis and enroll on the rates on their own. SCE is requesting to record the incremental O&M and/or capital costs for the development and implementation of the systems necessary to create the bill comparison tool through this memorandum account. In addition, as discussed in Exhibit SCE-130, SCE will plan to develop a self-service, online, bill calculator tool, which will provide customer-specific bill comparison estimates. SCE anticipates that this capital project will require 18 months to implement once the project is initiated.
SCE also anticipates testing and evaluating enrollment tactics for opt-in TOU, such as soliciting interest in the rates during turn-on (a method employed by Arizona Public Service) and making outbound calls to encourage participation on the optional TOU rates. Each year, SCE plans to evaluate and improve its methodologies and customer targeting as well as its “after-care” tactics. SCE also plans to regularly conduct internal evaluations of customer acceptance and any behavior modifications resulting from the new rate options to refine offerings in subsequent campaigns.

3. Specific Request

SCE requests that the Commission authorize SCE to file a Tier 1 Advice Letter to establish a memorandum account to record incremental costs for marketing, education and outreach as well as new systems functionality and enhancements related to rate reform and optional TOU rates. Specifically, an ordering paragraph should be included in the Phase 1 decision as follows:

SCE is authorized to file a Tier 1 Advice Letter to establish a memorandum account to record incremental customer education and outreach and systems costs related to rate reform and optional TOU marketing. Costs required to effectively communicate charges and options to customers may also be recorded in this memorandum account. SCE shall seek disposition of all recorded amounts in a future GRC application or other suitable proceeding.

X.

SCHEDULE, IMPLEMENTATION AND COORDINATION OF RATE CHANGES, 2015-2018

Chapter VI.A.1. demonstrates why SCE’s four-year phase-in proposal is reasonable. In this section, SCE addresses three additional matters relating to schedule, implementation and coordination of rate changes over the OIR Rate Period. First, as SCE indicated in its December 29, 2014 Response To ALJ Ruling Requiring Utilities to File Supplemental Information Setting Forth Implementation Schedule for Rate Changes, SCE proposes to file an advice letter implementing 2015 rate changes within 30 days of the issuance of a Phase 1 decision.

Second, future revenue requirement changes other than those occurring at the time the Phase 1 decision is first implemented and every January thereafter through January 2018 “would be applied such that the volumetric rates for each of the . . . usage tiers would move up or down together on an equal
percentage basis.”545 That is, the level of rates would be designed to collect the revised, authorized revenue requirement for the residential rate class while maintaining the target, year-by-year fixed tier rate ratios set forth in the Commission’s Phase 1 decision.

Third, with respect to the intersection between the rates established in this proceeding and the revenue requirement changes that the Commission will consider over the next four years in other rate-setting proceedings, it would be inappropriate to hold rate reform hostage in consideration of revenue requirement increases occurring in the future given that the prudent guidance from the Assigned Commission and Assigned ALJs for Phase 1 was to assume two scenarios, one with no revenue requirement increases and one with a 2.1% increase per year over the OIR Rate Period.546 As shown in Chapter VI, above, the affordability impacts of SCE’s Proposal under both scenarios are reasonable and would be subject to a gradual phase-in schedule as required by law. Additional (now speculative) bill impacts are to be evaluated by the Commission and addressed in each revenue requirement proceeding, especially because they will impact more than just residential customers.547 In any event, SCE does not anticipate foreseeable substantial revenue requirement increases because SCE anticipates an approximately 3% revenue requirement increase in 2015 owing to the ERRA proceeding and additional modest increases from SCE’s pending GRC Phase 1.548 The forecast price increases for natural gas are modest, and should an unforeseeable gas price spike occur, resulting in large revenue requirement increases, SCE has a record of moderating revenue requirement changes through potentially extending the period over which the under-collection is addressed.549

545 Exh. SCE-101/Garwacki, p. 21. See also, SCE/Garwacki, Tr. 18, pp. 2491:26-2492:16.
546 SCE/Garwacki, Tr. 18/2488:9-14.
547 Id., 2488-2489.
549 Id., 2489:19-28.
XI.

MISCELLANEOUS ISSUES

A. Phase-Out of Volumetric GHG Allowance Credit For Upper Tier Customers

In D.12-12-033, the Commission ordered the IOUs to “neutralize” greenhouse gas (GHG) costs in all residential rates through the volumetric return of GHG allowance revenues in an amount equal to, and not exceeding, the GHG Cap-and-Trade program costs that are embedded in residential rates. 550 D.12-12-033 further stated that “[s]hould the differences between lower- and upper-tier residential rates be substantially reduced or eliminated, it would no longer be appropriate to use allowance revenues for this purpose” and that, when the differential between upper-tier and lower-tier rates narrows, “the carbon price signal should be fully reflected in residential rates and all remaining revenue should be returned on a non-volumetric basis” through the California Climate Credit. 551

The Commission recently reiterated its view that the “trigger” to end the current practice of using allowance revenues to volumetrically offset program costs is substantial tier flattening, which the smaller IOUs have already achieved because they were not subject to AB1X restrictions:

The two small utilities have not had caps imposed on their baseline rates and thus have not experienced the large disparities between lower and upper tiers that the large utilities have. Because the small utilities are able to pass GHG costs on to both lower and upper tiers, D.12-12-033 required the utilities to make their residential returns solely through the Climate Credit. For the large utilities, the Commission authorized this rate offset until such time as the differences between lower and upper-tier residential rates can be substantially reduced or eliminated. The Commission is currently considering this issue in R.12-06-013. 552

SCE urges the Commission to make a finding in its Phase 1 decision that a simple tier rate ratio of 1.3 to 1.0 constitutes the point at which “the differences between lower and upper-tier residential rates” has been “substantially reduced or eliminated” under D.12-12-033 and D.14-12-054 such that the Commission could and should cease its practice of using GHG allowance revenues to offset GHG costs

550  D.12-12-033, Ordering Paragraph 8.
551  Id., p. 114.
552  D.14-12-054, p. 5, n. 10.
embedded volumetrically in residential rates. Under SCE’s Proposal, that trigger will occur no sooner than in 2017.

The 30% differential, to be realized in 2017 under SCE’s Proposal, is appropriate for two primary reasons. First, GHG costs reflect the near-term higher costs of generation owing to California’s clean energy policies. As described in Chapter III.A.4.d, SCE has presented undisputed evidence that, at most, the difference in marginal generation costs between serving upper-tier and lower-tier customers is approximately 20%. Changing the Commission’s current practice too soon before that approximate threshold has been met will only exacerbate the problem by which upper-tier customers subsidize lower-tier customers for costs that all customers incur. Second, SCE’s proposed 2016 rates are still very steeply tiered by historical standards. SCE’s proposed Tier 3 rate is still 1.6 times the baseline rate in 2016. Thus, SCE does not propose any changes to the current mechanism for allocating GHG allowance revenues to residential customers of SCE before 2017.

The lifting of rate restrictions for Tiers 1 and 2 by AB 327 should not by itself trigger a change in SCE’s current practice of using GHG allowance revenues to volumetrically offset costs in upper-tiered rates.\textsuperscript{553} Just as the smaller IOUs have two-tiered rates and customer charges, and thus embed GHG costs in rates (without a volumetric offset), it would be appropriate to do so for the large IOUs only after substantial progress has been made on tier reform to put SCE on the same footing as its Commission-regulated peers at PacifiCorp and Liberty Utilities, consistent with SCE’s Proposal. “Another reason why the GHG allowance revenues should not be returned to residential customers solely as a Climate Credit is the bill volatility that results from returning the allowance revenues as a semi-annual credit instead of using the allowance as a means of reducing the differential between current, steeply-tiered volumetric rates.”\textsuperscript{554}

\textsuperscript{553} Exh. SCE-101/Garwacki, p. E-24. SCE notes that it can easily construct its residential rate designs such that the GHG costs are allocated equally across tiers. The important issue is whether the costs, regardless of where they are allocated, are offset until the differentials between the tiers have been substantially reduced. \textsuperscript{554} Id., p. E-25.
XII.

SAFETY CONCERNS

As the Commission stated in D.14-06-029, “[t]he Commission’s regulatory responsibility includes ensuring that utility safety programs and measures are adequately funded.”\textsuperscript{555} Nothing in this proceeding impacts the funding of those safety programs, as no request is being made to increase or decrease authorized revenue requirements of the IOUs or to modify the Commission’s safety programs and mandates. “Other Commission proceedings, such as the IOUs’ general rate cases, are charged with ensuring that customer rates are collected and used appropriately to fund safety programs and measures.”\textsuperscript{556}

XIII.

CONCLUSION

For the reasons discussed above and in SCE’s direct and rebuttal testimony, SCE maintains that its residential rate reforms are reasonable, lawful, fair and urgently needed to address distortions that the Legislature and the Commission have been trying in earnest to resolve since 2009. SCE respectfully requests that they be adopted by the Commission without modification.

\textsuperscript{555} D.14-06-029, p. 53.
\textsuperscript{556} Id.
Respectfully submitted,

FADIA KHOURY

/s/ Fadia Khoury
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January 5, 2015
BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA

Order Instituting Rulemaking on the
Commission’s Own Motion to Conduct a
Comprehensive Examination of Investor Owned
Electric Utilities’ Residential Rate Structures, the
Transition to Time Varying and Dynamic Rates,
and Other Statutory Obligations.

R.12-06-013
(Filed June 21, 2012)

CERTIFICATE OF SERVICE

I hereby certify that, pursuant to the Commission’s Rules of Practice and Procedure, I
have this day served a true copy of PHASE 1 OPENING BRIEF OF SOUTHERN
CALIFORNIA EDISON COMPANY (U 338-E) on all parties identified on the attached
service list R.12-06-013. Service was effected by one or more means indicated below:

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  ALJ Julie Halligan
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Executed January 5, 2015, at Rosemead, California.

/S/ Janice Velarde
Janice Velarde
Project Analyst
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2244 Walnut Grove Avenue
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**California Public Utilities Commission**

**Service Lists**

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MCE REGULATORY  MELISSA P. MARTIN
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WALKER WRIGHT  WALKER WRIGHT
SUNRUN, INC. SUNRUN INC.
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MRW & ASSOCIATES, LLC  DAVIS WRIGHT & TREMAINE LLP
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BENJAMIN AIRTH  DAVID MARCUS
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<td>PATRICK JOBIN</td>
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<td>GREGORY REISS</td>
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<td>SENIOR MANAGER, INVESTOR RELATIONS</td>
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<td>LYNN HAUG</td>
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<td>LARGE-SCALE SOLAR ASSOCIATION</td>
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<td>ANN TROWBRIDGE</td>
<td>ATTORNEY</td>
<td>DAY CARTER &amp; MURPHY LLP</td>
<td>3620 AMERICAN RIVER DR., STE. 205, SACRAMENTO, CA 95864</td>
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<td>CALIFORNIA PACIFIC ELECTRIC COMPANY, LLC</td>
<td>REGULATORY AFFAIRS MGR.</td>
<td>PACIFICORP</td>
<td>825 NE MULTNOMAH ST., STE 2000, PORTLAND, OR 97230</td>
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<td>SARAH LEBSON</td>
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http://www.cpuc.ca.gov/service_lists/R1206013_80447.htm

1/5/2015
Non Email Recipients

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