Sierra Club Request for Bill Calculator Changes – March 1, 2013 Prepared by James Barsimantov, EcoShift Consulting

Flexibility in Combining TOU with Tiered Rates

Tiers and TOU can be combined in two basic ways: A baseline credit can be given within a TOU rate (effectively a 2 tier system), or charging a TOU peak surcharge within a tiered rate structure (up to 5 tiers). Both are important options to have. The PG&E calculator only offers the first option, while the other two calculators seem to offer both. Currently, it is impossible to model a rate structure that combines TOU with more than 2 tiers in the PG&E calculator. *The PG&E calculator needs to be updated to allow more flexibility in combining tiers with TOU, in a similar manner as the other two calculators.*

Specifying Tier Differentials

The calculators are inflexible in setting differentials between tiers, and are therefore not able to specify user requests. Namely, in the PG&E calculator allows setting the 1-2, 3-4, and 4-5 tier differential, and solves for the 2-3 differential. The SCE calculator allows only the 1-2 differential and top 2 tiers differential, solving for intermediate tiers. SDG&E allows the user to specify all tiers except the bottom or the top (user specifies). We understand that the models must use the revenue requirement to solve for one of the tiers, so specifying all of the differentials isn't possible. However, we need to be able to choose which tiers differentials we want to specify and which the model will solve for. For example, by only allowing specification of the 3-4 differential and not the 2-3 differential in PG&E calculator, when we specify a \$0.10 differential between tiers 3-4, we get a rate structure as follows: T1-12.8, T2-14.7, T3-25.0, T4-35.0. There is no way to say that we'd like the 2-3 differential to be 10 cents, and let the model tell me what the T4 rate should be. This renders the calculator somewhat useless, and the fact that each model does it differently creates consistency issues.

Bins of Bill Change in Bill Impact Tables

Bill Impact Tables should have as many bins for bill decreases as there are for increases, and the range for bins should go to at least +/-50%. Currently, the PG&E calculator has bins of 5% change in bills, but <-20% is the last category for decreases, while >+100% is the last category for increases. The other two calculators are not as skewed, but would also benefit from making the ranges of bins equivalent for both increases and decreases, and having the last category be >50% on either end of the histogram.

Bill Impact by Usage Level and Climate Zone

To allow a complete understanding of bill impacts, all calculators should give output on total bill by usage level by climate zone. Currently, the SDG&E calculator is the only one that does this. The SCE calculator does this, but for a very limited set of usage level bins (3 bins),

which should be expanded to more bins (\sim 8) that are evenly spaced. The PG&E calculators gives no information on impacts by usage level or by zone.

Baseline Allowance to 60%

Baseline allowance percent can only range between 40% and 55% on all three calculators. *The range should go from 40-60% to cover what is currently in the statute and allow for modeling a full range of options.*