PACIFIC GAS AND ELECTRIC COMPANY
SmartMeter™ CPUC Staff Inquiry
Data Response

PG&E Data Request No.:	ED_002		
PG&E File Name:	SM CSI_DR_ED_002-Q02		
Request Date:	November 18, 2010	Requester DR No.:	11/18/10
Date Sent:	December 22, 2010	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Steve Roscow

QUESTION 2

Customer credits: please provide the following information on a customer-specific basis:

a. For each month that an individual customer receives a bill credit, please demonstrate the actual calculation of that credit, specific to the "service point" that was affected (i.e., PG&E's response should be in the form of a spreadsheet with approximately 5,000 rows, with a customer-specific set of monthly calculations on each row)

b. For each month that an individual customer receives a bill credit, please provide (a) the SmartMeter-based demand level and demand charge that was actually billed for each month, and (b) the prior-year historical pre-SmartMeter demand level and demand charge for the corresponding month, for comparison. Please identify the actual source of the demand figure used in each credit calculation (i.e., whether the demand figure used in the credit calculation is pre- or post SmartMeter installation)

ANSWER 2

Please note that the attachment to this response contains confidential customer-specific information and is being submitted under CPUC Code Section 583.

Attachment ED_002-02-1 is a flash drive containing an Excel workbook with the results of the requested analysis. Please note that the file must be opened with Excel 2007 version.

The steps used to prepare the analysis follow:

1. Gather monthly billing data by Service Agreement (SA) and Service Point (SP).

2. Determine which SPs had meter errors while using a Silver Springs Network (SSN) SmartMeter.

3. Determine the percentage difference between 2009 SSN demand reads and 2008 non-SSN demand reads for the same period.

4. Determine the percentage difference between 2010 SSN demand reads and 2009 non-SSN demand reads for the same period.

5. Select the most recent difference as the Annual Demand Difference.

6. For those meters with no errors, take the greater of 11.8 percent or the Annual Demand Difference and multiply that amount by each monthly demand charge generated by an SSN SmartMeter.

7. For those meters with an error at any point in the meters' history, take the greater of 37.5 percent or the Annual Demand Difference and multiply that amount by each monthly demand charge generated by an SSN SmartMeter.

8. Assign monthly refunds amounts to each SA.

9. Produce summary statistics.

Definitions used in the analysis follow:

- Historical Demand (HD): A demand number originating from a meter that is not an SSN SmartMeter.

- Percent Deviation: A formula representing the difference, in percentage terms, between a customer's demand in kilowatts (kW) for an SSN SmartMeter versus the customer's historical demand.

- Demand Comparison: The act of calculating the Percent Deviation for two periods that are comparable; that is, one pre-SmartMeter calendar month compared to the same calendar month post-SmartMeter deployment.

- Meter Error: Any recorded data anomaly in a SmartMeter read. In the analysis, the error triggers the higher, error floor value.

- Floor Value: The floor value is a credit adjustment factor to the demand billing based on the interval length used to derive billing demand amount. Depending on that interval length, the basic floor value is 11.8 percent, while the error floor value is 37.5 percent.

- Error Adder: For each customer whose meter had an error, an additional refund was calculated such that the total refund is 37.5 percent of demand charges during the time an SSN meter was in place.

- CPUC Adder: For each customer whose Demand Comparison exceeded the floor (whether 11.8 percent or 37.5 percent), an additional refund was calculated that brings the total refund up to the customer's Percent Deviation multiplied by the demand charges for the time the customer had an SSN SmartMeter.

- YYYYMM: A number representing a particular billing year and month.

The Excel workbook has four major worksheets, described below:

- Demand_kv2c_bseg_ALL. This worksheet contains all the billing data used in the analysis and sourced by other worksheets.

- Percentages. Using the monthly billing data in Demand_kv2c_bseg_ALL, this worksheet computes the percentage of billed kW charges to be refunded to each SP. The Percentages worksheet determines the percentage of billed demand charges for each SP based on Historical Demand and whether there was a Meter Error with an SSN SmartMeter.

- Refunds by Period. This worksheet is a pivot table that shows, for each SP by month, the prior year's demand, the current year's demand, the billed kW charges, the computed percentage to be refunded (sourced from the Percentages worksheet), and the refund amount.

- Summary. The Summary worksheet shows statistics for the total analysis.

The results of the analysis -- using current customer data and the refund calculation methods proposed by PG&E and the Energy Division -- follow:

Base Refund	$4,328,483
Error Adder	645,805
PG&E Proposed Refund	$4,974,287
CPUC Adder	561,807
CPUC Proposed Refund	$5,536,094