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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company To Revise Its Electric Marginal Costs, Revenue Allocation, and Rate Design, including Real Time Pricing, to Revise its Customer Energy Statements, and to Seek Recovery of Incremental Expenditures. (U 39 M)	Application 10-03-014 (Filed March 22, 2010)

Opening Brief of the Vote Solar Initiative In Phase II of the Pacific Gas and Electric Company Test Year 2011 General Rate Case

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SUMMARY OF VOTE SOLAR INITIATIVE'S RECOMMENDATIONS

The Vote Solar Initiative urges the Commission to reject PG&E's proposal to impose a fixed customer charge on all residential customers and to eliminate Tier 4 from PG&E's residential rate design. Vote Solar believes that the elimination of Tier 4 and the imposition of a customer charge will hurt the development of the residential solar PV market by reducing the strength of the price signal to PG&E's highest consuming customers.

The Commission should give due consideration to the negative impacts of PG&E's residential rate proposal on state energy policy and goals, as the reduction in price to the highest consuming customers necessarily means less incentive to that group of customers to act consistently with the state's priorities to conserve energy and invest in distributed generation resources.

Additionally, Vote Solar urges the Commission to ensure that time of use rates incorporate a strong on-peak/off-peak differential in price to reflect the peak generation and operational values that residential PV brings to PG&E's distribution grid.

Vote Solar requests a final oral argument pursuant to Commission Rule 13.13(b).

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OPENING BRIEF OF THE VOTE SOLAR INITIATIVE IN PHASE II OF THE PACIFIC GAS AND ELECTRIC COMPANY TEST YEAR 2011 GENERAL RATE CASE

In accordance with Rule 13.1 of the Rules of Practice and Procedure of the California Public Utilities Commission (Commission) and the procedural schedule established by the May 26, 2010 Assigned Commissioner's Ruling and Scoping Memo (Scoping Memo), The Vote Solar Initiative (Vote Solar) respectfully submits its opening brief in Phase 2 of Pacific Gas & Electric Company's (PG&E) Test Year 2011 General Rate Case (GRC). Pursuant to Commission Rule 13.13(b), Vote Solar requests a final oral argument in the above captioned case.

I. Introduction and General Background

PG&E proposes several fundamental changes to its current residential rate design. Going beyond a routine rate level adjustment, PG&E now asks the Commission to approve sweeping changes to its residential rate design, including a change in the number of tiers for non-CARE and CARE customers, the imposition of a fixed customer charge, a reduction of the baseline from 60% to 55%, and the flattening of generation and distribution rates.[1] PG&E is proposing these sweeping changes just months after Tier 5 was eliminated from its residential rate structure by a settlement agreement.[2] PG&E's proposal in this general rate case (GRC) goes too far and comes too fast after the elimination of Tier 5.

Vote Solar works closely with policy makers and regulatory bodies to achieve a thriving solar market and intervened in this GRC because of its concern over the impact of the proposed changes on existing and prospective residential solar photovoltaic (PV) markets in PG&E's service territory. Vote Solar opposes the institution of a customer charge and the elimination of Tier 4 from PG&E's residential rates. As explained in this brief, PG&E's proposed residential rates will result in a significant loss of value for customers who have installed PV and will run counter to California energy goals that promote residential PV and conservation. Vote Solar limits its discussion in this opening brief to these issues because they are fundamental to customer decisions to invest in PV.

II. Overall Residential Rate Design

Vote Solar fully understands that rate principles that are good for PV must be considered on balance with all other ratemaking objectives. However, Vote Solar believes PG&E's proposed rates would reward high consumption customers with a second rate reduction within a year, going too far, too fast to provide rate relief at the expense of other objectives. Vote Solar opposes PG&E's proposed rates on the grounds that the elimination of Tier 4 and the imposition of the customer charge remove

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[1] *See* Exhibit 1 at p.1-12, lines 10-15.
[2] *See* D.10-05-051 (approving settlement that consolidated Tiers 4 and 5, effective June 1, 2010).

significant price signals for high consumption customers to reduce their usage by installing PV or taking conservation measures. Vote Solar believes that state policy goals to promote residential PV and the conservation of energy deserve the Commission's full consideration.

A. Rate Design Is an Important Component to a Thriving Solar Market

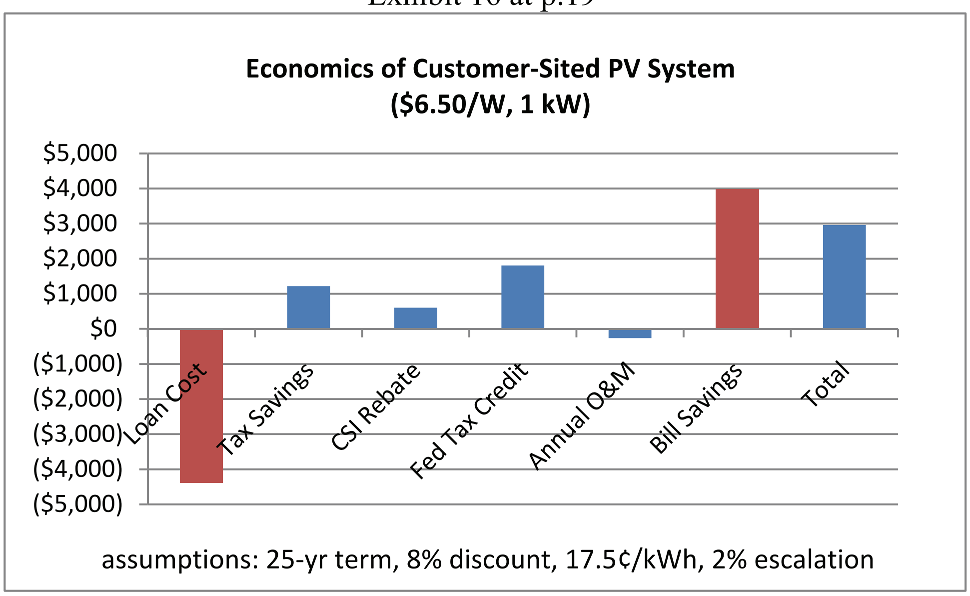
Rate design has an immediate and direct impact on the health of the residential PV market. Effective rates for electricity are ones that clearly communicate ratemaking objectives through a strong price signal. A strong price signal is one that discourages wasteful behavior and encourages investment in PV or efficiency measures. The current rate design has 4 tiers and a customer using over 200% of the baseline and consuming in Tier 4 receives the strongest price signal to reduce consumption. Under PG&E's proposal to eliminate Tier 4, the price signal for the next kilowatt hour (kWh) a customer consumes will be flat from 130% of baseline to over a 1000% of baseline.[3] By removing any price distinction for consumption above 130%, PG&E is proposing to eliminate the price signal that currently communicates a clear signal to residential customers consuming in Tier 4 that PV and conservation are viable alternatives to purchasing the next kWh from PG&E. In this way, PG&E's proposal undermines the California Solar Initiative's (CSI) goal of creating a self-sustaining residential PV market.

Rate design is critical to the success of the CSI because bill savings are the primary driver of customer decisions to invest in PV.[4] The underlying purpose of the CSI program is to stimulate the residential PV market to reach a critical threshold where it can

[3] *See* Exhibit 1 at p.1-12, lines 13-15.
[4] *See* Exhibit 16 at p.19.

sustain growth without reliance on incentives.[5] As the chart below demonstrates, bill savings are the largest component of the financial decision to invest in PV.[6] In essence, bill savings that result from installing PV reflect the cost avoided by generating electricity rather than purchasing the next increment from PG&E. The amount of time that it takes for bill savings to equal the total cost of a PV system is the payback period. Thus, a dramatic reduction in annual bill savings means that a customer's payback period will increase. Given the fact that the life of a PV system is finite and the financial commitment required to install PV is substantial, the number of years and months that it will take a customer to reach payback on initial investment is critical.[7]

Exhibit 16 at p.19



Rate design becomes ever more important to the success of the CSI program as CSI incentive payments step down. In PG&E's territory, the success of the CSI program

[5] *See, e.g.,* SB 1, codified at Cal. Pub. Res. Code § 25780(a) (2010); D.06-01-024 at p.4 (January 12, 2006) ("Significantly, the benefits of solar technologies also motivate us to transform the existing market in a way that makes solar products cost-effective without incentives.").
[6] *See* Exhibit 16 at p.21 (Chart: Economics of Customer-Sited PV System).
[7] *See* Exhibit 16 at p.28.

has lead to steep incentive declines into step 8, or $0.35 per Watt.[8] Significantly, PG&E's residential rates featured 5 tiers for most of the time period since the CSI program was introduced. Indeed, barely six months have passed since the elimination of Tier 5 from PG&E's residential rate structure.[9] Eliminating Tier 4 at this time would go too far, too fast and carry the risk of destabilizing the pace of customer PV installations in PG&E's territory. As Vote Solar noted in its testimony, it is too early to know the effects of tier consolidation of Tier 5 and Tier 4, which only just took effect on June 1, 2010.[10] If anything, the rapid stepping down of the CSI incentive levels in PG&E's territory in the time subsequent to Tier 5 consolidation highlights the importance of rate design to achieving CSI goals. Vote Solar believes that the convergence of the incentive decline and PG&E's proposal is sending the wrong message to a residential PV market that still needs significant growth to achieve CSI goals.

B. The Success of CSI Directly Impacts California Energy Goals

The future success of the CSI program in creating a thriving residential solar market is dependent on rate design and is interdependent with California's broader energy goals. The CSI program's contribution to residential PV directly helps to advance the state's loading order, meet AB32 greenhouse gas emission reduction goals, and achieve Renewables Portfolio Standard (RPS) compliance.[11]

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[8] *See, e.g.*, Transcript at p.522 (Vote Solar witness Rose); CSI Step Table available at: http://www.csi-trigger.com (Go Solar California is joint project of the California Energy Commission and the California Public Utilities Commission).
[9] *See* D.10-05-051.
[10] *See* Transcript at pp.511-513 (Vote Solar witness Rose).
[11] *See* Cal. Pub. Util. Code § 399.11, *et seq.*.

As acknowledged by Vote Solar and other parties, PG&E has the highest installed residential PV capacity of any utility in the country, a tribute to the CSI program's early success.[12] In this way, PG&E's previous 5-tier rate structure was part of the foundation for a thriving residential solar market in PG&E territory and has helped to advance California's energy goals through the CSI program. Residential PV is central to the CSI program's purpose "to establish a self-sufficient solar industry in which solar energy systems are a viable mainstream option for both homes and business."[13] The CSI program invites ratepayers to become partners in utility grid operation by helping "avoi[d] purchases of electricity at peak rates, with additional system reliability and pollution benefits."[14] Though the CSI program provides customers with incentive payments to make an investment in solar more attractive, it is customers that must take on the financial obligations to install a system. In no small part, PV customers are partners with PG&E in the CSI program, and the financial contribution to install on-site PV should not be overlooked or marginalized.

The success of the CSI program in increasing the number of residential PV systems advances the state's loading order. As Vote Solar testified, residential PV satisfies multiple aims within the loading order by increasing renewable, distributed generation and by matching the peak shaving aims of energy efficiency measures.[15] The Energy Action plan states:

> "The loading order identifies energy efficiency and demand response as the state's preferred means of meeting growing energy

[12] *See, e.g.,* Transcript at pp. 504-05 (Vote Solar witness Rose), 955 (Solar Alliance witness Beach).
[13] See SB 1, codified at Cal. Pub. Res. Code. § 25780(a) (2010).
[14] *Id.* at § 25780(b).
[15] *See* Exhibit 16 at p.11, lines 3-5.

> needs. After cost-effective efficiency and demand response, we rely on renewable sources of power and distributed generation, such as combined heat and power applications. To the extent energy efficiency, demand response, renewable resources, and distributed generation are unable to satisfy increasing energy and capacity needs, we support clean and efficient fossil-fired generation."[16]

On the most basic level, both PV and energy efficiency measures help customers avoid consumption from the grid. In addition, the Commission's 2010 CSI staff report shows a meaningful relationship between residential PV and energy efficiency as CSI participants are more likely than non-participants to take energy efficiency measures.[17] Beyond the effect of reduced customer demand, on-site PV has additional value as a generation resource that largely correlates with peak demand and feeds the grid at times of day when residential customers may not be consuming all that is produced on-site.[18] Even if the Commission has not yet quantified these benefits, it has recognized them as unique to solar PV and worthy of consideration.[19]

The technological advantage of PV as a zero-emissions technology makes it well suited to advance California's policies aimed to diversify fuel sources and to reduce greenhouse gas emissions. For California's RPS, residential PV most directly impacts a utility's compliance by reducing the amount of kWh sales that the utility must meet with a percentage of renewable generation.[20] By consuming less kWhs from the grid, a residential PV customer reduces PG&E's RPS compliance baseline. As it concerns emissions, the California Air Resource Board ("CARB") expects and depends on the

[16] *See* Exhibit 16 at p.10.
[17] *See* Exhibit 16 at p.11.
[18] *See* Exhibit 16 at p.12 (Chart 1: Peak Consumption and Solar Production).
[19] *See* D.10-04-052 at p.18.
[20] *See* Exhibit 16 at p.8; *see also* Cal. Pub. Util. Code § 399.11(a).

projected contribution of the CSI program to meet California's AB 32 emission reduction goals.[21] CARB projects that a successful CSI program will reduce carbon emissions 2.10 million metric tons of carbon dioxide equivalent by 2020.[22]

Given the degree of interdependence between the CSI program and California's other energy goals and policies, the importance of the residential solar market should not be marginalized. Vote Solar respectfully requests that the Commission give full weight and consideration to the impact that PG&E's proposed customer charge and tier consolidation will have on the residential PV market and state's energy goals.

C. PG&E's Proposed Rates Undermine Rate Structure Stability

As Vote Solar testified, a customer contemplating investment in PV is looking to the long run stability of the investment, in terms of payback, and instability in rate design undermines the confidence of customers in making such an investment.[23] In this GRC, PG&E is proposing to eliminate its upper tier rate for a second time this year.[24] A PG&E customer who installs PV accepts the risks that rate levels will fluctuate over time, but that customer might expect the structure in which the price signal is delivered to remain stable. That is to say, a customer who installs PV in order to offset consumption over 200% of baseline will expect a meaningful distinction to remain between Tier 3 and Tier 4 price signals, regardless of whether the absolute rate level decreases or increases within a tier. Removing this distinction essentially pulls the rug out from under a customer who decides to invest in a PV system to offset Tier 4 usage.

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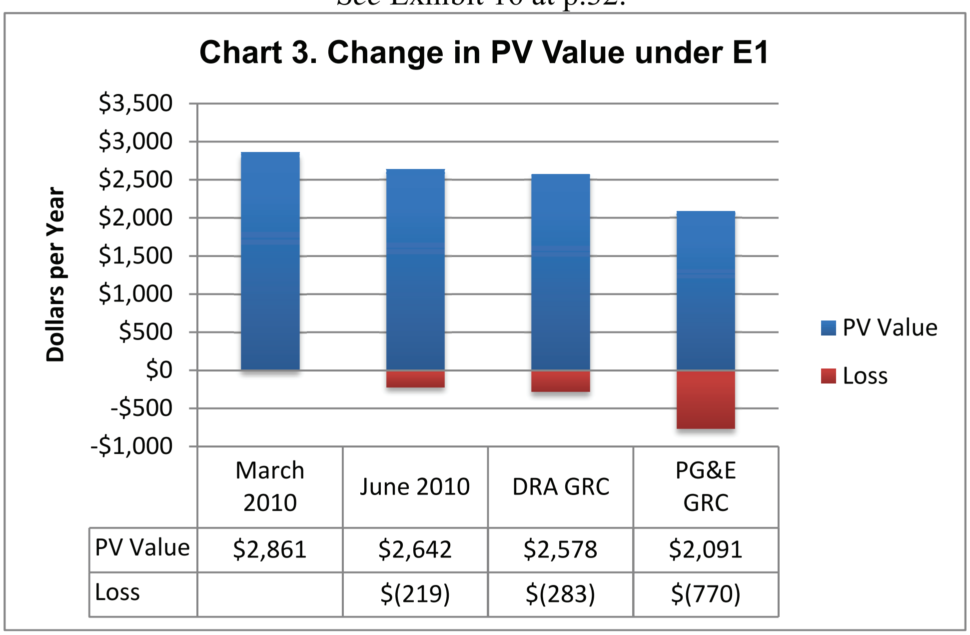
[21] *See* Cal. Health and Safety Code § 38500, *et seq.; see also* Exhibit 16 at p.9.
[22] *See* Exhibit 16 at p.11.
[23] *See* Exhibit 16 at pp.28-29.
[24] *See* D.10-05-051.

Vote Solar believes that any loss of customer confidence in rate stability caused by the recent loss of Tier 5 will only be exacerbated by the proposed elimination of Tier 4. Vote Solar testified that the elimination of Tier 5 earlier this year means that customers with usage in Tier 5 who installed a PV system in early 2010 will see a dramatic loss in expected annual bill savings and payback period under the proposed rates.[25] As shown in Chart 3 in Vote Solar's direct testimony,[26] a PG&E customer with high consumption and an average PV system size will see a loss of $770 in annual bill savings under the rates proposed by PG&E in this GRC. Moreover, the same customer will see the PV system's net present value (NPV) decline by approximately 45% due solely to the difference in utility rates.[27] This is a substantial change in circumstances for a customer taking on a large financial commitment to participate in the CSI program.

See Exhibit 16 at p.32.



[25] *See* Exhibit 16 at pp. 38.
[26] *See* Exhibit 16 at p.30 (Chart 3:Change in PV Value under E1).
[27] *See* Exhibit 16 at p.32.

Vote Solar respectfully urges the Commission to reject the elimination of Tier 4 in order to prevent further diminution of the value of residential PV so soon after the loss of Tier 5.

III. Proposed Monthly Customer Charge

A. Fixed Customer Charges Detract from Conservation Price Signals

Vote Solar generally opposes fixed customer charges because customers cannot directly offset such charges with conservation measures or self-generation. In this instance, Vote Solar opposes PG&E's proposed $3.00 monthly fixed customer charge for non-CARE residential customers for the additional reason that it weakens the price signal of the highest tier volumetric charge and, thus, reduces the incentive to conserve electricity or install PV for customers who would logically have the most incentive to do so. Volumetric charges allow customers to respond to price signals by taking measures to offset usage. Because PG&E's proposed customer charge circumvents this incentive, Vote Solar believes that it represents a lost opportunity for customer investment in PV or conservation measures.

PG&E's proposed Tier 3 rate will increase roughly $0.02/kWh if the Commission rejects the proposed customer charge.[28] Accordingly, if the Commission accepts PG&E's proposed customer charge in the context of a 3-tiered system, the conservation price signal will be $0.02/kWh weaker for those customers consuming in proposed Tier 3, than it would otherwise. However, if the Commission rejects the customer charge and the tier consolidation proposal, Vote Solar believes that the revenue expected from a customer charge should be allocated in a way that strengthens the price

[28] *See* Exhibit 1 at pp.3-10, 3-11.

signal for the top tier, and does not lose opportunities to incentivize PV and conservation. Vote Solar believes that it would be consistent with the loading order for the Commission to reject the customer charge proposal and to continue to incentivize conservation an require PG&E to obtain its rate residential rate recovery through volumetric rates.

To justify its move to a fixed customer charge for its customers, PG&E states that a customer charge will help to better recover the fixed costs of providing service and will smooth the month to month variability in customers' bills.[29] Vote Solar does not believe that the purported benefits of PG&E's proposed customer charge outweigh the negative impact on state energy goals caused by weakening the price signal in upper tier volumetric rates. First, PG&E operates in a decoupled environment, so it already has a mechanism, through yearly true-ups, to recover any fixed costs that were under-recovered in volumetric rates.[30] Additionally, Vote Solar believes that PG&E's current minimum bill requirement better assures that a customer cannot avoid PG&E's fixed costs.[31] For example, if a customer installs solar PV and offsets all of his usage with on-site generation, he still faces a minimum charge of $4.50, which is greater than the proposed customer charge. In effect, the fixed charge does not improve PG&E's ability or method to recover its costs, it merely provides for creative cost shifting to achieve rate relief for high consumption customers which runs contrary to the promotion of California's loading order and myriad energy policy goals.

Second, a fixed customer charge that statistically smoothes the monthly variability of customers' bills comes at the expense of a price signal that could

[29] *See, e.g.,* Transcript at pp.38-39 (PG&E witness Faruqui), 271 (PG&E witness Keane).
[30] *See* Exhibit 2 at p.1-8.
[31] *See* Transcripts at p.271 (PG&E witness Keane).

incentivize a customer to use less electricity. Vote Solar believes the benefit of this minimal smoothing of monthly bill variability pales in comparison to the opportunity lost to avoid the next kWh, to reduce peak demand, to lower greenhouse gas emissions and to increase the grid penetration of residential PV. A customer charge does not advance the aims of California's energy goals.

PG&E witness Keane stated during cross-examination that the proposed customer charge is "a start to recover some of our fixed costs."[32] This suggests that PG&E might be contemplating using future GRCs to recover increasing amounts of its costs through this mechanism. As a result, the strength of the upper tier conservation price signal could be further diluted. Even as proposed, PG&E's fixed customer charge will already erode the strong price signal in the upper tiers that is needed to incentivize conservation and residential PV to meet the state energy goals.

Vote Solar urges the Commission to reject PG&E's proposed customer charge on the policy grounds that it runs counter to conservation goals and that it does nothing to improve PG&E's recovery of fixed costs; it only shifts more of the burden of those costs to customers who consume less electricity. For these reasons, Vote Solar respectfully requests that the Commission reject the proposed customer charge, for all residential customers.

IV. Proposed CARE Tier 3 Rate

Vote Solar has not taken a position on CARE Tier 3 in its testimony. Vote Solar reserves the right to respond to other parties' comments regarding CARE Tier 3 in its reply brief.

[32] Transcript at p.271 (PG&E witness Keane).

V. Proposed Reduction in Baseline from 60% to 55%

Vote Solar has not taken a position in its testimony on PG&E's proposal to lower baseline. Vote Solar reserves the right to respond to other parties' comments regarding proposed changes to the baseline in its reply brief.

VI. Proposed Tier Changes for Non-CARE Customers

As discussed above, Vote Solar opposes PG&E's proposal to eliminate Tier 4 because it believes that customers with consumption in Tier 4 are more likely to invest in PV to offset that usage.[33] By eliminating Tier 4 and reducing the incentive for the most likely customers to adopt PV, PG&E's proposal undermines customer participation in the residential PV market and reduces the ability of California to meet its state energy goals. Under the CSI program, utility customers truly become partners with their utilities in reaching the state's energy goals. By investing in PV, approximately 42,000 customers[34] in PG&E's service territory have taken on a financial obligation to help reduce California's reliance on fossil fuel sources of generation; a priority embodied in the loading order.

Under the proposed 3-tier rate structure, Vote Solar believes that fewer customers will be attracted to invest in PV. The bill savings that a residential customer realizes by installing PV are entirely dependent on the underlying rate structure.[35] In light of the changes already made to the rate structure this year—the loss of Tier 5—Vote Solar testified that many existing PV customers will see a significant devaluation in the net present value (NPV) of their installed systems and prospective customers will be wary of

[33] *See* Exhibit 16 at p.29.
[34] *See* Exhibit 2 at p.2-19.
[35] *See* Exhibit 16 at p.19.

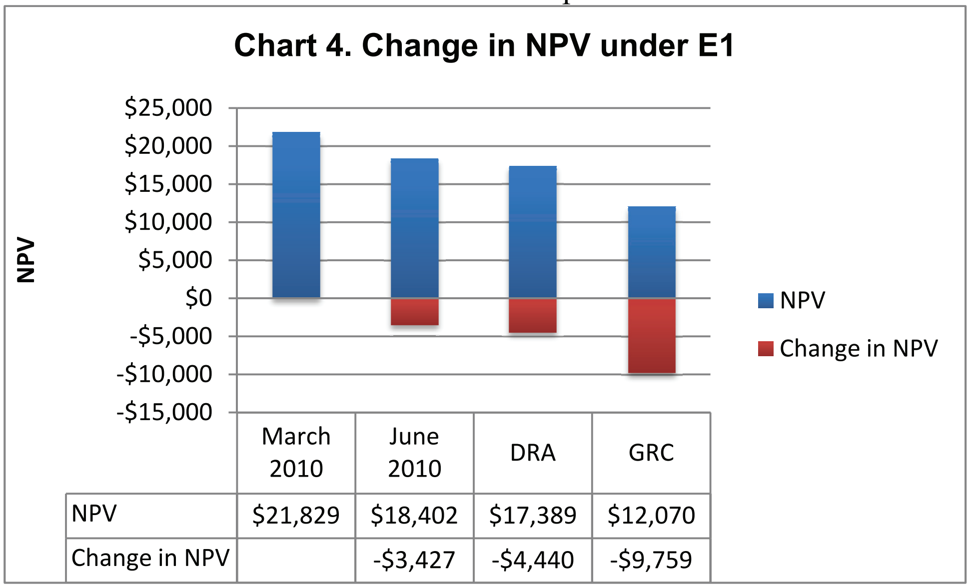
further uncertainty.[36] Vote Solar respectfully requests that the Commission reject the proposed elimination of Tier 4 in order to preserve a rate structure that provides stability and a meaningful price signal distinction for customers consuming over 130% of baseline.

A. PG&E's Proposed Rates Will Cause a Substantial Loss in Value to Existing and Prospective PV Customers

Vote Solar's direct testimony examined the impact of the elimination of Tier 4 and Tier 5—earlier this year—on customers with PV taking service under E1, E6 and E7. In this analysis, Vote Solar demonstrated that PG&E's proposed rates result in substantial reduction in bill savings and net present value when compared to rates as they existed in March of 2010, prior to the settlement that eliminated Tier 5.[37] For example, a reference residential customer who installed PV in January of 2010 and takes service under E1 will see a dramatic reduction in expected bill savings and NPV from an investment in PV in the course of this year alone. As Chart 4 below demonstrates, this reference PV customer taking service under E1—one with high consumption profile and an average system size per rate schedule—will see a loss in NPV of approximately 45% when comparing March 2010 rates to those proposed by PG&E in this GRC.[38]

[36] *See* Exhibit 16 at p.38.
[37] *See* Exhibit 16 at pp.30, 33, 36 (Charts 3, 5, 7).
[38] *See* Exhibit 16 at p.32 (Chart 4: Change in NPV under E1).

See Exhibit 16 at p.32.



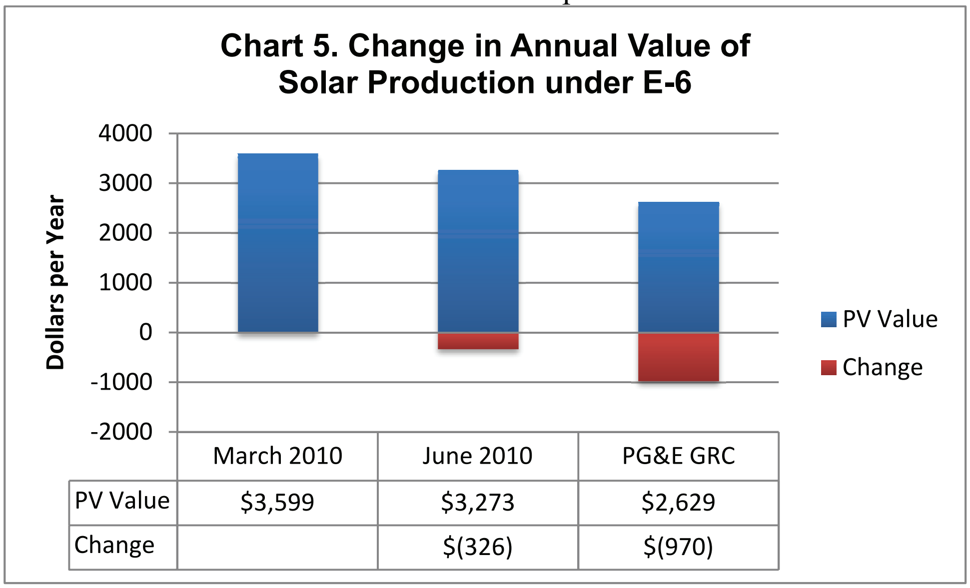
	March 2010	June 2010	DRA	GRC
NPV	$21,829	$18,402	$17,389	$12,070
Change in NPV		-$3,427	-$4,440	-$9,759

Chart 4. Change in NPV under E1

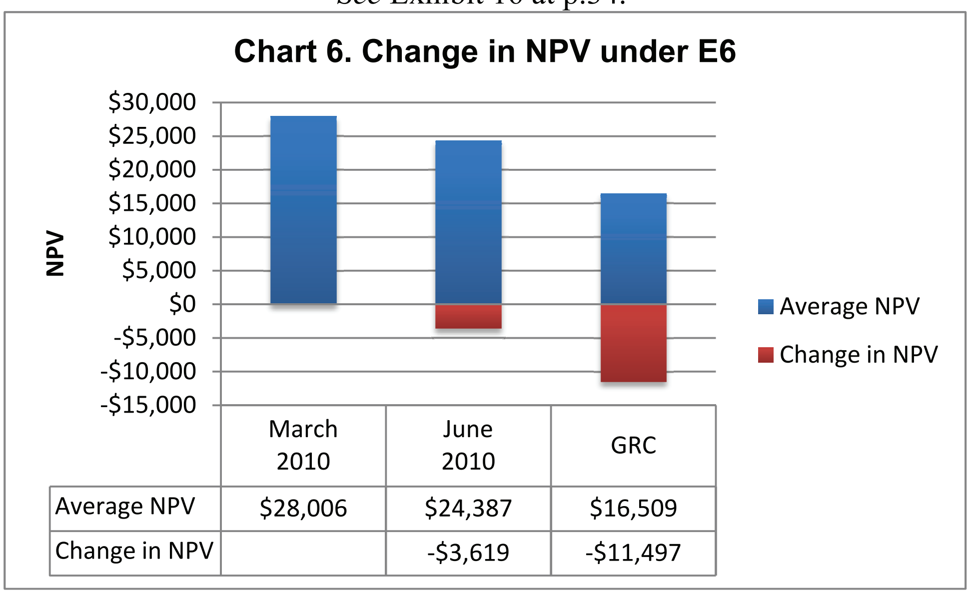
Tier consolidation also has a substantial impact on customers taking service under time of use (TOU) rates, E6 and E7.[39] As Chart 5, below, demonstrates, a reference customer taking service under E6 in March 2010 will see a decline in annual bill savings of 27% .[40] Chart 6 shows that the NPV of the system for that same customer will have declined 59% when compared to March 2010 rates and 50% compared to current rates.

[39] *See* Exhibit 16 at pp.34-37.
[40] Exhibit 16 at p.33 (Chart 5: Change in Annual Value of Solar Production under E-6).

See Exhibit 16 at p.33.

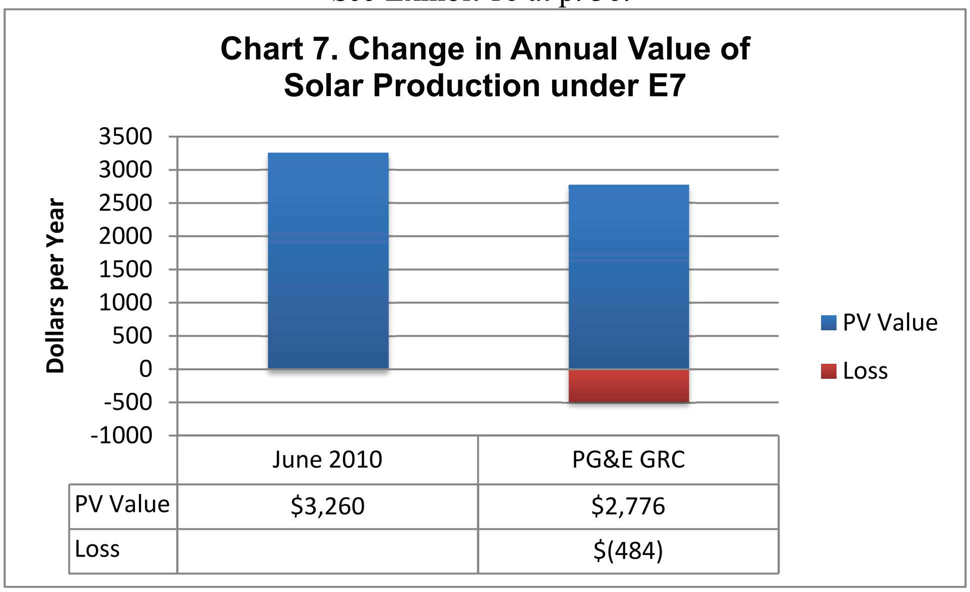


See Exhibit 16 at p.34.

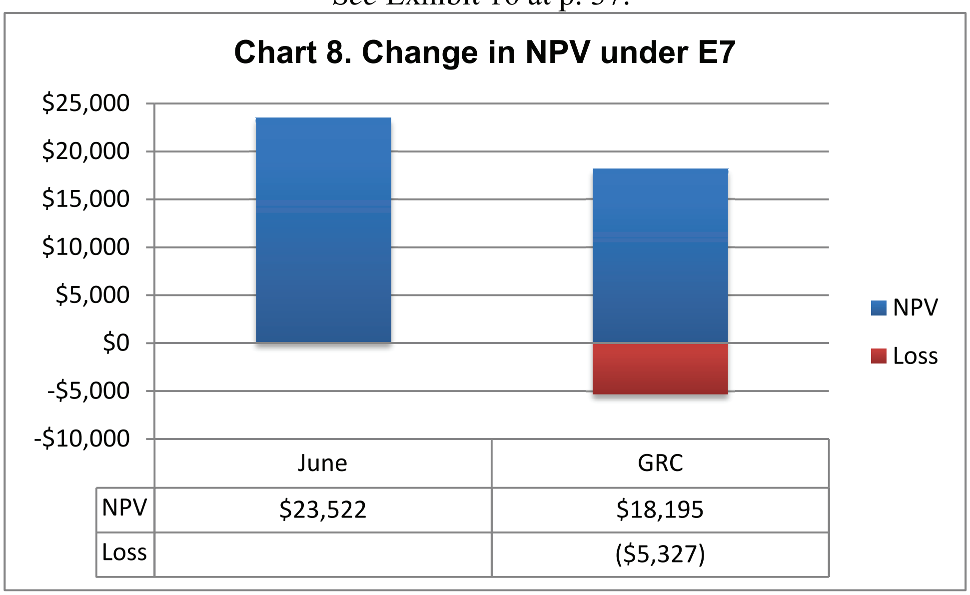


Similar negative effects are seen for E7. Although E7 is closed to enrollment by new customers, Vote Solar believes that the impact of tier consolidation on existing residential PV customers For E7 should be given due consideration. As Charts 7 and 8 demonstrate, the proposed elimination of Tier 4 would cause a loss in annual bill savings of nearly 15% and a decline in NPV of 23%.[41]

See Exhibit 16 at p. 36.



See Exhibit 16 at p. 37.



In addition to modeling the impacts on residential PV customers from the proposed rates as compared to current rates or those existing in March 2010, Vote Solar

[41] *See* Exhibit 16 at pp.36-37 (Chart 7: Change in Annual Value of Solar Production under E7; Chart 8: Change in NPV under E7).

modeled the impact on E1 rates of the 4-tier proposal put forward by Division of Ratepayer Advocates (DRA). As Chart 3 on p.9 demonstrates, *supra*, DRA's 4-tier proposal results in a much smaller loss to residential PV customers than PG&E's proposed rates.[42] For example, compared to March 2010 rates, a reference customer taking service under E1 would lose $9,759 in value of solar production under the proposed GRC rates, compared to a loss of only $4,440 under the DRA proposed rate.[43] Vote Solar believes that the DRA proposal demonstrates that a 4-tier structure is more appropriate to support the development of residential PV.

Vote Solar's modeling demonstrates that the impacts of PG&E's proposed 3-tier structure are substantial and negative for the vast majority of PV customers who span the range of system sizes and consumption profiles.[44] In this way, Vote Solar's testimony and modeling is meant to be illustrative of the relation of values for PV under the various rates—March 2010, June 2010 and the proposed GRC rates—and is not meant to suggest an absolute value that PV customers expect or should realize. The values given in the above charts most aptly show the percentage change in value between the rates, rather than establishing an expectation of what minimum value is necessary to promote solar.

B. Elimination of Tier 4 Removes a Conservation Price Signal for PG&E's Highest Consumption Customers

Eliminating Tier 4 is inconsistent with the state's loading order because it fails to send conservation signals to the customers that consume the most. Lowering the rates of the highest consuming customers provides relief to the group that could on average be

[42] *See* Exhibit 16 at p.32 (Chart: Change in NPV under E1).
[43] *See* Exhibit 16 at p.32.
[44] *See* Exhibit 16 at pp.41-43 (Tables 3, 4 and 5).

expected to achieve the greatest amount of per customer conservation by taking long run energy efficiency measures or installing solar PV to offset load. Failing to send an adequate conservation signal to this group is equivalent to ignoring the lowest hanging fruit in terms of conservation opportunities.

PG&E suggests that the conservation signal embodied in the current rates exceeds what is necessary or cost-effective under the loading order. PG&E witness Faruqui states that a conservation measure is not cost-effective if the cost to avoid the next unit of electricity exceeds the cost of producing that next unit. While that statement is not without logic, it rests on a proposed rate design that no witness could claim was actually based on marginal costs.[45] Regardless, dogmatic reliance on the rationale that rates should track marginal costs leads to logical conclusions that are potentially at odds with California policy. For example, one implication of the cost of service principle is that declining block rates should be instituted where the marginal costs of energy supply fall as energy usage increases. PG&E witnesses Faruqui and Keane both opined that declining block rates would be appropriate in such a situation.[46]

The cost-of-service principle, as an end of itself, is in conflict with California's loading order and historic orientation toward conservation in ratemaking. Vote Solar does not debate the utility of marginal costs to achieving a rational rate structure. However, even if proposed rates in this GRC were fully consistent with PG&E's marginal costs, the loading order should still guide the Commission to provide appropriate conservation signals to consumers to reduce their usage.

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[45] *See, e.g.,* Transcript at pp.33(PG&E witness Faruqui), 279 (PG&E witness Keane).
[46] *See* Transcript at pp.32 (PG&E witness Faruqui), 281 (PG&E witness Keane).

For these reasons, Vote Solar urges the Commission to reject PG&E's proposal to eliminate Tier 4, as removing the disincentive of PG&E's highest consumption customers to conserve is counterproductive to California energy policy.

VII. Proposed Time-of-Use Rates

Vote Solar's testimony shows a negative impact for existing and prospective PV customers under PG&E's proposed rates. To the extent tier consolidation impacts TOU rate design for E6 and E7, Vote Solar emphasizes the proven success of this structure in promoting residential PV in PG&E's territory, as approximately 57% of PV customers take service under a TOU rate.[47]

For a TOU rate, however, the strength of the differential between on-peak and off-peak use is an even more important consideration. Vote Solar has not put forth a specific proposal for TOU rates, E6 and E7, but emphasizes the importance of maintaining a meaningful differential between on-peak and off-peak. Such a design sends a strong signal and more effectively carries out the underlying purpose of TOU rates to discourage use at peak times of day. Accordingly, by sending a strong price signal to avoid peak use, a TOU rate with a meaningful on-peak and off-peak differential sends a signal to incentivize PV generation by putting a value on its strong correlation with PG&E system peak. [48]

[47] *See* Exhibit 16 at p.24.
[48] *See* Exhibit 16 at p.12.

VIII. Proposal for Flat Generation and Distribution Rates with Tiered Conservation Incentive Adjustment

Vote Solar has not taken a position on the flattening of generation and distribution rate components. Vote Solar reserves the right to respond to other parties' comments regarding this issue.

IX. Other Issues

Vote Solar does not add any further issues here, but reserves the right to respond to all issues raised by all other parties in opening briefs.

X. Conclusion

Vote Solar respectfully requests that the Commission reject PG&E's proposal to eliminate Tier 4 from residential rates E1, E6 and E7, and to impose a fixed customer charge on all residential PG&E customers. Vote Solar requests the opportunity to make a final oral argument pursuant to Commission rule 13.13(b) and the Scoping Memo.

Respectfully submitted on this day, December 20, 2010.

____/s/_Kevin T. Fox___

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Attachment A

Verifications

I am the attorney for The Vote Solar Initiative (Vote Solar); Vote Solar is absent from the County of Alameda, California where I have my office, and I make this verification for Vote Solar for that reason; the statements in the foregoing document are true of my own knowledge, except as to matters which are therein stated on information or belief, and as to those matters I believe them to be true. I declare under penalty of perjury that the foregoing is true and correct.

Executed on December 20, 2010 at Oakland, California.

/s/ Kevin T. Fox

Kevin T. Fox, Attorney for The Vote Solar Initiative

CERTIFICATE OF SERVICE

I hereby certify that I have served a copy of the foregoing document, **Opening Brief of the Vote Solar Initiative In Phase II of the Pacific Gas and Electric Company Test Year 2011 General Rate Case**, by electronic mail where possible and by First-Class U.S. Mail where not, to all known parties to A. 10-03-014, named on the service list attached to the original certificate of this document pursuant to the Commission's Rules of Practice and Procedure.

I declare under penalty of perjury that the foregoing is true and correct.

Executed at Oakland, California, Monday, December 20, 2010.

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