less than 5 cents per kWh), yet a household consuming in Tier 4 and willing to pay up to, say, five times what it costs (i.e., 25 cents per kWh) for the value the security lighting provides, would choose to forego that value given it would be charged 40 cents per kWh for additional Tier 4 consumption.

These parties' arguments for essentially maximizing the rate in the highest non-CARE tier strike me as social engineering without any consideration for other factors that should drive rate design. Taken to an extreme, if all you care about is providing the highest possible upper-tier rate to maximize the incentive for households consuming in that tier to conserve or purchase a solar system, why not charge $1.00 per kWh or implement a steep ten-tier rate structure to maximize upper-tier rates? At some point—and I believe we are there already—the upper tier rates become punitive and unfair. The Commission doesn't charge rates in the 40 to 50 cent per kWh range to upper-tier consuming households in any other service territory, nor to any of PG&E's non-residential customers, and it should not do so to residential customers in PG&E's service territory.[9]

Q 9 At page 6-11, DRA states, "IOUs may like fixed charges as they provide stable revenues for IOUs, however, fixed charges give customers less control over the level of their bills." Taking the first part of this sentence first, is it true that PG&E is proposing a customer charge because it makes its revenue collections more stable?

A 9 While it is true that a customer charge would help mitigate month-to-month swings in PG&E's monthly revenue collections from residential customers, the impact would be small, as the customer charge would only account for about $160 million out of almost $5 billion in residential revenues per year. Further, PG&E's revenue balancing accounts largely mitigate concerns about monthly revenue collection fluctuations. However, it is very important for customers to have bills which do not vary widely from month to month. PG&E's proposed $3.00 customer charge not only more closely aligns PG&E's rates with its costs, but it importantly reduces month-to-month bill volatility, by reducing the Tier 3 rate by approximately 2 cents per kWh below what it would otherwise be.

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[9] With the exception of critical peak or peak day prices, which are cost-based and occur only for a very limited number of hours each year.

One of the problems with inclining block rates is their nonlinearity. As customers move from lower to higher tiers, their bills increase by a much greater proportion than their kWh consumption increases, particularly when there are large differentials between the rates in the various tiers. Table 1-2, which shows bill calculations for an illustrative Kern County household, demonstrates the problem. In June 2009, a month with reasonably mild summer temperatures, the average Kern County household consumed 842 kWh. In July, though, there was extensive hot weather, and the average household consumption increased by 38 percent, to 1,165 kWh.[10] Table 1-2 calculates bills at various rates for a household consuming twice those amounts, or 1,683 kWh in June and 2,331 kWh in July (also a 38 percent increase).

The top portion of the table shows the June and July 2009 bills based upon Schedule E-1 rates in effect at the time. While household consumption increased by 38 percent, due to the inclining block rate structure (and, in particular, the very high upper-tier rates) the household's bill increased by nearly twice that percentage, 72 percent, going from $387.11 in June to $666.14 in July. This result is due to the extended hot weather necessitating increased air conditioner operation, pushing the average usage from Tier 4 to Tier 5, with 546 kWh being charged a very high rate of 44.1 cents per kWh. Such a steeply inclining block rate, with very high upper-tier rates, makes it very difficult for households to manage their bills under these circumstances, and can lead to very dissatisfied customers.

[10] This is not atypical. A similar very large increase in average residential household usage occurred in Kern County between June and July in 2008.

TABLE 1-2
PACIFIC GAS AND ELECTRIC COMPANY
ILLUSTRATIVE BILL CALCULATIONS

Line No.		Jun-09 Sales (kWh)	Jun-09 Rates ($/kWh)	Jun-09 Bill ($)	Jul-09 Sales (kWh)	Jul-09 Rates ($/kWh)	Jul-09 Bill ($)	% Change kWh	% Change Bill
1	Customer Charge								
2	Energy Charges								
3	Tier 1	595	$0.11531	$68.61	595	$0.11531	$68.61		
4	Tier 2	178	$0.13109	$23.33	178	$0.13109	$23.33		
5	Tier 3	417	$0.25974	$108.31	417	$0.25974	$108.31		
6	Tier 4	493	$0.37866	$186.85	595	$0.37866	$225.23		
7	Tier 5	0	$0.44098	$0.00	546	$0.44098	$240.65		
8	**Total**	**1,683**		**$387.11**	**2,331**		**$666.14**	**38%**	**72%**
		Current Rates (June)			**Current Rates (July)**				
		Sales (kWh)	**Rates ($/kWh)**	**Bill ($)**	**Sales (kWh)**	**Rates ($/kWh)**	**Bill ($)**	**% Change kWh**	**% Change Bill**
9	Customer Charge								
10	Energy Charges								
11	Tier 1	595	$0.11877	$70.67	595	$0.11877	$70.67		
12	Tier 2	178	$0.13502	$24.03	178	$0.13502	$24.03		
13	Tier 3	417	$0.29062	$121.19	417	$0.29062	$121.19		
14	Tier 4	493	$0.40029	$197.52	595	$0.40029	$238.09		
15	Tier 5	0	$0.40029	$0.00	546	$0.40029	$218.45		
16	**Total**	**1,683**		**$413.42**	**2,331**		**$672.43**	**38%**	**63%**
		Ph. 2 Proposal (June)			**Ph. 2 Proposal (July)**				
		Sales (kWh)	**Rates ($/kWh)**	**Bill ($)**	**Sales (kWh)**	**Rates ($/kWh)**	**Bill ($)**	**% Change kWh**	**% Change Bill**
17	Customer Charge			$3.00			$3.00		
18	Energy Charges								
19	Tier 1	567	$0.11877	$67.34	567	$0.11877	$67.34		
20	Tier 2	171	$0.13502	$23.09	171	$0.13502	$23.09		
21	Tier 3	397	$0.27641	$109.74	397	$0.27641	$109.74		
22	Tier 4	548	$0.27641	$151.60	567	$0.27641	$156.73		
23	Tier 5	0	$0.27641	$0.00	629	$0.27641	$173.73		
24	**Total**	**1,683**		**$354.77**	**2,331**		**$533.62**	**38%**	**50%**

The middle portion of Table 1-2 shows what bills would be for those June and July household consumption levels if they were priced out at PG&E's current rates, put in place after the Commission approved the settlement in PG&E's Summer Rate Relief Application. At current rates, the 38 percent increase in consumption results in the bill increasing by

63 percent, an improvement from the 72 percent figure in 2009 but still quite volatile. Finally, the bottom portion of the table shows the results if priced using PG&E's proposed residential rates in this proceeding.[11] Under PG&E's proposed rates, there is a further reduction in volatility, as the bill would increase by just 50 percent in response to the 38 percent increase in consumption.

It is important to note that this issue is not limited to inland areas with hot summer temperatures. In fact, the percentages of usage by tier are quite similar across PG&E's various climate zones, given the fact that the baseline quantities are set higher in climate zones with higher historical usage levels and lower in climate zones with lower historical usage levels. Thus, even cooler coastal areas with relatively low air conditioner penetrations nonetheless have a significant percentage of Tier 4 usage (due to the lower baseline quantities in coastal areas).

Q 10 What about DRA's claim that a customer charge gives customers less control over their bills?

A 10 A number of other parties made similar arguments, that the customer charge should be rejected because it cannot be avoided.[12] But that is precisely its point – to represent costs that are unavoidable and thus should be paid by all customers, as opposed to avoided by some and thus shifted to, and paid by, others. As described in PG&E witness Quadrini's prepared testimony, PG&E has certain fixed costs of serving each household (e.g., collecting meter data, preparing and sending a bill, providing customers access to their account information on the web, etc.) that PG&E cannot avoid, even if that household reduces its consumption to zero. Since PG&E incurs these costs to serve the customer independent of its consumption level, an economically efficient and fair way to collect these costs is through a fixed customer charge that similarly does not vary with consumption.

No party arguing against PG&E's customer charge proposal disputes the existence of these fixed costs. But the opposing parties want lower-tier

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[11] These rates are from Exhibit (PG&E-8), June 30, 2010 Update.

[12] Greenlining (pp. 9-10), Disability Rights Advocates (pp. 12-13), Vote Solar (p. 38).