

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



August 7, 2014

Advice Letter 4458-E

Brian Cherry
Vice President, Regulation and Rates
Pacific Gas and Electric Company
P.O. Box 770000
San Francisco, CA 94177

**SUBJECT: ESTABLISH ELECTRIC SCHEDULE PEVSP, PLUG-IN ELECTRIC VEHICLE
SUBMETERING PILOT - PHASE 1 AND ASSOCIATED AGREEMENT FORMS, IN
COMPLIANCE WITH RESOLUTION E-4651**

Dear Mr. Cherry:

Advice Letter 4458-E is effective as of July 10, 2014.

Sincerely,

A handwritten signature in cursive script that reads "Edward Randolph".

Edward Randolph
Director, Energy Division



Brian K. Cherry
Vice President
Regulatory Relations

Pacific Gas and Electric Company
77 Beale St., Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177

Fax: 415.973.7226

July 10, 2014

Advice 4458-E

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Establish Electric Schedule PEVSP, Plug-In Electric Vehicle Submetering Pilot – Phase 1, and Associated Agreement Forms, in Compliance with Resolution E-4651

Pacific Gas and Electric Company (PG&E) hereby submits for filing revisions to its electric tariffs. The affected tariff sheets are listed in Attachment 1.

Purpose

The purpose of this advice letter is to comply with Ordering Paragraph (OP) 2 of the California Public Utilities Commission (Commission or CPUC) Resolution E-4651, *Southern California Edison Company, San Diego Gas & Electric Company, and Pacific Gas & Electric Company request to implement a Plug-in Electric Vehicle Submetering Pilot (PEVSP) in Compliance with Decision 13-11-002*, (Resolution). Per OP 2 of the Resolution, PG&E is required to file a Tier 1 advice letter to revise the tariffs for the PEVSP and associated agreements per the specific modifications provided in the Resolution.

Background

On January 21, 2014, Southern California Edison Company (SCE) on behalf of the Investor Owned Utilities (IOUs) submitted a joint advice letter¹ to implement the PEV Pilot per OP 2 of Decision (D.) 13-11-002. OP 2 of D.13-11-002 required the IOUs to submit a Tier 2 Advice Letter that includes: 1) the metering requirements provided by the Energy Division to the IOUs, 2) draft versions of the data format template, 3) the Submeter Meter Data Management Agent (MDMA) registration form, 4) the customer enrollment form, and 5) MDMA Service Requirements. OP 3 of the same decision ordered the IOUs to submit a preliminary budget for the submetering pilots, and allowed it to be filed in the same Tier 2 Advice Letter required by OP 2. OP 6 of the same decision ordered the IOUs to submit a timeline for the submetering pilot

¹ The joint IOUs advice letter includes SCE Advice 2993-E, PG&E Advice 4343-E, and San Diego Gas & Electric Company (SDG&E) Advice 2566-E.

program evaluation process, and allowed it to be filed in the same Tier 2 Advice Letter required by OP 2.

On June 27, 2014, the Commission issued Resolution E-4651. The Resolution approves the IOUs Schedule Plug-in Electric Vehicle Submetering Pilot tariffs with modifications and requires the IOUs to file revised tariffs within 14 days of the effective date of the Resolution.

Discussion and Revised Tariffs

Some of the key revisions required by the Resolution include:

1. The IOUs shall allow participation by Community Choice Aggregator (CCA) customers and shall work with a CCA intending to determine a separate billing procedure to accommodate generation-specific PEV load necessary to accommodate MDMA's service CCA customers. (*Findings and Conclusions 2.i and 2.ii*)
2. The IOUs shall reduce the limit on Net Energy Metering (NEM) customer participation to 20% (300) of total eligible submeters for Phase 1 of the Pilot. (*Findings and Conclusions 2.iv*)
3. Correct the length of the Enrollment period to 6 months. (*Findings and Conclusions 2.v*)
4. Allow 10 days for an MDMA to report a drop-out or change of address, and include the following options that allow customers who change their address to continue in the pilot (*Findings and Conclusions 2.vi*):
 - a) For customers among the first 500 within a service territory that relocate within the service territory: 1) their MDMA must submit a separate Customer Enrollment Form for their new service address at least five days before the end of the current billing period; and 2) they are eligible to reenroll in the Pilot after the Enrollment Period.
 - b) For customers that relocate to another IOU's service territory, they may reenroll if the IOU's 500 submeter limit has not been met.
5. Extend pilot eligibility to Direct Pay Plan and Level Pay Plan customers if their submeter service does not involve remitting payments to be credited against their account. Customers currently enrolled with Direct Pay Plan and Level Pay Plan are eligible to participate in the pilot, but must unenroll from the programs for the duration of the pilot. (*Findings and Conclusions 2.vii*)
6. Limit submeters to 19 submeters per primary meter and restrict participants from using multiple levels of submeters. (*Findings and Conclusions 2.viii*)

7. Change the eligibility terms on page 4 of the Customer Enrollment Agreement to limit pilot participation only in cases where customers are participating in utility programs that would prevent the completion of subtractive billing. The IOUs shall include a statement disclaiming the accuracy of these tools used to analyze electricity usage from the billing periods that they are enrolled with subtractive billing that explains that since submeter data will not be used for these programs, resulting analyses may not be accurate. (*Findings and Conclusions 3.iv*)
8. Indicate that Energy Division will review the applications to maintain impartiality and consistency for MDMAs operating in multiple IOU territories, and consult with the IOUs if necessary. The IOUs shall amend this term to state that MDMAs must notify Energy Division and all IOUs in which they are providing services in the event that they terminate service prior to the end of the Pilot Term. (*Findings and Conclusions 4.ii*)
9. Reduce the Preliminary Pilot Program Budget for the Third Party Evaluator by \$1 Million to \$2,000,000 in aggregate across all three utilities. (*Findings and Conclusions 6.i*)
10. Use the \$1 Million of the \$3 Million previously allocated to the Third Party Evaluator to, in part, provide the Submeter MDMA a one-time enrollment payment of no less than \$210 per customer and a \$17.50 per month payment for performing submetering data management and exchange responsibilities. (*Findings and Conclusions 6.iii*)
11. Revise the terms to reflect the 60- and 30-day deadlines by which MDMAs must receive payment to ensure that the MDMAs are compensated for adequate performance. (*Findings and Conclusions 6.iv*)
12. PG&E and SDG&E shall revise the Customer Enrollment Agreement and Schedule PEVSP to include a flat \$20/month payment for customers on commercial time-of-use tariffs. (*Findings and Conclusions 6.vi*)

This advice letter contains the following tariffs, which were developed jointly and are tied together:

1. Electric Schedule PEVSP, Plug-In Electric Vehicle Submetering Pilot - Phase 1
2. Electric Sample Form 79-1158, Electric Vehicle Submetering Meter Data Management Agent (MDMA) Registration Agreement

3. Electric Sample Form 79-1159, Electric Vehicle Submetering Pilot (Phase 1) Customer Enrollment Agreement

Attachment 2 to this advice letter is a reference document that shows the revisions made to the tariffs originally submitted in the joint IOUs advice letter.

Electric Schedule PEVSP, Plug-In Electric Vehicle Submetering Pilot - Phase 1

The purpose of this schedule is to present the provisions to implement Phase 1 of the PEV Pilot to evaluate customer demand for and benefits of a PEV submetering arrangement. The first phase of the Pilot is intended to evaluate billing integration and communication standards associated with submetered data. This Schedule is applicable to bundled service customers and Community Choice Aggregation customers, as defined in PG&E's Electric Rule 23, on Residential, Industrial and Commercial rate schedules, who charge a plug-in electric vehicle (PEV) which is connected to the same meter that registers usage of the customer's primary load and where the connected PEV load is measured by a customer or third-party owned PEV submeter (submeter load) and subtracted from the customer's primary meter and billed on an applicable PG&E PEV rate schedule.

Form 79-1158, Electric Vehicle Submetering Meter Data Management Agent (MDMA) Registration Agreement

The purpose of this form is to register an entity desiring to act as a Submeter MDMA. Such an entity must complete this Registration Agreement and submit to the Energy Division for review and approval. The Registration Agreement also contains performance standards and data reporting and transfer requirements that a Submeter MDMA needs to follow.

Together, these tariffs and agreements will establish the terms and conditions by which PG&E, Submeter MDMA's and customers may participate in this pilot.

Form 79-1159, Electric Vehicle Submetering Pilot (Phase 1) Customer Enrollment Agreement

The purpose of the Customer Enrollment Agreement is to provide the terms and conditions of the customer's participation in the Phase 1 of the Pilot. The agreement includes eligibility requirements, duties and obligations of the IOU, duties and obligations of the participant, termination of the agreement, limitation of liability, warranty disclaimer, and applicable law.

The Customer Enrollment Agreement also acknowledges and documents the customer's agreement to the terms and conditions and requires a signature of both the participating customer and the customer's Submeter MDMA.

Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, facsimile or E-mail, no later than **July 30, 2014**, which is 20 days after the date of this filing. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests should also be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Brian K. Cherry
Vice President, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177
Facsimile: (415) 973-7226
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Rule 7.4.). The protest shall contain the following information:

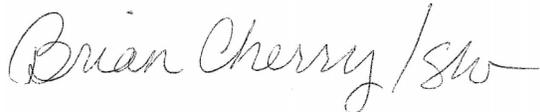
1. specification of the advice letter protested;
2. grounds for the protest;
3. supporting factual information or legal argument;
4. name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and
5. statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Rule 3.11).

Effective Date

PG&E requests that this Tier 1 advice letter become effective upon filing, which is **July 10, 2014**.

Notice

In accordance with General Order 96-B, Rule 4, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and parties on the service lists for Rulemaking (R.) 09-08-009 and R.13-11-007. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the CPUC's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter filings can also be accessed electronically at: <http://www.pge.com/tariffs>.



Vice President, Regulatory Relations

Attachments

cc: Service List R.09-08-009 and R.13-11-007

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **Pacific Gas and Electric Company (ID U39 E)**

Utility type:

ELC GAS
 PLC HEAT WATER

Contact Person: **Shirley Wong**

Phone #: **(415) 972-5505**

E-mail: **slwb@pge.com and PGETariffs@pge.com**

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas
PLC = Pipeline HEAT = Heat WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: **4458-E**

Tier: **1**

Subject of AL: **Establish Electric Schedule PEVSP, Plug-In Electric Vehicle Submetering Pilot – Phase 1, and Associated Agreement Forms, in Compliance with Resolution E-4651**

Keywords (choose from CPUC listing): **Compliance, Agreement, Forms, Metering**

AL filing type: Monthly Quarterly Annual One-Time Other _____

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: **Resolution E-4651**

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: **No**

Summarize differences between the AL and the prior withdrawn or rejected AL:

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for: **No**

Confidential information will be made available to those who have executed a nondisclosure agreement: **N/A**

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: _____

Resolution Required? Yes No

Requested effective date: **July 10, 2014**

No. of tariff sheets: **10**

Estimated system annual revenue effect (%): **N/A**

Estimated system average rate effect (%): **N/A**

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: **See Attachment 1.**

Service affected and changes proposed: **Establish new Electric Schedule PEVSP (Plug-In Vehicle Submetering Pilot – Phase 1), and new Electric Sample Forms 79-1158 (Electric Vehicle Submetering Meter Data Management Agent Registration Agreement) and 79-1159 (Electric Vehicle Submetering Pilot (Phase 1) Customer Enrollment Agreement)**

Protests, dispositions, and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
ED Tariff Unit
505 Van Ness Ave., 4th Floor
San Francisco, CA 94102
E-mail: EDTariffUnit@cpuc.ca.gov

Pacific Gas and Electric Company
Attn: Brian K. Cherry, Vice President, Regulatory Relations
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177
E-mail: PGETariffs@pge.com

Cal P.U.C. Sheet No.	Title of Sheet	Cancelling Cal P.U.C. Sheet No.
34247-E	ELECTRIC SCHEDULE PEVSP PLUG-IN ELECTRIC VEHICLE SUBMETERING PILOT - PHASE 1 Sheet 1	
34248-E	ELECTRIC SCHEDULE PEVSP PLUG-IN ELECTRIC VEHICLE SUBMETERING PILOT - PHASE 1 Sheet 2	
34249-E	ELECTRIC SCHEDULE PEVSP PLUG-IN ELECTRIC VEHICLE SUBMETERING PILOT - PHASE 1 Sheet 3	
34250-E	ELECTRIC SCHEDULE PEVSP PLUG-IN ELECTRIC VEHICLE SUBMETERING PILOT - PHASE 1 Sheet 4	
34251-E	ELECTRIC SCHEDULE PEVSP PLUG-IN ELECTRIC VEHICLE SUBMETERING PILOT - PHASE 1 Sheet 5	
34252-E	ELECTRIC SAMPLE FORM 79-1158 ELECTRIC VEHICLE SUBMETERING METER DATA MANAGEMENT AGENT (MDMA) REGISTRATION AGREEMENT Sheet 1	
34253-E*	ELECTRIC SAMPLE FORM 79-1159 ELECTRIC VEHICLE SUBMETERING PILOT (PHASE 1) CUSTOMER ENROLLMENT AGREEMENT Sheet 1	
34254-E*	ELECTRIC TABLE OF CONTENTS Sheet 1	33941-E
34255-E	ELECTRIC TABLE OF CONTENTS RATE SCHEDULES Sheet 6	33935-E**

**ATTACHMENT 1
Advice 4458-E**

**Cal P.U.C.
Sheet No.**

Title of Sheet

**Cancelling Cal
P.U.C. Sheet No.**

34256-E*

ELECTRIC TABLE OF CONTENTS
SAMPLE FORMS
Sheet 31

33692-E



ELECTRIC SCHEDULE PEVSP
PLUG-IN ELECTRIC VEHICLE SUBMETERING PILOT - PHASE 1

Sheet 1 (N)
 (N)

APPLICABILITY: This Schedule is applicable to bundled service customers and Community Choice Aggregation customers, as defined in PG&E's Electric Rule 23, on Residential, Industrial and Commercial rate schedules, who charge a plug-in electric vehicle (PEV) which is connected to the same meter that registers usage of the customer's primary load and where the connected PEV load is measured by a customer or third-party owned PEV submeter (submeter load) and subtracted from the customer's primary meter and billed on an applicable PG&E PEV rate schedule. (N)

Customers must have a SmartMeter™ or interval data recorder (IDR) type meter as their primary meter to participate in this pilot. Separate PEV submetering requirements, specified in PG&E's Submeter Performance Requirements document, must be met as a condition of program participation.

TERRITORY: Within the entire territory served.

RATES: Customers eligible for service under this Pilot Schedule will have their primary usage and PEV submetered usage billed on separate applicable rate schedules.

Applicable residential rate schedules for primary meter usage are E-1, E-6, E-7, EM and ES and their low income equivalents. The applicable residential rate schedule for EV submetered usage is EV-B.

Applicable commercial rate schedules for primary submetered usage are A-6, A-10, E-19V, E-19, and E-20. The applicable commercial rate schedules for EV submetered usage are A-6 and A-10. PG&E's Net Energy Metering (NEM) rate schedule may be a rider, as applicable, to the primary meter rate schedule.

PILOT ELIGIBILITY: Customers participating in this pilot will not be eligible to participate in PG&E's Balance Payment Plan (BPP) or Automatic Payment Plan.

ELECTRIC VEHICLE SERVICE PROVIDER (EVSP) INCENTIVE PAYMENT: A one-time enrollment payment of \$210 will be provided to the Submeter Meter Data Management Agent (MDMA) for each participant enrolled in this Pilot. This payment will be made by PG&E to the Submeter MDMA within 60 days after the participant's completed enrollment. Additionally, \$17.50 per month will be provided to the Submeter MDMA for performance of its data management and exchange responsibilities in compliance with Pilot requirements for each month the customer remains on the Pilot. These payments will be made by PG&E to the Submeter MDMA within 60 days of the first two successful billing cycles for a given customer, and within 30 days after successful billing cycles thereafter. PG&E may petition the CPUC's Energy Division to terminate this ongoing incentive, with no cost, liability, or further obligation, if Submeter MDMA fails to meet its performance requirements. These incentive payments are applicable only for Phase 1 of the Pilot, which ends after 12 billing cycles for a customer participant and no later than February 28, 2016. (N)

(Continued)



ELECTRIC SCHEDULE PEVSP
PLUG-IN ELECTRIC VEHICLE SUBMETERING PILOT - PHASE 1

Sheet 2

<p>COMMERCIAL/ INDUSTRIAL TIME-OF-USE TARIFF CUSTOMER PAYMENT:</p>	<p>Commercial/Industrial customers with submeter usage billed under a Time-of-Use tariff, shall receive a payment applied as a bill credit of \$20/month per submeter. PG&E may petition the CPUC's Energy Division to terminate this ongoing customer payment, with no cost, liability, or further obligation, if Submeter MDMA fails to meet its performance requirements. These payments are applicable only for Phase 1 of the Pilot, which ends after 12 billing cycles for a customer participant and no later than February 28, 2016.</p>	<p>(N)</p>
<p>SPECIAL CONDITIONS:</p>	<ol style="list-style-type: none"> 1. Pilot Term: Phase 1 duration is for 18 months beginning September 1, 2014 and ending February 28, 2016. 2. Pilot Participation Cap: On a first-come, first-served basis, a maximum of 500 submeters may be enrolled in each phase of the Pilot. Of the 500 submeters, a limit of 100 submeters may be related to NEM accounts. 3. Pilot Participation Period: Participating customers are permitted to receive submetering service when enrolled into the pilot and may continue participation for up to 12 consecutive billing cycles. Customers may unenroll from the Pilot at any time, but may not re-enroll in Phase 1 of the Pilot unless they are relocating in one of the Investor Owned Utility's (IOU's) service territories as discussed in Special Condition 9. 4. Customer Enrollment in Submetering Services: The Submeter MDMA is responsible for enrolling eligible customers and such enrollment will become effective with the start date of the customer's next billing cycle. The Submeter MDMA must notify PG&E of a customer's enrollment by submitting a completed Form 79-1159, PEV Submetering Pilot Customer Enrollment Agreement (Customer Enrollment Agreement - Electric Vehicle Submetering Pilot (Phase 1)) at least 5 business days prior to the start date of the customer's next billing cycle. 5. Enrollment Period: The enrollment period is for the first 6 months of the Phase 1 Pilot, September 1, 2014 – February 28, 2015 or until the maximum of 500 submeters is reached, whichever is earlier (Enrollment Period). Once enrollment of 500 submeters is reached, Phase 1 of this pilot will be closed for enrollment. For the first 3 months of the Enrollment Period (the "Exclusivity Period"), each Submeter MDMA will have "Exclusivity Rights" to enroll a pre-determined number of submeters into the pilot program. This number will be determined by dividing 500, the pilot's enrollment cap, by the number of Submeter MDMA's participating in the pilot program. Exclusivity Rights expire at the end of the third month of the Exclusivity Period. 6. MDMA Services for the PEV Submeter: Program participants, or their Submeter Meter Data Management Agents (MDMAs), are required to provide, own and maintain the submeter used in this Pilot. The standards for qualified meters are contained in the EV Submeter Phase 1 Performance Standards for Metering and Meter Data Management Agents. Accuracy requirements are set at +/- 5% for this Pilot, which are below accuracy standards required by PG&E for its meters and billing. For purposes of this Pilot, PG&E will bill participating customers as if the submeters satisfy PG&E's meter accuracy requirements. 	<p>(N)</p>

(Continued)

Advice Letter No: 4458-E
 Decision No. E-4651

Issued by
Brian K. Cherry
 Vice President
 Regulatory Relations

Date Filed	July 10, 2014
Effective	July 10, 2014
Resolution No.	_____



ELECTRIC SCHEDULE PEVSP
PLUG-IN ELECTRIC VEHICLE SUBMETERING PILOT - PHASE 1

Sheet 3

SPECIAL
 CONDITIONS:
 (Cont'd.)

- | | | |
|----|--|-----|
| 6. | MDMA Services for the PEV Submeter: (Cont'd.) | (N) |
| | Submeter MDMAs are required to perform certain meter data management services (Submeter MDMA services) related to providing properly formatted, accurate, and timely data submission to PG&E. These requirements are listed in the EV Submeter Phase 1 Performance Standards for Metering and Meter Data Management Agents. The Submeter MDMA is required to submit a completed Submeter MDMA Registration Agreement (Form 79-1158) for approval prior to participating in this pilot by July 11, 2014. This form, among other things, requires the Submeter MDMA to state (1) the number of submeters that have agreed to participate as of the date it submits the Agreement and (2) the total number of submeters that it plans to enroll, with expected breakdown of customer class (Residential and Commercial) and NEM participation. | |
| 7. | Primary and Submeter Bill Calculation: All customers served under this Schedule will be provided separate primary meter billing amounts and PEV submeter billing amounts, in their electric bills. The customer's primary metered usage is billed according to the primary rate schedule selected by the customer. The customer's submetered PEV usage is billed according to the applicable residential or commercial EV schedule, as applicable. The primary meter billed amount calculation excludes the PEV submeter usage and demand, as applicable. The PEV submeter billed amount will be based upon data delivered to PG&E by the Submeter MDMA pursuant to the MDMA Performance Standards and applicable Data transfer template. | |
| 8. | Billing Adjustments: Billing adjustments will not be made pursuant to Rule 17 on either the primary or submeter account due to revisions or adjustments provided by the Submeter MDMA after the customer's electric bill is issued for that month. | |
| 9. | Disenrollment, Changes of Address: The Submeter MDMA or customer must report all Pilot program drop-outs or change of address to PG&E within ten business days of disenrollment from the Pilot. As of the effective date of the drop out or change of address, PG&E will default to using the current tariff of the primary meter for all load at that premises. PG&E will effectuate any required rate and billing changes coincident with the start of the next billing cycle. Customers who drop out of this Pilot after enrollment will continue to be counted against the enrollment cap. For customers that are involuntarily disenrolled due to termination of submetering service by Submeter MDMA, PG&E will notify the customers of the involuntary termination and allow the customers to complete the remainder of their Pilot Participation Period subject to completing the requirements to reenroll with an alternative Submeter MDMA. For customers that relocate within the service territory: 1) their MDMA must submit a separate Customer Enrollment Agreement for their new service address at least five days before the end of the current billing period; and 2) they are eligible to reenroll in the Pilot after the Enrollment Period. Similarly, for customers that relocate to another IOU's service territory, they may reenroll if the IOU's 500 submeter limit has not been met. | (N) |

(Continued)

Advice Letter No: 4458-E
 Decision No. E-4651

Issued by
Brian K. Cherry
 Vice President
 Regulatory Relations

Date Filed	July 10, 2014
Effective	July 10, 2014
Resolution No.	



ELECTRIC SCHEDULE PEVSP
PLUG-IN ELECTRIC VEHICLE SUBMETERING PILOT - PHASE 1

Sheet 4

SPECIAL
 CONDITIONS:
 (Cont'd.)

- 10. **Pilot Eligibility:** If a customer's Submeter MDMA remits payments directly to PG&E on the customer's behalf, the customer cannot participate in either the Balance Payment Plan or Automatic Payment Plan options offered by PG&E for the duration of the customer's participation in this pilot. Customers already enrolled in these plans must unenroll for the duration of their participation in this pilot. (N)
- 11. **IOU Programs Availability:** Programs such as My Energy and Green Button may be available to customers participating in this pilot but the data accuracy of these programs will be contingent upon the availability and the timeliness of the submeter data.
- 12. **Submeter:** The submeter may be embedded within the EVSE (as defined below) or may be stand-alone. The submeter must be located at a fixed point anywhere between the primary meter and the PEV. All submeters must meet UL safety requirements or be embedded within a device that meets UL safety requirements, or comply with PG&E's specific safety requirements. The IOUs shall limit customers to 19 submeters per primary meter and restrict participants from using multiple levels of submeters.
- 13. **Submeter Meter Data Management Agent (Submeter MDMA):** The Submeter MDMA is the entity that retrieves, processes, and submits PEV data using validation, editing and estimating methods, as determined by the IOUs and MDMA's, and provides this information to PG&E for billing purposes. Whether the Submeter MDMA, the Customer, or other third party owns the submeter, the Submeter MDMA is responsible for obtaining authorization from the Customer to access and submit this information on the Customer's behalf. The Submeter MDMA must submit a completed Customer Enrollment Agreement to PG&E. The Submeter MDMA cannot be the customer of record (COR).
- 14. **Definitions:**
 - a) **Electric Vehicle Service Equipment (EVSE):** The conductors, including the ungrounded, grounded, and equipment grounding conductors, the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets or apparatuses installed specifically for the purpose of delivering energy from the premises wiring to the electric vehicle and may include an embedded submeter.
 - b) **Primary Meter:** The interval data recorder meter type owned by UTILITY which registers all electricity usage associated with the premises.
 - c) **Submeter:** Submeter in this Schedule only references the meter owned by the customer or a third party, which measures the electrical load associated with charging the electric vehicle.
 - d) **Primary Meter Billed Amount:** The primary meter charges billed to the customer for its non-PEV related usage and demand, as applicable, metered at its premises and billed in accordance with the customer's current tariff. (N)

(Continued)



ELECTRIC SAMPLE FORM 79-1158
ELECTRIC VEHICLE SUBMETERING METER DATA MANAGEMENT AGENT
(MDMA) REGISTRATION AGREEMENT

Sheet 1 (N)
(N)
(N)

Please Refer to Attached
Sample Form

(N)
(N)

EV Submeter Pilot Phase 1

Submeter MDMA Registration Agreement

ELECTRIC VEHICLE SUBMETERING METER DATA MANAGEMENT AGENT (MDMA) REGISTRATION AGREEMENT

I. INSTRUCTIONS FOR QUALIFYING AS A SUBMETER METER DATA MANAGEMENT AGENT

A. BACKGROUND

On November 19, 2013, the California Public Utilities Commission (Commission or CPUC) issued Decision (D.) 13-11-002 modifying the PEV Submetering Protocol requirements set forth in D. 11-07-029 by adopting the Commission Energy Division (ED) Staff's Plug-In Electric Vehicle Submetering Roadmap for a two-phase pilot. Ordering Paragraph 2 of D.13-11-002 requires the investor-owned utilities (IOUs) to submit a Tier 2 Advice Letter that includes the metering requirements provided by the ED to the IOUs, draft versions of the data format template, the Submeter Meter Data Management Agent (MDMA) registration Agreement, the customer enrollment Agreement, and MDMA Service Requirements.

All Submeter MDMA's must submit a Notice of Participation to the Commission's Energy Division by July 11, 2014 to participate in the pilot. Submeter MDMA's must indicate the following in the Notice of Participation: (1) the number of submeters associated with customers that have agreed to participate as of the date they submit the Notice and (2) the total number of submeters that they plan to enroll. The Notice of Participation is embedded within the Submeter MDMA Registration Agreement. Phase 1 of the Pilot ends after 12 billing cycles for a customer participant and no later than February 28, 2016.

The Commission may require that potential Submeter MDMA's comply with certain Energy Division standards in experience, education and training to perform the functions of a Submeter MDMA. These functions and associated requirements are described in detail in the Phase One Performance Standards for Metering and Meter Data Agents Participating in California's Electric Vehicle Submetering Pilot (Performance Standards), approved by the Commission in Resolution E-4651 and attached hereto as Attachment 1

B. REGISTRATION AGREEMENT

An entity desiring to act as a Submeter MDMA must complete the attached registration Agreement and submit it to the ED.

The ED will review the submitted documentation, determine if the prospective Submeter MDMA's standards meet the requirements established by the Commission, and notify the Submeter MDMA whether its request is approved via e-mail. The ED will make reasonable efforts to review the documentation and respond to the Submeter MDMA request within ten business days. Missing documentation may require the prospective Submeter MDMA's to resubmit that portion of the application and restart the ten-day review process.

C. REQUIREMENTS

1. Entities seeking to offer Submeter MDMA services for an electric vehicle (EV) submeter must submit a Submeter MDMA Registration Agreement to the ED. Approval to act as a Submeter MDMA will be granted to Submeter MDMA's that satisfy the requirements established in the MDMA Performance Standards document.
2. The determination is based on the ED's review of the Submeter MDMA's written application, completed documents, and the ability to meet PG&E's EV Submeter Pilot Phase 1 Data Reporting and Transfer Requirements (Data Exchange Requirements), attached hereto as Attachment 2.

ELECTRIC VEHICLE SUBMETERING METER DATA MANAGEMENT AGENT (MDMA) REGISTRATION AGREEMENT

3. Upon receipt of the Submeter MDMA's Registration Agreement, PG&E will electronically forward a copy of its data exchange requirements to the Submeter MDMA.
4. The Submeter MDMA's are allowed ten days to report a customer drop out or change of address to the IOUs.
5. The Submeter MDMA's must notify Energy Division and all IOUs in which they are providing services in the event that they terminate service prior to the end of the Pilot Term.

D. SUBMETER MDMA REGISTRATION PROCESS

1. Submeter MDMA submits Registration Agreement to Adam Langton (adam.langton@cpuc.ca.gov) or Noel Crisostomo (noel.crisostomo@cpuc.ca.gov) of the CPUC's Energy Division by July 11, 2014. Reasonable efforts will be made to acknowledge receipt of the Registration Agreement within ten business days of receipt. The Energy Division may request additional information, as needed, to approve the MDMA's registration request for this phase of the Pilot.
2. Submeter MDMA receives final approval, may submit Customer Enrollment Agreements to PG&E starting September 1, 2014.
3. Submeter MDMA's shall enroll submeters on a first-come, first-served basis subject to Exclusivity Period and Enrollment Cap.

E. ENROLLMENT REPORTING

1. Submeter MDMA's must report the balance of unenrolled customers to PG&E that will be available for enrollment during the Exclusivity Period on Friday of each week until 450 customers have been enrolled, in which case, Submeter MDMA must submit daily updates.
2. PG&E will notify Submeter MDMA's of remaining spaces available via email by Wednesday of the following week.
3. Beginning at the fourth month Submeter MDMA's are able to enroll additional submeters on a first-come, first-served basis, reporting enrollments to PG&E daily.

F. SUBMETER TESTING AND CALIBRATION

Submeter MDMA's are not required to provide compliance and testing data to the IOUs if they have otherwise complied with the application process and demonstrated consistency with the Performance Standards for Metering and MDMA's. The Third Party Evaluator retained by the IOUs may randomly field test no more than five percent of the submeters for accuracy. By virtue of a customer's enrollment with submeter service by the IOU, the Independent Evaluator and Submeter MDMA's may obtain access from their participants for testing and calibration, if selected as part of the evaluation.

G. DATA FORMAT

Submeter MDMA must satisfy PG&E's EV Submetering Pilot Phase 1 Data Reporting and Transfer Requirements, attached hereto as Attachment 2.

ELECTRIC VEHICLE SUBMETERING METER DATA MANAGEMENT AGENT (MDMA) REGISTRATION AGREEMENT

H. FORMAT TESTING

After PG&E receives the completed qualification documentation, the Submeter MDMA may contact PG&E to schedule the format acceptance test to ensure it can produce a secure data file that satisfies PG&E's Data Exchange Requirements. To schedule the test, please contact the EV Submetering Pilot Program Manager at PG&E.

I. SECURITY AND CONFIDENTIALITY

Submeter MDMA must comply with Data security and confidentiality requirements specified in the CPUC's Privacy Rules and PG&E's Electric Rule 27 (Privacy and Security Protections for Energy Usage Data). The Submeter MDMA's access to, use, and disclosure of customer-specific energy usage and billing data is subject to the prior, express written consent of the participating customer and the sole responsibility of the Submeter MDMA.

J. VEE PERFORMANCE STANDARDS

For the purposes of Phase 1 of the submetering pilot, the usage measured at the EV submeter will be used to allocate energy usage between a primary load and an electric vehicle. PG&E will accept the Submeter MDMA's data as being "valid" or VEE'd and bill both the EV and primary accounts accordingly. For purposes of Phase 1 of the pilot only, the Submeter MDMA is not required to satisfy the "Standards for Validating, Editing, and Estimating Monthly and Interval Data for Monthly and Interval Data" contained in "VEE-Attachment of the Direct Access Standards for Metering and Meter Data".

K. SUBMETER MDMA TERMINATION

PG&E will notify Submeter MDMA in the event it fails to timely meet performance requirements for two consecutive billing periods. Absent corrective actions, if Submeter MDMA fails to timely meet performance requirements for a third consecutive month, PG&E may petition Energy Division to terminate pilot participation by Submeter MDMA and its customers.

L. JURISDICTION

This agreement at all times shall be subject to such modifications as the Commission may direct from time to time in the exercise of its jurisdiction.

ELECTRIC VEHICLE SUBMETERING METER DATA MANAGEMENT AGENT (MDMA) REGISTRATION AGREEMENT

M. INDEMNIFICATION

I, Submeter MDMA, hereby release, hold harmless, and indemnify PG&E from any liability, claims, demands, causes of action, damages, or expenses resulting from my participation in the submetering pilot under this Registration Agreement, including but not limited to the use of customer information obtained pursuant to the prior express, written consent of customers participating in the pilot, and from the taking of any action, including changes in services or rates of customers participating in the pilot, pursuant to this Registration Agreement, and provided such Utility action is consistent with applicable CPUC orders, tariffs and regulations.

[This Agreement must be signed by someone who has authority to financially bind the Submeter MDMA]

Signature of Authorized Agent of Company

Submeter MDMA Company Name

Name of Authorized Agent of Company (Print)

Executed on (Date)

Phone Number

City and State Where Executed



ELECTRIC VEHICLE SUBMETERING METER DATA MANAGEMENT AGENT (MDMA) REGISTRATION AGREEMENT

2.0 SUBMETER MDMA REGISTRATION AGREEMENT

A completed and approved Submeter MDMA Registration Agreement must be submitted by any entity desiring to participate as a Submeter MDMA in the Phase 1 Submetering pilot.

PG&E will use reasonable efforts to acknowledge receipt of the Registration Agreement, request any necessary additional information, and provide information on the required Acceptance Test with sample data, contact names, and procedures, within ten business days of receipt of the Registration Agreement.

MDMAs will have a temporary right to a number of customers within each IOU territory in which they plan to participate. During this three month "Exclusivity Period" each MDMA will have "Exclusivity Rights" to a number of submeters that will be determined by dividing the 500 maximum submeter enrollments by the number of Submeter MDMAs. Submeter MDMAs must report the balance of unenrolled customers to PG&E that will be available for enrollment during the Exclusivity Period on Friday of each week until 450 customers have been enrolled, in which case, Submeter MDMA must submit daily updates. Beginning at the fourth month Submeter MDMAs are able to enroll additional submeters on a first-come, first-served basis, reporting enrollments to PG&E daily.

This registration is for Phase 1 only and expires on February 28, 2016

Submeter MDMA NAME	Contact Person
Address:	Title
City, State, ZIP	Phone Number
Address	Email Address
Submeter MDMA's DUNNS Number	

NUMBER OF SUBMETERS ASSOCIATED WITH CUSTOMERS THAT HAVE AGREED TO PARTICIPATE:

TOTAL NUMBER OF SUBMETERS YOU PLAN TO ENROLL AND PROVIDE SUBMETERING SERVICES:

Total Submeter installations will be broken down as follows:

Residential:	Non-NEM	+ +	+ NEM	+ +	= Subtotal	+ +
		+		+		+
Commercial:	Non-NEM	+	+ NEM	+	= Subtotal	+
		+		+		+
	Subtotal	=	Subtotal	=	= Total	=

Attachment 1

**EV Submeter Pilot Phase 1
PERFORMANCE STANDARDS FOR
METERING AND METER DATA MANAGEMENT AGENTS**

1. STANDARDS FOR EV SUBMETERING

A. Physical Location

1. **Location.** The submeter must be located at any fixed point between the primary utility electric meter and the electric vehicle supply equipment (EVSE) coupler. Any EVSE containing an embedded submeter must indicate that it contains a metering device.
2. **Identification.** A submeter must be labelled with a unique serial number for identification.
3. **Security.** A meter system shall be designed and constructed so that metrology components are adequately protected from environmental conditions likely to be detrimental to accuracy. Components shall be designed to prevent unauthorized access to adjustment mechanisms and terminal blocks by providing for application of a physical security seal or an Audit Trail.
4. **Security from Tampering.** During Phase 1 of the submetering pilot, no sealing requirements will be placed on the submeter, regardless of whether remote configuration is feasible. The Submeter Meter Data Management Agent and/or EVSPs should document how they physically prevent submeters from tampering. No means shall be provided by which any measured electricity can be diverted from the measuring device.

B. Accuracy and Measurement

1. **Accuracy.** The submeter must maintain accuracy of +/- 5% during the first Phase of the pilot. The term 'accuracy' is equivalent to the same term used in the ANSI C-12 standard. Submeter MDMA is responsible for describing how they comply with this accuracy requirement prior to pilot installation.

ELECTRIC VEHICLE SUBMETERING METER DATA MANAGEMENT AGENT (MDMA) REGISTRATION AGREEMENT

2. **Interval of Measurement.** The submeter shall have the capability to measure energy consumption in time intervals equal to the interval used by PG&E, but submeters are not required to measure energy consumption in intervals smaller than 15 minutes. A Submeter MDMA has the option to measure in less than 15-minute time periods if they choose to do so. Regardless of the submeter's measurement interval, the Submeter MDMA must report energy consumption data in time intervals consistent with those used by PG&E.
3. **Standard Time Synchronization.** The submeter shall be synchronized to the same time used by utility meters in order to maintain billing consistency with measurements from the primary utility meter. The submeter's time should be synchronized to the United States time standard as defined by the National Institute of Standards and Technology or within three minutes of the time used by PG&E.
4. **Unit of Measurement.** The submeter must measure electricity data to the nearest Watt-hour (Wh) for each time interval and must be time-stamped to indicate the time/date of the energy consumption.
5. **Submeter and MDMA Storage of Data.** The device memory should retain information on the quantity of electricity consumed during a loss of external power. Values indicated or stored in memory shall not be affected by electrical, mechanical or temperature variations, radio-frequency interference, power failure, or any other environmental influences to the extent that accuracy is impaired per UL 2594. Memory shall be nonvolatile or backed up in a network.
6. **Utility Storage of Data.** Watt-hour data accumulated and indicated shall be retained by PG&E consistent with the same data storage requirements applicable to customer billing data.

C. Safety

All submeters should be included as part of devices that meet UL safety requirements. If the submeter is a stand-alone device, that device must meet UL safety requirements, or comply with PG&E's specific safety requirements.

D. Informing Customers about Submeter Data

1. **MDMA Responsibilities.** There is no requirement for the submeter device to visually display data. Customers should be informed of this requirement by the EVSP or Submeter MDMA. MDMA's must make data available to customers through a web-based or mobile phone application and by request
2. **Utility Responsibilities.** Utilities are required to report submeter data through the customer's monthly bill. PG&E is not required to report this usage data through their customer web tools. A utility may opt to report data to customers online
3. **Terms Subject to Modification after Pilot Term.** Customers should be informed that the pilot is temporary and that the requirements may change after the end of the first pilot phase.

E. Transfer of Submeter Data from Submeter MDMA's to Utilities

1. **Customer Submeter and Account Identification.** The MDMA must communicate the submeter serial number to the customer's utility as part of the customer enrollment in submetering services. This serial number shall be included in the monthly data communication in order to associate the submeter with the correct customer account.
2. **Minimum Transfer Requirement.** Utilities shall implement a simple means of receiving data that allows any qualified EVSP or Submeter MDMA to submit data to PG&E. Each utility shall make available a standard format for the MDMA to submit meter data via electronic spreadsheet. The form should allow the Submeter MDMA to submit all of its data through a single spreadsheet to the appropriate utility contact. The MDMA's should submit the data via the Internet in a secured /encrypted manner.
3. **Alternative Transfer Option.** Utilities are encouraged to explore additional meter transfer protocols that involve the use of 'Green Button' elements or other data transfer protocols that allow PG&E to efficiently receive data from the Submeter MDMA. These options may be offered to

ELECTRIC VEHICLE SUBMETERING METER DATA MANAGEMENT AGENT (MDMA) REGISTRATION AGREEMENT

EVSPs as an alternative to the basic spreadsheet submission option, but cannot be required as the only data transfer method.

4. **Transfer Deadlines.** Submeter MDMA s must report data for a given billing period no later than three business days after the end of the billing period. Utilities should provide advance communication of these monthly deadlines to the Submeter MDMA to the extent that billing periods are known prior to the start of the Pilot Terms.
5. **Transfer Testing.** Submeter MDMA must demonstrate ability to transfer a test meter data file, which can be successfully processed for subtractive billing by PG&E. The Transfer Testing may use the Minimum Transfer Requirement or the Alternative Transfer Requirement if offered by PG&E. Data transfer testing shall only be required during the MDMA registration process and thereafter as necessary.
6. **Process Updates.** Utilities may make periodic changes to the standard format for the MDMA to submit meter data. Submeter MDMA s may be required, at their cost, to make modifications and perform additional testing of their systems to support any changes required by the Utilities.

F. SUBMETER MDMA QUALIFICATION

Entities seeking to offer Submeter MDMA services for an electric vehicle (EV) submeter shall be required to submit a Submeter MDMA Registration Agreement if EVSP or entity seeks to offer such services. For Phase 1, the written request shall include the following information: name of the person or entity; business address and telephone number; intervals by which the EV submeter usage is measured, number of participants by customer class, utility service territory, whether the primary account is billed under a netting arrangement and all other data requirement found in the MDMA Registration form. Submeter MDMA s are required to register with the CPUC in order to participate in the Utilities' EV submetering programs. Upon receipt of the request, the CPUC's Energy Division (ED) shall be required to review the entities registration requirements. If the ED states that the proposed Submeter MDMA's educational and training requirements are sufficient, then the Submeter MDMA may begin offering Submeter MDMA services so long as it meets all the Submeter MDMA-related requirements.

G. SUBMETER MDMA VEE PERFORMANCE STANDARDS

1. Meet requirements established in the **“EV Submeter Pilot Data Reporting and Transfer Requirements” (Attachment 2)**
2. For the purposes of Phase 1 of the CPUC’s EV “single customer of record” submetering pilot, the usage measured at the EV submeter will be used to allocate energy usage between a primary load and an electric vehicle. PG&E will accept the Submeter MDMA’s data as being “valid” and bill both EV and primary accounts accordingly.
3. The Submeter MDMA must provide all of its EV submeter data to PG&E within 3 business days of PG&E’s regularly scheduled meter read date. Any submetered data submitted after 5:00 pm Pacific Time of the third business day will not be incorporated into the customer’s bill. If data is not received for any submeter billed interval within this timeframe, that interval will be considered as “zero” by PG&E when calculating the primary and EV submeter monthly bills. The 3 business day standard may be met by providing submeter data throughout the course of the month (e.g. on a weekly basis) if desired.

H. METER SYSTEM TESTING

An independent third party evaluator (3PE) will be allowed to field test up to five percent of the EV submeters within each of the utilities service territories for each phase of the EV pilot to evaluate the accuracy of the overall metering system at a customer site. The 3PE shall be allowed to select which EV meters to test, and the Submeter MDMA and its customers’ shall provide the necessary access and assistance to facilitate such testing.

The submeter MDMA’s will propose methodologies for testing and calibration for IOU review, consent, and subsequent implementation.

Submeter Manufacturer Certification & Accuracy: EVSE providers shall provide the respective utilities with documentation of their compliance with the “EV Submeter Pilot Phase 1 Performance Standards for Metering and Meter Data Management Agents” in general and the results of accuracy testing specifically for each submeter by serial number.

**Attachment 2
EV Submeter Pilot Phase 1
Data Reporting and Transfer Requirements**

IOU & MDMA Suggested Updates

I. INTRODUCTION

This document is intended to describe the data format and data transfer processes necessary for a Submeter Meter Data Management Agent (MDMA) participating in Phase 1 of the CPUC ordered Electric Vehicle (EV) Submetering Pilot (Pilot). Submeter MDMAs are expected to meet certain performance standards in the EV Submetering Pilot¹, including transferring submeter data to the California Investor Owned Utilities (IOUs) for the purpose of Subtractive Billing. This document provides information on EV Submeter data formats and transfer methods to be used in the Pilot.

Submeter MDMAs are expected to transfer Submeter Data to the Utilities using one of two methods: Either the Minimal Transfer Requirement, or the Alternative Transfer Option. The Utilities may offer the alternative option, but it may not be required of Submeter MDMA for the Pilot. Details to implement the Minimal Transfer Requirement are the focus of this document.

Additional Submeter MDMA activities are beyond the scope of this document, such as the process for a Submeter MDMA to register with an IOU and to sign up customers for the Electric Vehicle Submetering Pilot. These additional activities are referenced herein, but the details are outside of the scope of this document.

II. TERMS AND DEFINITIONS

CSV – Comma Separated Values. The spreadsheet file format used in the Minimal Transfer Requirement. It is also a format used for Green Button subscription files.

¹ See: Phase One Performance Standards For Metering And Meter Data Agents Participating In California's Electric Vehicle Submetering Pilot

ELECTRIC VEHICLE SUBMETERING METER DATA MANAGEMENT AGENT (MDMA) REGISTRATION AGREEMENT

DUNS number - Data Universal Numbering System. A nine digit number assigned by Dun & Bradstreet unique to a single business entity.

NAESB - North American Energy Standards Board. NAESB is the standards organization that created the ESPI standard, which is used by Green Button.

UTC Time - Coordinated Universal Time (UTC). A signed positive 64 bit integer value representing the number of seconds from midnight Jan 1, 1970, in UTC, not counting leap second corrections to UTC (35 seconds through 2012). So 5:00 PM EDT on September 22, 2013, has a UTC Time value of 1379883600")

UUID - Universally Unique Identifier. UUID is used to identify entities such as Customer and Submeter MDMA's.

III. DATA FORMATS

This section describes the data file formats to be used in the Pilot. The two data formats available for this pilot are a Spreadsheet file format or the Green Button XML format. The spreadsheet format is for the Minimal Transfer Requirement.

A. Minimal Transfer Requirement

The spreadsheet data file format and name conventions are described below.

1. Spreadsheet Data Format

The Spreadsheet format is a simplified derivation of the Green Button XML format. The spreadsheet format allows Submeter MDMA's to transfer in one file EV Submeter data for multiple submeters and multiple days. The spreadsheet includes field headers with the following titles and meaning. The spreadsheet shall be transmitted in CSV file format.

Field Title	Field Description
Customer UUID	Assigned by IOU after a Registered Submeter MDMA completes the Customer enrollment with the IOU.
Interval Duration	Duration of data interval for the Read Quantity represented in seconds. Interval Duration is either "0900" for 15 minute intervals or "3600" for 60 minute intervals. Interval Duration is specified by the IOU based on the Primary Meter's unit of measure and/or the IOU's

ELECTRIC VEHICLE SUBMETERING METER DATA MANAGEMENT AGENT (MDMA) REGISTRATION AGREEMENT

	Subtractive Billing processes.
Read Date & Time	Date & Time for the start (beginning) of the data interval. Read Date & Time is expected to be at the top of the hour for 60 minute intervals (e.g., UTC Time equivalent of 10:00 am, 11:00 am,), or on the quarter hour for 15 minute intervals (e.g., UTC Time equivalent of 10:15 am, 10:30 am, 10:45 am, 11:00 am). A read Date & Time record is required for every interval every day, even when the Read Quantity is zero. (Formatted UTC Time, see terms and definitions)
Read Quantity	Interval value in Watt hours. (Formatted Decimal 12/6 with zero padding on the right, and none on the left)
Date Processed	Date the data was loaded into the spreadsheet by Submeter MDMA. (Formatted UTC Time, see terms and definitions)

Below is an example of the spreadsheet file: (UTC Seconds in the example represent UTC Time)

36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369728900, 40.640000, 1370844900
36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369729800, 41.120000, 1370844900
36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369730700, 43.040000, 1370844900
36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369731600, 41.280000, 1370844900
36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369732500, 39.840000, 1370844900
36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369733400, 39.360000, 1370844900
36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369734300, 40.000000, 1370844900
36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369735200, 40.000000, 1370844900
36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369736100, 39.200000, 1370844900
36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369737000, 40.160000, 1370844900
36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369737900, 40.000000, 1370844900
36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369738800, 45.440000, 1370844900
36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369739700, 45.280000, 1370844900
36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369740600, 43.520000, 1370844900
36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369741500, 38.880000, 1370844900
36c8dc0f-ceee-4203-8ff9-05d2feeca7e7, 900, 1369742400, 46.080000, 1370844900

Customer UUID assigned by IOUs.

Duration

Read Start (UTC Seconds)

Quantity Consumed

3rd Party Processed Date (UTC Seconds)

ELECTRIC VEHICLE SUBMETERING METER DATA MANAGEMENT AGENT (MDMA) REGISTRATION AGREEMENT

2. Spreadsheet File Minimum Data Transfer Requirements

To facilitate data processing and possible data troubleshooting, minimum data transfer requirements are defined.

1. No partial day data will be processed by the IOU.
 - a. Spreadsheet files shall contain a minimum of 24 hours of interval data. (e.g., 96 consecutive intervals assuming 15 minute intervals, or 24 consecutive intervals assuming 60 minute intervals.)
 - b. Spreadsheet files shall contain a read Date & Time record for every interval, even when the interval's Read Quantity is a zero or a missing value.
 - c. Missing values shall be represented with a zero values.
 - d. SCE and SDG&E expect 96 consecutive intervals in a day; PG&E expects 24 consecutive intervals in a day for Residential submeters and 96 consecutive intervals in a day for Commercial & Industrial submeters.
2. IOUs recommend daily file transfers.
 - a. Daily file transfers may contain Date & Time records for multiple days.
 - b. Daily file transfers containing Date & Time records for multiple days, shall contain all expected consecutive intervals (e.g., no missing intervals or gaps in intervals)
 - c. Daily file transfers may contain repeated or corrected Date & Time records. IOU will use the most recently received and processed interval record(s), when billing the submeter data. IOU may not correct Date & Time records for intervals previously billed.
3. Date & Time records should not be delayed by more than three days. Records delayed by three or more days may not be processed for billing, due to the Pilot requirement that meter data is to be sent 3 days after the customer's billing period.

3. Spreadsheet File Name Structure

The CSV spreadsheet files transferred by the Submeter MDMA to PG&E shall use the following file naming structure:

“MDMA-DUNS_IOU-DUNS_EVSP_YYYYMMDDHHMMSS.CSV”

File Name Component	Component Description
MDMA-DUNS	The nine digit DUNS Number of the Submeter MDMA registered with the IOU and provided to the IOU as part of the Submeter MDMA's Registration process. (Format numeric 9, all formatting dashes omitted)
IOU-DUNS	The nine digit DUNS Number of the IOU and provided

ELECTRIC VEHICLE SUBMETERING METER DATA MANAGEMENT AGENT (MDMA) REGISTRATION AGREEMENT

	by the IOU as part of the Submeter MDMA Registration process. (Format numeric 9, All formatting dashes omitted)
EVSP	Hard coded “EVSP” to identify the file as part of the EV Submetering pilot application.
YYYYMMDDHHMMSS	The date and time the spreadsheet file was created by the Submeter MDMA, based on MDMA’s local time as determined by MDMA. Purpose of this file name component is to determine time sequence of files sent from an individual MDMA.
Example file name: “987654321_123456789_EVSP_20130428245959.csv”	

B. Provision of UUIDs to Submeter MDMAs

The provisioning of UUIDs consists of transferring the Customer UUIDs from the IOU to the Submeter MDMA. . The Customer UUIDs are assigned by IOU after the MDMA’s approved registration into the EV Submetering Pilot, and after a Registered Submeter MDMA submits a valid Customer Enrollment form to IOU. The Customer UUIDs are sent by encrypted email from IOU to the MDMA or by the EVSP Enrollment report described below in section Enrollment and Exception Reporting to Submeter MDMA.

The Customer UUIDs will be sent to the Submeter MDMA in a CSV file containing both the UUID and the corresponding Unique Submeter Device Identifier (aka, Submeter Serial Number) for the customer’s service. See EVSP Enrollment Data Format below for more details.

IV. DATA TRANSFER METHODS

The IOUs each have slightly different methods to send and receive Minimal Transfer Requirement spreadsheet files and Green Button XML format files. This section describes PG&E’s methods.

PG&E uses sFTP to receive both the Spreadsheet Format and Greenbutton Format data files from MDMA. For the phase 1 pilot, PG&E will only support receiving the Spreadsheet format from MDMA and only provide MDMA enrollment files (no providing of Exception Reporting files for phase 1).

PG&E’s preference is for MDMA to push data files to our hosted sFTP servers (Inbound) and to pull enrollment files from our SFTP servers (outbound).

Per PG&E’s preferred method, PG&E will provide MDMA the following information:

1. IP Address
2. Assigned Username
3. Password or log in key (for key connectivity)

4. MDMA's to provide PG&E:
 - a. Name, email, and telephone number of MDMA's connectivity contact person(s).
 - b. Filename(s)

If file encryption is required, PG&E will provide the MDMA with PG&E's PGP Public Key. If necessary, PG&E can support pulling data files from MDMA's external servers (inbound) and pushing enrollment files to MDMA servers (outbound). To support this, PG&E will require the following information from the registered MDMA:

Files Inbound to PG&E:

1. SSH2 RSA 2048-bit key. This is used for validating the sFTP Connection. PG&E does use passwords as an alternative.
2. Hostname / IP address
3. Download folder path
4. Filename(s)
5. Name, email, and telephone number of MDMA's connectivity contact person(s).

Files Outbound from PG&E:

1. Hostname / IP address
2. Username
3. Password (or log-in key will need to be exchanged)
4. Upload folder path
5. Name, email, and telephone number of MDMA's connectivity contact person(s).

If file encryption is required, PG&E will provide the MDMA with PG&E's PGP Public Key.

V. ENROLLMENT AND EXCEPTION REPORTING TO SUBMETER MDMA'S

Enrollment information and reporting of errors or exceptions in the submeter CSV Spreadsheet format from PG&E to Submeter MDMA may be provided in CSV formats described below. These reporting CSV files will be transferred from PG&E to the Submeter MDMA using the outbound Data Transfer Methods described above.

A. Enrollment and Exception Reporting File Name Structure

The CSV files transferred by PG&E to Submeter MDMA shall use the following file naming structure:

ELECTRIC VEHICLE SUBMETERING METER DATA MANAGEMENT AGENT (MDMA) REGISTRATION AGREEMENT

“MDMA-DUNS_IOU-DUNS_EVSPENROLLMENTS_YYYYMMDDHHMMSS.CSV”
 “MDMA-DUNS_IOU-DUNS_EVSEXCEPTIONS_YYYYMMDDHHMMSS.CSV”

See the Spreadsheet File Name Structure section above for additional description of the file name components.

B. EVSP Enrollment Data Format:

Field Title	Field Description
Transaction Type	Valid values are: <ul style="list-style-type: none"> • “New Enrollment” • “Enrollment Termination” (Formatted alpha-numeric)
Customer UUID	Assigned by IOU after a Registered Submeter MDMA completes the Customer enrollment with the IOU. The “New Enrollment” transaction file is the vehicle to initially transmit the UUID to the MDMA. Submeter MDMA will receive a Customer UUID for every Unique Submeter Device Identifier.
Unique Submeter Device Identifier	The Unique Submeter Device Identifier (aka Submeter Serial Number on the Customer Enrollment Form) provided by the Submeter MDMA during the Customer enrollment process. This identifier is unique to each submeter and provided by the MDMA. This identifier is expected not to change during the Phase I pilot. In the event of a submeter replacement, MDMA shall report data for the replacement submeter using the previously assigned Customer UUID. (Formatted alpha-numeric maximum 17 characters)
Effective Date	First date IOU will accept Submeter data from the MDMA. (Formatted UTC Time, see terms and definitions)
Termination Date	Date of the last day the EV submetering data will be used for subtractive billing. A new enrollment will not have a Termination Data (blank field); an Enrollment Termination will have a Termination date. For the Phase I pilot an Enrollment Termination will be sent after the 11 th billing month. MDMA are expected to submit to IOU an Enrollment Termination, in the event their customer discontinues Submetering service. (Formatted UTC Time, see terms and definitions)

ELECTRIC VEHICLE SUBMETERING METER DATA MANAGEMENT AGENT (MDMA) REGISTRATION AGREEMENT

C. EVSP Exception Data Format:

If the IOU processing the MDMA's submetering data detects an error or exception within the spreadsheet data file, the IOU, at its own discretion, may elect to provide the MDMA with an exception notice. One method of sending an exception notice from the IOU to the submeter MDMA is an Exception Data file in the following format:

Field Title	Field Description
Customer UUID	Assigned by IOU after a Registered Submeter MDMA completes the Customer enrollment with the IOU.
Originating File Name	CSV file name provided by the Submeter MDMA which generated the exception (formatted MDMA-DUNS_IOU-DUNS_EVSP_YYYYMMDDHHMMSS.CSV)
Date Processed	Date Processed by PG&E. (Formatted UTC Time, see terms and definitions)
Exception Error	<p>A description of the error generated by the CSV file provided by the Submeter MDMA. Example exception-errors may include:</p> <ul style="list-style-type: none"> • Invalid Enrollment - Customer and/or Device Invalid. • Invalid Data - Negative Values not allowed. • Invalid Data - Partial Data Found. • Invalid Data - Data received that is before or after the enrollment. • Invalid Enrollment - Customer and/or Device Invalid. <p>(Formatted alpha-numeric, up to 255 characters)</p>

VI. ALTERNATIVE TRANSFER OPTION (GreenButton format)

The IOUs may offer an alternative data transfer option, but the option may not be required of Submeter MDMA for the Pilot. The Alternative option described in this document is the Extensible Markup Language (XML) Green Button format.

The expected XML data format for EV Submetering data is the forthcoming NAESB Green Button Connect My Data standard for bulk transfer (Bulk Standard). This forthcoming standard is under development by NAESB and expected to be completed in early 2014.

The XML format for the Bulk Standard is a modification of the NAESB Green Button Connect XML². The batch modifications to the Green Button Connect XML are outlined in the document titled Authorization and Bulk Transfer in Green Button Connect My

² See REQ.21 – Energy Services Provider Interface, NAESB 2010, http://www.naesb.org/ESPI_Standards.asp

Data.³ Section 2.5 of the document describes Use Case #13: Bulk Transfer of Multiple Authorized Resources.

Please note the majority of the document titled Authorization and Bulk Transfer in Green Button Connect My Data, relates to an OAuth Authorization method which is not utilized in the EV Submetering Pilot.

The current ESPI Schema is available at the following webpage:
http://naesb.org/termsfuse_form.asp?doc=espi.xsd

VII. End of Document

³ See:

http://osgug.ucaiug.org/sgsystems/OpenADE/Shared%2520Documents/Testing%2520and%2520Certification/GreenButtonTestPlan/referenceMaterial/GreenButtonAuthorization.docx&sa=U&ei=mhFYU9PoLYWrAT1jYHoCQ&ved=0CBsQFjAA&usg=AFQjCNEwqtjaVvo3Al6tgJlkeBnCt_3C1g



ELECTRIC SAMPLE FORM 79-1159
ELECTRIC VEHICLE SUBMETERING PILOT (PHASE 1)
CUSTOMER ENROLLMENT AGREEMENT

Sheet 1 (N)
(N)
(N)

Please Refer to Attached
Sample Form

(N)
(N)

ELECTRIC VEHICLE SUBMETERING PILOT (PHASE 1) CUSTOMER ENROLLMENT AGREEMENT

I. Customer Enrollment Agreement - Electric Vehicle Submetering Pilot (Phase 1)

TERMS AND CONDITIONS

This Participation Agreement (“Agreement”), effective upon the date a Customer Enrollment Agreement is submitted, is entered into between Pacific Gas and Electric Company (“PG&E”), a California corporation, with principal offices located at 77 Beale St, San Francisco CA 94105, and customers that receive electric service from PG&E (hereafter, “Participant,” “Customer,” or “you”). PG&E and Participant are referred to jointly as “Parties.”

A. PURPOSE AND OVERVIEW OF THE PHASE 1 PILOT

PG&E is conducting a temporary Plug-in Electric Vehicle (EV) Submeter Pilot. To participate in Phase 1 of the Pilot, Customers must read and agree to the terms and conditions of this Agreement and be eligible for an applicable separately-metered EV Rate. The customer enrollment process is described in the Customer Enrollment Agreement.

The applicable EV Rates require a separate meter to measure only the energy used to charge electric vehicles, which will be charged at a different rate than the rest of your residence or business. For this Pilot, the separate meter must be a submeter owned by the Customer or by a third party. This Pilot is available to eligible customers within all of PG&E’s service districts and limited to 500 submeters on a first-come, first-served basis. Customers on a Net Energy Metering (NEM) rate are eligible but will be limited to 20% of the participation cap.

As a Participant in this Pilot, you agree to install an eligible Customer- or third party-owned submeter that meets the California Public Utilities Commission (CPUC)--approved Standards for Metering Products (accuracy and intervals) for the exclusive use of tracking the energy used to charge your electric vehicle to be billed on the applicable submeter Rate. Your Submeter Meter Data Management Agent (Submeter MDMA) will be required to collect and transmit your submeter usage data to PG&E as scheduled in the required format in compliance with the Submeter MDMA Performance Requirements (copy available upon request). You will retain sole responsibility for paying the entire monthly bill including EV and other charges regardless of any agreement between you and your Submeter MDMA.

This Pilot will begin on September 1, 2014. Any Customer enrolled in the Pilot will be eligible to participate for no more than 12 consecutive billing cycles; however the Customer may terminate participation in the pilot at any time. When Pilot participation ends, the submeter Rate will be terminated for the submetered account. Thereafter, any future electric vehicle charging will be billed at the Customer’s otherwise applicable tariff rate for the primary meter. Customers are encouraged to contact PG&E to discuss available electric vehicle rates.

In addition, you agree to provide an independent evaluator paid by the Investor Owned Utilities (IOUs) with feedback on your experiences with Pilot participation, including enrollment, equipment installation, and billing. In accordance with the CPUC’s instruction, this survey will not be burdensome. Additionally, you may be required to provide access to your home or facility for the evaluator to perform tests on your submeter. Such submeter testing is only required of five percent of participating customers. If your submeter is selected for testing, tests will be arranged at a convenient time, and your MDMA may be present. No adjustments to your primary or submetered accounts billed over the course of your participation in the Pilot will be made regardless of whether the submeter is found to violate CPUC meter accuracy standards.

ELECTRIC VEHICLE SUBMETERING PILOT (PHASE 1) CUSTOMER ENROLLMENT AGREEMENT

B. ELIGIBILITY

To be eligible to participate in the Pilot, Participants must:

1. Have an active PG&E service account;
2. Have an eligible PG&E interval data recorder (IDR) meter;
3. Charge a plug-in electric vehicle at that account;
4. Have an approved submeter installed for the exclusive use of tracking the energy used to charge your electric vehicle;
5. Be a Bundled Service Customers or Community Choice Aggregation (CCA) customer (i.e. does not participate in Direct Access (DA) or Community Aggregation (CA) service);
6. Not participate in either the Balance Payment Plan or Automatic Payment Plan options offered by PG&E for the duration of their participation in this pilot if their submeter MDMA provides remittance payments to PG&E. If participant is already enrolled in one of these plans, they must unenroll for just the duration of their participation in this pilot.

C. DUTIES AND OBLIGATIONS OF PG&E:

PG&E will:

1. Enroll you in the Pilot beginning with your next PG&E billing period, provided that you or your Submeter MDMA has submitted your complete Customer Enrollment Agreement at least five (5) business days prior to the end of your current billing period.
2. Receive your submeter EV usage information from your Submeter MDMA;
3. Use this information to separately calculate your usage for charging your electric vehicle on the applicable EV rate and the rest of your home or business usage on your current rate. Accuracy of your bill is dependent on receiving timely and accurate information from your Submeter MDMA and the accuracy of the submeter itself.
4. Late or incomplete EV submeter usage information will be disregarded (treated as if there was no EV usage for the time interval(s) involved) only where the Submeter MDMA action is the cause of the data transmission failure. As a result, any actual EV charging during these intervals will be billed at your current rate and will not be adjusted in any future bills if any EV usage data is subsequently received.
5. Provide you a summary bill reflecting all of your charges, including your submetered EV usage;
6. After 12 consecutive billing cycles PG&E will close your submeter account. Your entire usage will then be charged at your otherwise applicable rate.
7. Commercial/Industrial customers with submeter usage billed under a Time-of-Use tariff, shall receive a payment applied as a bill credit of \$20/month per submeter. PG&E may petition the CPUC's Energy Division to terminate this ongoing customer payment, with no cost, liability, or further obligation, if Submeter MDMA fails to meet its performance requirements. These payments are applicable only for Phase 1 of the Pilot, which ends after 12 billing cycles for a customer participant and no later than February 28, 2016.

ELECTRIC VEHICLE SUBMETERING PILOT (PHASE 1) CUSTOMER ENROLLMENT AGREEMENT

D. DUTIES AND OBLIGATIONS OF PARTICIPANT:

Participant or its agent will:

1. Install or have installed a qualified submeter¹ for the exclusive use of tracking the energy used to charge your electric vehicle;
2. Own the EV submeter and be entirely responsible for its ongoing maintenance and services.
3. Request the submeter to be placed on an applicable EV rate schedule for its electric vehicle charging usage during the Pilot.
4. Have a Submeter MDMA provide PG&E with your submeter usage data as scheduled in the required format in compliance with the MDMA performance requirements (copy available upon request).
5. The Submeter MDMA must report a customer drop out or change of address to PG&E within 10 days.

Participant will:

1. Provide an independent third party evaluator with feedback on your experiences with Pilot participation, including enrollment, equipment installation, and billing.
2. Agree that the EV submeter and submeter usage information may not meet the accuracy standards or metering tariff standards required by PG&E for general billing purposes, and waive all rights and remedies related to such accuracy standards and metering tariffs, including any information provided to Participant based on such submeter usage or other information through other PG&E programs or services. In addition, for purposes of the Pilot, Participant's EV usage will be billed solely based on the submeter data provided by the Submeter MDMA, which is solely responsible for the accuracy and timely delivery to PG&E of submeter usage information.
3. If selected, provide access and assistance to facilitate random meter testing by an independent 3rd Party Evaluator.
4. In the event the Participant has a change of address, be allowed to re-enroll for the remainder of the Participant's pilot term. For customers that relocate within the service territory: 1) their MDMA must submit a separate Customer Enrollment Agreement for their new service address at least five days before the end of the current billing period; and 2) they are eligible to reenroll in the Pilot after the Enrollment Period. Similarly, for customers that relocate to another IOU's service territory, they may reenroll if PG&E's 500 submeter limit has not been met.
5. Retain sole responsibility for paying the entire monthly bill including EV and other charges regardless of any agreement between you and your Submeter MDMA.

E. TERMINATION:

1. This Agreement shall be effective for no more than 12 consecutive billing cycles after Pilot enrollment.

¹ The IOUs included CPUC's Energy Division's Temporary Submetering Performance and Data Communication Requirements in EV Submeter Pilot Phase 1 Performance Standards for Metering and Meter Data Management Agents.

ELECTRIC VEHICLE SUBMETERING PILOT (PHASE 1) CUSTOMER ENROLLMENT AGREEMENT

2. PG&E may petition the CPUC's Energy Division to terminate this Agreement, with no cost, liability, or further obligation, if Submeter MDMA fails to meet Submeter MDMA performance requirements for three consecutive months.
3. PG&E shall have the right to modify or immediately terminate this Agreement upon written notice to Participant if PG&E determines this Agreement would be inconsistent with, or violate any rule, regulation, or policy of the CPUC or other applicable laws or where Participant fails to satisfy its obligations as set forth in Section D above.
4. Participant shall notify PG&E promptly if Participant no longer desires to participate in the Pilot.
5. PG&E will notify the Participant if the Submeter MDMA service is terminated and the Participant may complete the remainder of the pilot subject to completing the requirements to re-enroll with an alternative Submeter MDMA.

F. NOTICES

PG&E will provide notices to Customer about this Pilot by email or mail to the customer name and address listed on the Customer Enrollment Agreement. Notices from customer to PG&E hereunder shall be in writing and must be either personally delivered; sent by facsimile transmission; or sent by registered or certified mail, postage prepaid, return receipt requested, as follows:

To PG&E:

PG&E Records Unit
PO Box 8329
Stockton, CA 95208
1-800-PGE-5000 (1-800-743-5000)

To Participant: Customer name and address as identified on PG&E customer account.

G. LIMITATION OF LIABILITY:

1. Participant shall indemnify, hold harmless and defend PG&E and its directors, employees, agents, and contractors from any and all costs, liabilities, claims and expenses, including those from death or injury to any person or from a loss or damage to any real, personal or other property, arising from, or in connection with, this Agreement, unless solely caused by the negligence or willful misconduct of PG&E.
2. In no event shall PG&E be liable for any incidental, indirect, special, consequential, or punitive damages (including lost income), for any cause of action, whether in contract or tort, arising in any manner from this Agreement or the performance or non-performance of its obligations under this Agreement, regardless of the cause or foreseeability thereof. Unless solely caused by PG&E's negligence or willful misconduct, and except as expressly stated otherwise in this Agreement, PG&E shall not be liable for any costs, liabilities, claims or expenses in connection with this Agreement, including any loss or damage to any Participant's property. Further, the amount of PG&E's aggregate liability or damages shall not exceed ten thousand dollars (\$10,000.00).
3. Participant acknowledges that PG&E has not promised Participant energy or bill savings from use of the EV submeter and/or participation in the Pilot.

ELECTRIC VEHICLE SUBMETERING PILOT (PHASE 1) CUSTOMER ENROLLMENT AGREEMENT

4. Participant will hold PG&E harmless for its participation in and use of any other PG&E programs or features during the course of this Pilot. Programs such as My Account and Green Button may be available to customers participating in this Pilot but the data may not be all inclusive.
5. Participant will hold PG&E harmless for its inability to participate in PG&E's Automatic Payment and Balance Payment Plan, during the course of this Pilot.

H. WARRANTY DISCLAIMER:

PG&E makes no warranties, whether statutory, express, or implied, including, but not limited to, any warranties regarding the safety, design, construction, function, performance, fitness for a particular purpose, or placement of customer-owned submeters, or any benefits to be derived from the placement, operation, or use of the customer owned submeters.

I. APPLICABLE LAW:

This Agreement shall be interpreted, governed and construed under the laws of the State of California, without reference to its choice of law provisions, and it is subject to modifications by the California Public Utilities Commission in the exercise of its jurisdiction.

J. ENTIRE AGREEMENT:

This Agreement contains the entire agreement and understanding between the Parties related to Participant's participation in the Pilot, except for additional terms and conditions that are subsequently made a part of PG&E's tariffs as part of the further implementation of this Pilot. This Agreement supersedes all prior representations and discussions between PG&E and Participant pertaining to its subject matter. This agreement at all times shall be subject to such modifications as the California Public Utilities Commission may direct from time to time in the exercise of its jurisdiction.

K. APPLICABLE PG&E RATE FOR PHASE ONE OF THIS PILOT:

1. Where the Primary Meter qualifies for Residential Service:

- *Rate Schedule EV, option B*

2. Where the Primary Meter qualifies for Commercial/Industrial Service

- Rate Schedule A1 (customers < 75 kW)

- Rate Schedule A10 (customers > 75 kW < 500 kW)

- Rate Schedule A6 (customers with demands < 500 kW)

Rate Schedule NEM may be applied as a "rider" to all the schedules above and would be applicable to customers with photovoltaic (PVs) meeting the tariff requirements.

More detail on these rates can be found at <http://www.pge.com/tariffs/ERS.SHTML#ERS>

ELECTRIC VEHICLE SUBMETERING PILOT (PHASE 1) CUSTOMER ENROLLMENT AGREEMENT

Customer Enrollment Agreement Instructions

- STEP 1:** Read the Plug-In Electric Vehicle Submetering Pilot (Phase 1) Participation Agreement in its entirety
- STEP 2:** Install an eligible Submeter(s), if not already installed, owned or leased by you or your Electric Vehicle Service Provider (EVSP)
- STEP 3:** Retain the services of a PG&E-approved Submeter Meter Data Management Agent (Submeter MDMA)
- STEP 4:** Complete this Customer Enrollment Agreement (Your Submeter MDMA may assist you with completing the form)
- STEP 5:** Sign the last page of this form (Section 4) to authorize the Entire Agreement
- STEP 6:** Have your Submeter MDMA sign the last page of this form (Section 5) to authorize the Entire Agreement
- STEP 7:** You or Your Submeter MDMA must submit this Customer Enrollment Agreement to PG&E for processing
- Retain a copy of the completed Agreement for your records
 - You or your Submeter MDMA must submit this Agreement at least five (5) business days before end of your billing period for you to be enrolled in the next billing period
 - Form may be submitted to PG&E at the contact below:

PG&E Records Unit
PO Box 8329
Stockton, CA 95208
1-800-PGE-5000 (1-800-743-5000)

- Commercial Customers supported by a PG&E Representative may be provided this form directly

Processing:

PG&E will review the Agreement and reply as follows:

- If Agreement is incomplete or inaccurate: You and your Submeter MDMA are notified. You and your Submeter MDMA complete Agreement and resubmits to PG&E
- If Agreement is complete: Enrollment process continues. Upon completion, PG&E will inform you and your Submeter MDMA when your EV Submetering Pilot (Phase 1) participation begins.

ELECTRIC VEHICLE SUBMETERING PILOT (PHASE 1) CUSTOMER ENROLLMENT AGREEMENT

Authorization To Release Customer information And Act On A Customer's Behalf

INFORMATION, ACTS AND FUNCTIONS AUTHORIZED:

By signing this form to add the customer service account(s) set forth below, I, Customer, authorize my Agent (the Submeter MDMA) to act on my behalf to request and receive billing, usage, and meter data for the account(s) specified herein, to the extent such billing, usage, and meter data is associated with my dates of enrollment in the Pilot. This authorization also provides authority to the Submeter MDMA to act on my behalf of request rate changes necessary to participate in the Pilot.

I (Customer) authorize my Submeter MDMA to act on my behalf to perform the following selected specific acts and functions:

- 1) Yes No Request rate changes necessary for me to participate in the Electric Vehicle Pilot (Phase 1).
- 2) Yes No Receive a copy of my monthly PG&E bill for the duration of my participation in the Electric Vehicle Pilot (Phase 1).

Authorization is given for the period commencing with the date of execution of this Agreement until either the pilot ends or I decide to terminate my participation. If I, Customer, wish to release additional information to my agent, Submeter MDMA, or extend the timeframe during which this information will be released, I acknowledge that I must complete, sign and submit PG&E Form (79-1159).

Yes No I (MDMA) will provide PG&E remitted payments to be credited toward (Customer's) account as part of my submetering service.

I understand that if my submeter MDMA provides remittance payments to PG&E, I cannot participate in either the Balance Payment Plan or Automatic Payment Plan options offered by PG&E for the duration of my participation in this Pilot. If I am already enrolled in one of these plans, I must unenroll for the duration of my participation in this Pilot.

RELEASE OF ACCOUNT INFORMATION:

I (Customer), _____ (print name of authorized signatory), declare under penalty of perjury under the laws of the State of California that I am authorized to execute this document on behalf of the Customer of Record listed on this form and that I have authority to financially bind the Customer of Record. I further certify that my Submeter MDMA, _____ (print name of Submeter MDMA), has authority to act on my behalf and request the release of information for the accounts listed on this form and perform the specific acts and functions listed above, including rate changes. I understand that PG&E reserves the right to verify any authorization request submitted before releasing information or taking any action on my behalf. I authorize PG&E to release the requested information on my account or facilities to the above Submeter MDMA who is acting on my behalf regarding the matters listed above. I hereby release, hold harmless, and indemnify PG&E from any liability, claims, demands, causes of action, damages, or expenses resulting from: 1) any release of information to my Submeter MDMA pursuant to this Authorization; 2) the unauthorized use of this information by my Submeter MDMA; and 3) from any actions taken by my Submeter MDMA pursuant to this Authorization, including rate changes. I understand that I may cancel this authorization at any time by submitting a written request.

REVOCACTION:

Customer may cancel this Authorization at any time by contacting PG&E at (415) 973-0335. Consent from the Submeter MDMA is not required for Customer to cancel this Authorization. To the extent the



ELECTRIC VEHICLE SUBMETERING PILOT (PHASE 1) CUSTOMER ENROLLMENT AGREEMENT

Pilot expires or otherwise terminates, the Authorization granted herein will automatically be revoked regardless of whether the Customer submits a request to cancel the Authorization.

Entire Agreement This Agreement, together with the applicable EV Rate and Plug-in Electric Vehicle Submetering Pilot Terms and Conditions, contains the entire agreement and understanding between the Parties related to Participant's participation in the Pilot, except for additional terms and conditions that are subsequently made a part of PG&E's tariffs as part of the further implementation of this Pilot. This Agreement supersedes all prior representations and discussions between PG&E and Participant pertaining to its subject matter.

Section 1 Property Type (Check one)

- Detached Home (Residential)
 Multi-family Dwelling/Attached Home (Residential)
 Commercial (Business)

Section 2 PG&E Customer Account Information

 Customer
 Account Number *(Appears below your name on your PG&E bill)*

 Primary PG&E Electric Meter ID Number

Print First and Last Name *(As it appears on the PG&E bill)*

Customer Account Street Address

City	State	Zip
------	-------	-----

Telephone Number	Email Address <i>(To be used for communications regarding Pilot)</i>
------------------	--

<i>If Commercial Account:</i> Business Name	Contact Name	Title
---	--------------	-------

* *Alternate Mailing Address (Provide if applicable):*

Street Address

City	State	Zip
------	-------	-----

**ELECTRIC VEHICLE SUBMETERING PILOT
(PHASE 1)
CUSTOMER ENROLLMENT AGREEMENT**

Section 3 Submeter Information *(If customer elects to have multiple Submeters, up to 19, please attach separate sheet for each submeter. Note: Multiple level submeters not allowed.)*

Submeter unique identifier *(Appears on the Submeter)*

Submeter Provisioning

Date Submeter(s) installed:

Expected Level of EV Charging (Level 1, 2 or 3)



ELECTRIC VEHICLE SUBMETERING PILOT (PHASE 1) CUSTOMER ENROLLMENT AGREEMENT

Section 4 Customer & Submeter MDMA Authorization

[This form must be signed by someone who has authority to financially bind the customer]
[for example, CFO of a company or City Manager of a municipality]

_____ Authorized Customer Signature	_____ Print Name
_____ Date	_____ Phone Number
_____ City and State Where Executed	

I (**Submeter MDMA**), hereby release, hold harmless, and indemnify PG&E from any liability, claims, demand, causes of action, damages, or expenses resulting from the use of customer information obtained pursuant to this authorization and from the taking of any action pursuant to this authorization, including rate changes provided such utility action is consistent with applicable CPUC orders, tariffs and regulations.

_____ Authorized Agent Signature	_____ Company Name
_____ Agent Name (Print)	_____ Title
_____ Street Address	_____ Phone Number
_____ City, State, ZIP	_____ Email Address
_____ Date	_____ City and State Where Executed



ELECTRIC TABLE OF CONTENTS

Sheet 1

TABLE OF CONTENTS

SCHEDULE	TITLE OF SHEET	CAL P.U.C. SHEET NO.	
	Title Page.....	34254-E*	(T)
	Rate Schedules.....	33833,33834,33835,33836, 34255 ,33838,32705,31541,33839-E	(T)
	Preliminary Statements.....	33840,32706,30376,32544,32398,33893,33670,33942-E	
	Rules.....	33841,32425,33725-E	
	Maps, Contracts and Deviations.....	33253-E	
	Sample Forms.....	32777,32429,32726,33726,32504,33654,33209,32506, 34256* ,32437,32508,32439-E	(T)

(Continued)

Advice Letter No: 4458-E
 Decision No. E-4651

Issued by
Brian K. Cherry
 Vice President
 Regulatory Relations

Date Filed July 10, 2014
 Effective _____
 Resolution No. _____



ELECTRIC TABLE OF CONTENTS
RATE SCHEDULES

Sheet 6

SCHEDULE	TITLE OF SHEET	CAL P.U.C. SHEET NO.
	Rate Schedules	
	Other	
S	Standby Service	28399,28400,33829,31125,28238,32515,32516,28241*-28243,31126,32517,30291,33430,28401-28404-E
E-CHP	Combined Heat and Power PPA	30809-30813-E
E-CHPS	Combined Heat and Power Simplified PPA	30814-30817-E
E-CHPSA	Combined Heat And Power Simplified 500 kW PPA	30825-30828-E
E-DCG	DCG Departing Customer Generation, CG	30168*,30169*,23667,30697,30698,28954,28607,23252,23253,28405,23255-E
E-DEPART	Departing Customers	28859-E
E-NWDL	New WAPA Departing Load	28581,28582,28862,28863,27448-27452-E
E-NMDL	New Municipal Departing Load	27453,32097,32098,32099, 29557,29558,29559,29560,29561,29562,29563,29564-E
E-LORMS	Limited Optional Remote Metering Services	20194-E
E-SDL	Split-Wheeling Departing Load	28588,28589,28867,28868,27459-27464-E
E-TMDL	Transferred Municipal Departing Load	27465,28869,28870,25883,28961,28594,28608,25887,25888,25889,25890,25891-E
NEM	Net Energy Metering Service	33897**,33898*,33899*,33900*,33901*-33904*,33905,33906,33907*-33918*-E
NEMFC	Net Energy Metering Service For Fuel Cell Customer-Generators	32805,33919,32442-32448-E
NEMBIO	Net Energy Metering Service for Biogas Customer-Generators	27253-27255,26140,27256,26142,27257,26144,27258-E
NEMCCSF	Net Energy Metering Service for City and County of San Francisco	28176,28177,28178,28179-E
NEMV	Virtual Net Metering for a Multi-Tenant or Multi-Meter Property Served at the Same Service Delivery Point	31546,31547,33920*,31549,32806,31551,33921,31553-31562,32807,31564,31565,33215,33216,31568,-E
NEMVMASH	Net Energy Metering – Virtual Net Energy Metering	31625,33922*,30516,33923, 33924,33925,31630-31637,33217,31639,33676,-E
E-ERA	Energy Rate Adjustments	33779-33782-E
RES-BCT	Schedule for Local Government Renewable Energy Self-Generation Bill Credit Transfer	30752,30753,29208,32216-32219,29213,32220-E
E-OBF	On-Bill Financing Balance Account (OBFA)	29490-29492-E
E-SOP	Residential Electric SmartMeter™ Opt-Out Program	31330, 31454-E
PEVSP	Plug-In Electric Vehicle Submetering Pilot – Phase 1	34247-34251-E (N)

(Continued)

Advice Letter No: 4458-E
 Decision No. E-4651

Issued by
Brian K. Cherry
 Vice President
 Regulatory Relations

Date Filed July 10, 2014
 Effective _____
 Resolution No. _____



ELECTRIC TABLE OF CONTENTS
SAMPLE FORMS

Sheet 31

FORM	TITLE OF SHEET	CAL P.U.C. SHEET NO.
Sample Forms Miscellaneous (Cont'd)		
79-966	Agreement for Schedule E-OBMC	32491-E
79-993	Agreement for Schedule E-POBMC	27810-E
79-995	Agreement for Customers Taking Service on Schedule E-31	33014-E
79-1006	Municipal Departing Load - Nonbypassable Charge Statement	32124-E
79-1013	New Municipal Departing Load Nonbypassable Charge Statement	33015-E
79-1024	Dual Supply Customer Authorizing Agreement	33017-E
79-1029	Community Choice Aggregator (CCA) Service Agreement	27499-E
79-1031	Community Choice Aggregator (CCA) Non-Disclosure Agreement.....	32646-E*
79-1039	Rate Schedule Selection Customer Agreement	33019-E
79-1040	Non-Disclosure and Use of Information Agreement	33020-E
79-1050	Contract for Customer Provision of Physically Assured Load Reduction.....	33021-E
79-1075	Notice to Add or Delete Customers Participating in the Capacity Bidding Program.....	32495-E
79-1076	Agreement for Aggregators Participating in the Capacity Bidding Program	32496-E
79-1079	Agreement for Aggregators Participating in the Base Interruptible Load Program	32497-E
79-1080	Notice to Add or Delete Customers Participating in the Base Interruptible Program	32498-E
79-1102	Section 399.20 Power Purchase Agreement.....	32140-E
79-1103	Small Renewable Generator Power Purchase Agreements	32141-E
79-1118	General Off-Bill and On-Bill Financing Loan Agreement	32499-E
79-1120	Standard Contract for Eligible CHP Facilities	30818-E
79-1121	Power Purchase and Sales Agreement - Contract For Eligible CHP Facilities with Net Output of Not Greater Than 5 MW	32148-E
79-1126	Off-Bill and On-Bill Financing Loan Agreement for Self-Installed Projects	32500-E
79-1127	Agreement to Perform Tariff Schedule Related Work, Rule 20A General Conditions	29717-E
79-1128	Affidavit in Support of Customer Claim as Qualifying as a Small Business Customer under Government Code Section 14837*	33026-E
79-1138	Power Purchase and Sale Agreement - Contract For Eligible CHP Facilities with Power Rating of Less Than 500 KW	32150-E
79-1141	Agreement for Schedule A-15 Fixed Usage Estimate	33683-E
79-1143	California State Government Customers On-Bill Financing Loan Agreement	32501-E
79-1149	Election to Withdraw From the Capacity Bidding Program Form.....	32481-E
79-1150	Renewable Market Adjusting Tariff Power Purchase Agreement	32749-E
79-1158	Electric Vehicle Submetering Meter Data Management Agent (MDMA) Registration Agreement	34252-E (N)
79-1159	Electric Vehicle Submetering Pilot (Phase 1) Customer Enrollment Agreement	34253-E* (N)

(Continued)

Advice Letter No: 4458-E
 Decision No. E-4651

Issued by
Brian K. Cherry
 Vice President
 Regulatory Relations

Date Filed July 10, 2014
 Effective July 10, 2014
 Resolution No. _____

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Tariff				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
1	Sheet 1	This Schedule is applicable to domestic bundled service customers on Residential and Commercial rate schedules, except for Street-Lighting rate schedules , who charge a plug-in electric vehicle (PEV) which is connected to the same meter that registers usage of the customer’s primary load and where the connected PEV load is measured by a customer or third-party owned PEV submeter (submeter load) and subtracted from the customer’s primary meter and billed on an applicable UTILITY PEV rate schedule.	This Schedule is applicable to bundled service customers and Community Choice Aggregation customers, as defined in PG&E’s Electric Rule 23, on Residential and Commercial rate schedules, who charge a plug-in electric vehicle (PEV) which is connected to the same meter that registers usage of the customer’s primary load and where the connected PEV load is measured by a customer or third-party owned PEV submeter (submeter load) and subtracted from the customer’s primary meter and billed on an applicable PG&E PEV rate schedule.	Removal of “domestic” – error, should not be there. Included “Industrial” as applicability – error, should be there. Included CCA - FINAL RESOLUTION pg 12 & 13, section (a) Removed Streetlight applicability - Streetlight schedules and outdoor lighting schedules are not considered residential or commercial rates schedules
2	Sheet 1	This schedule contains provisions to implement the first phase of a two-phase PEV Submetering Pilot (Pilot) to evaluate customer demand for and benefits of a PEV submetering arrangement. The first phase of the Pilot is intended to evaluate billing integration and communication standards associated with submetered data.		Deleted. This information is already contained in the title of the tariff.
3	Sheet 1	A one-time enrollment payment of \$200 will be provided to the Submeter MDMA for each	A one-time enrollment payment of \$210 will be provided to the Submeter MDMA for	Changed a one-time enrollment fee from \$200 per customer to \$210 per

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Tariff				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
		<p>participant enrolled in this Pilot. This payment will be made by the UTILITY to the Submeter MDMA 60 days after the participant’s enrollment. Additionally, \$10 per month will be provided to the Submeter MDMA for performance of its data management and exchange responsibilities in compliance with Pilot requirements for each month the customer remains on the Pilot. These payments will be made by the UTILITY to the Submeter MDMA within 60 days after the end of each quarter that customer has participated.</p>	<p>each participant enrolled in this Pilot. This payment will be made by PG&E to the Submeter MDMA within 60 days after the participant’s completed enrollment. Additionally, \$17.50 per month will be provided to the Submeter MDMA for performance of its data management and exchange responsibilities in compliance with Pilot requirements for each month the customer remains on the Pilot. These payments will be made by PG&E to the Submeter MDMA within 60 days of the first two successful billing cycles for a given customer, and within 30 days after billing cycles thereafter.</p>	<p>customer and a monthly submetering data management performance payment from \$10/month per customer to \$17.50/month per customer – FINAL RESOLUTION pg 32-34, section (6b) and section (6c). Inserted “completed” after “60 days after the participant’s enrollment.”</p>
4	Sheet 1	<p>These incentive payments are applicable only for Phase 1 of the Pilot, which ends after 12 billing cycles for a customer participant and no later than October 31, 2015.</p>	<p>These incentive payments are applicable only for Phase 1 of the Pilot, which ends after 12 billing cycles for a customer participant and no later than February 28, 2016.</p>	<p>Updated Phase 1 Pilot completion date to February 28, 2016 – Revised Submetering Roadmap Pilot Timeline in FINAL RESOLUTION pg 47.</p>
5	Sheet 2		<p>Commercial/Industrial customers with submeter usage billed under a Time-of-Use tariff, shall receive a payment applied as a bill credit of \$20/month per submeter. PG&E may petition the CPUC’s</p>	<p>Insert new section for Commercial/Industrial Time-of-Use Tariff Customer Payment per FINAL RESOLUTION pg. 35</p>

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Tariff				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
			Energy Division to terminate this ongoing customer payment, with no cost, liability, or further obligation, if Submeter MDMA fails to meet its performance requirements. These payments are applicable only for Phase 1 of the Pilot, which ends after 12 billing cycles for a customer participant and no later than February 28, 2016.	
6	Sheet 2 – Special Condition 1	Phase 1 begins on May 1, 2014, and ends 18 months thereafter, on October 31, 2015.	Phase 1 duration is 18 months beginning September 1, 2014 and ending February 28, 2016.	Updated Phase 1 Pilot completion date to February 28, 2016 – Revised Submetering Roadmap Pilot Timeline in FINAL RESOLUTION pg 47.
7	Sheet 2 – Special Condition 2	For each Utility, on a first-come, first-served basis, a maximum of 500 submeters may be enrolled in each phase of the Pilot. Of the 500 submeters, 50 submeters may be related to NEM accounts.	On a first-come, first-served basis, a maximum of 500 submeters may be enrolled in each phase of the Pilot. Of the 500 submeters, a limit of 100 submeters may be related to NEM accounts.	Deleted “For each Utility” Updated number of NEM accounts from 50 (10%) to 100 (20%) - FINAL RESOLUTION pg 15 & 16, section (d).
8	Sheet 2 – Special Condition 3	Customers may disenroll from the Pilot at any time, but may not re-enroll in Phase 1 of the Pilot.	Customers may unenroll from the Pilot at any time, but may not re-enroll in Phase 1 of the Pilot unless they are relocating in one of the Investor Owned Utility’s (IOU’s) service territories as discussed in Special Condition 9	Changed ‘disenroll’ to ‘unenroll’ -FINAL RESOLUTION pg 16 & 17, section (f).

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Tariff				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
9	Sheet 2 – Special Condition 4	The Submeter MDMA must notify UTILITY of a customer’s enrollment by submitting a completed PEV Submetering Pilot Customer Enrollment Form [Form xx-xxx] at least 5 business days prior to the start date of the customer’s next billing cycle.	The Submeter MDMA must notify PG&E of a customer’s enrollment by submitting a completed Form 79-1159, PEV Submetering Pilot Customer Enrollment Agreement (Customer Enrollment Agreement - Electric Vehicle Submetering Pilot (Phase 1)) at least 5 business days prior to the start date of the customer’s next billing cycle.	Assigned Submetering Pilot Customer Enrollment Form No. 79-1159.
10	Sheet 2 – Special Condition 5	The enrollment period is May 1 – October 1, 2014, or until the maximum of 500 submeters is reached, whichever is earlier (Enrollment Period).	The enrollment period is for the first 6 months of the Phase 1 Pilot, September 1, 2014 – February 28, 2015 or until the maximum of 500 submeters is reached, whichever is earlier (Enrollment Period).	Included total duration of enrollment period. Updated enrollment period dates – Revised Submetering Roadmap Pilot Timeline in FINAL RESOLUTION pg 47.
11	Sheet 2 – Special Condition 6	The standards for qualified meters are contained in the Submeter MDMA Performance Standards.	The standards for qualified meters are contained in the EV Submeter Phase 1 Performance Standards for Metering and Meter Data Management Agents.	Updated document name from “Submeter MDMA Performance Standards” to “EV Submeter Phase 1 Performance Standards for Metering and Meter Data Management Agents.”
12	Sheet 3 – Special Condition 6	The Submeter MDMA is required to submit a completed Submeter MDMA Registration Agreement (Form xxxx) for approval to participate in this pilot	The Submeter MDMA is required to submit a completed Submeter MDMA Registration Agreement (Form 79-1158) for approval to participate in this pilot	Assigned Submeter MDMA Registration Agreement Form No. 79-1158. Updated MDMA approval dates – Revised Submetering

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Tariff				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
		prior to April 1, 2014.	by July 11, 2014.	Roadmap Pilot Timeline in FINAL RESOLUTION pg 47. Replaced “prior to” with “by”.
13	Sheet 3 – Special Condition 7	All customers served under this Schedule will be provided separate primary bill charges and PEV submeter bill charges on a single billing statement.	All customers served under this Schedule will be provided separate primary meter billing amounts and PEV submeter billing amounts, in their electric bills.	Deleted “on a single billing statement. The CCA billing agent will need to put the submetered usage on the CCA bill.
14	Sheet 3 – Special Condition 7	The customer’s primary metered usage and demand, if applicable, are billed according to the customer’s current tariff, and the customer’s submeter PEV usage and demand, are billed according to the applicable residential or non-residential/commercial PEV rate schedule.	The customer’s primary metered usage and demand, as applicable, are billed according to the customer’s current tariff, and the customer’s submeter PEV usage and demand, as applicable, are billed according to the applicable residential or non-residential / commercial PEV rate schedule.	Changed “If applicable” to “as applicable” - SDG&E will be billing demand charges “as applicable not just max demand.
15	Sheet 3 – Special Condition 7	The primary meter billed amount calculation excludes the PEV submeter usage and demand.	The primary meter billed amount calculation excludes the PEV submeter usage and demand, as applicable.	Included “as applicable”. - SDG&E will be billing demand charges “as applicable not just max demand.
16	Sheet 3 – Special Condition 9	The Submeter MDMA or customer must report all Pilot program drop-outs to UTILITY within 5 business days of disenrollment from the Pilot. As of the effective date of the drop out or change of address, UTILITY will default to using the current tariff of	The Submeter MDMA or customer must report all Pilot program drop-outs or change of address to PG&E within ten business days of disenrollment from the Pilot. As of the effective date of the drop out or change of address, PG&E will default to using the	Changed 5 business days to 10 business days. Included Customers re-enrollment clause in case of change of address - FINAL RESOLUTION pg 16-17, section (f) and FINAL RESOLUTION, pg 40, sec (iii).

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Tariff				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
		<p>the primary meter for all load at that premises. UTILITY will effectuate any required rate and billing changes coincident with the start of the next billing cycle. Customers who drop out of this Pilot after enrollment will continue to be counted against the enrollment cap.</p>	<p>current tariff of the primary meter for all load at that premises. PG&E will effectuate any required rate and billing changes coincident with the start of the next billing cycle. Customers who drop out of this Pilot after enrollment will continue to be counted against the enrollment cap. For customers that are involuntarily disenrolled due to termination of submetering service by Submeter MDMA, PG&E will notify the customers of the involuntary termination and allow the customers to complete the remainder of their Pilot Participation Period subject to completing the requirements to re-enroll with an alternative Submeter MDMA. For customers that relocate within the service territory: 1) their MDMA must submit a separate Customer Enrollment Agreement for their new service address at least five days before the end of the current billing period; and 2) they are eligible to reenroll in the Pilot after the Enrollment Period. Similarly, for customers that relocate</p>	

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Tariff				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
			to another IOU's service territory, they may reenroll if the IOU's 500 submeter limit has not been met.	
17	Sheet 4 – Special Condition 10	Customers participating in this Pilot will not be eligible to participate in UTILITY's Level Pay Plan (LPP), Direct Payment (DP) Option, or other programs such as My Account, Green Button, Budget Assistant, PTR, or Rate Analyzer.	If a customer's Submeter MDMA remits payments directly to PG&E on the customer's behalf, the customer cannot participate in either the Balance Payment Plan or Automatic Payment Plan options offered by PG&E for the duration of the customer's participation in this pilot. Customers already enrolled in these plans must unenroll for the duration of their participation in this pilot	Updated existing Level Pay Plan (Balance Payment Plan for PG&E) and Direct Pay Plan (Automatic Payment Plan for PG&E) Customers' eligibility clause - FINAL RESOLUTION pg 17-18, section (f)
18	Sheet 4 – Special Condition 11		Programs such as My Energy and Green Button may be available to customers participating in this pilot but the data accuracy of these programs will be contingent upon the availability and the timeliness of the submeter data.	Modified language on IOU programs - FINAL RESOLUTION pg 22& 23 section (e)
19	Sheet 4 – Special Condition 12	There will be no more than 5 submeters allowed for each primary meter.	The IOUs shall limit customers to 19 submeters per primary meter and restrict participants from using multiple levels of submeters.	Changed the number allowed submeters per primary meter from 5 to 19 - FINAL RESOLUTION, pg 18 section (i).

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Tariff				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
20	Sheet 4 – Special Condition 13	The Submeter MDMA is the entity that retrieves, processes, and submits PEV data using CPUC-approved validation, editing and estimating (VEE) methods, and provides this information to UTILITY for billing purposes.	The Submeter MDMA is the entity that retrieves, processes, and submits PEV data using validation, editing and estimating methods, as determined by the IOUs and MDMA's, and provides this information to PG&E for billing purposes.	Removed "CPUC-approved" - FINAL RESOLUTION: pg 19, section (j).
21	Sheet 4 – Special Condition 14	Submeter in this Schedule only references the meter owned by the customer or its Submeter MDMA which measures the electrical load associated with charging the electric vehicle.	Submeter in this Schedule only references the meter owned by the customer or a third party, which measures the electrical load associated with charging the electric vehicle.	Removed "its MDMA" and replaced with "a third party" to be more generic.
22	Sheet 4 – Special Condition 14	The primary meter charges billed to the customer for its non-PEV related usage and maximum demand, if applicable, metered at its premises and billed in accordance with the customer's current tariff.	The primary meter charges billed to the customer for its non-PEV related usage and demand, as applicable, metered at its premises and billed in accordance with the customer's current tariff.	Removed "maximum" and changed "if applicable" to "as applicable" - SDG&E will be billing demand charges "as applicable not just max demand.
23	Sheet 5 – Special Condition 14	The submeter charges billed to the customer for its PEV usage and maximum demand, if applicable, submetered at its premises, billed as a separate service account and presented as a Summary Bill to the customer.	The submeter charges billed to the customer for its PEV usage and demand, as applicable, submetered at its premises, billed as a separate service account and presented as a Summary Bill to the customer.	Removed "maximum" and changed "if applicable" to "as applicable" - SDG&E will be billing demand charges "as applicable not just max demand.

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Customer Enrollment Agreement				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
24	Page 1	For this Pilot, the separate meter must be a submeter owned by the Customer or by the Customer's electric vehicle service provider (EVSP).	For this Pilot, the separate meter must be a submeter owned by the Customer or by a third party.	Removed "its MDMA" and replaced with "a third party" to be more generic.
25	Page 1	Customers on a Net Energy Metering (NEM) rate are eligible but will be limited to 25% of the participation cap.	Customers on a Net Energy Metering (NEM) rate are eligible but will be limited to 20% of the participation cap.	Changed NEM participation limit from 25% to 20% - FINAL RESOLUTION: pg 15 & 16, section (d).
26	Page 1	This Pilot will begin on May 1, 2014.	This Pilot will begin on September 1, 2014.	Changed begin date from "May 1, 2014" to September 1, 2014" - New schedule in FINAL RESOLUTION page 47
27	Page 1	In addition, you agree to provide an independent evaluator paid by the Investor Owned Utilities (IOUs) with feedback on your experiences with Pilot participation, including enrollment, equipment installation, and billing.	In addition, you agree to provide an independent evaluator paid by the Investor Owned Utilities (IOUs) with feedback on your experiences with Pilot participation, including enrollment, equipment installation, and billing. In accordance with the CPUC's instruction, this survey will not be burdensome.	Added the last sentence - FINAL RESOLUTION: pg 21, section (a)
28	Page 1	Additionally, you	Additionally, you may be required to provide	Added the last

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Customer Enrollment Agreement				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
		may be required to provide access to your home or facility for the evaluator to perform tests on your submeter.	access to your home or facility for the evaluator to perform tests on your submeter. Such submeter testing is only required of five percent of participating customers. If your submeter is selected for testing, tests will be arranged at a convenient time, and your MDMA may be present.	sentence - FINAL RESOLUTION: pg 21, section (a)
29	Page 2	Be a bundled service customer (i.e. does not participate in Direct Access (DA), Community Choice Aggregation (CCA), or Community Aggregation (CA) service).	Be a Bundled Service Customers or Community Choice Aggregation (CCA) customer (i.e. does not participate in Direct Access (DA) or Community Aggregation (CA) service);	Deleted "Community Choice Aggregation (CCA)" - FINAL RESOLUTION: pg 12, section (a)
30	Page 2		Not participate in either the Balance Payment Plan or Automatic Payment Plan options offered by UTILITY for the duration of their participation in this pilot if their submeter MDMA provides remittance payments to PG&E. If participant is already enrolled in one of these plans, they must unenroll for just the duration of their participation in this pilot.	Inserted new Item no. 7 in Eligibility Section - FINAL RESOLUTION pg 17 & 18 section (g). Direct Pay Plan for PG&E is Automatic Payment Plan. Level Pay Plan for PG&E is Balance Payment Plan.
31	Page 2	Late or incomplete EV submeter usage information will be disregarded (treated as if there was no EV usage for the	Late or incomplete EV submeter usage information will be disregarded (treated as if there was no EV usage for the time interval(s) involved) only where the Submeter MDMA action is the cause of the data transmission failure. As a result, any actual EV charging during these intervals will be billed at your current rate and will not be	Moved Item no. 4 of Section E Termination to Section C DUTIES AND OBLIGATIONS OF PG&E. Added "only where the

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Customer Enrollment Agreement				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
		time interval(s) involved). As a result, any actual EV charging during these intervals will be billed at your current rate and will not be adjusted in any future bills if any EV usage data is subsequently received.	adjusted in any future bills if any EV usage data is subsequently received.	Submeter MDMA action is the cause of the data transmission failure” - FINAL RESOLUTION: pg 22, section (d).
32	Page 2	Provide you a monthly summary bill reflecting all of your charges, including your submetered EV usage.	Provide you a summary bill reflecting all of your charges, including your submetered EV usage.	Delete “monthly”
33	Page 2	Install a qualified submeter for the exclusive use of tracking the energy used to charge your electric vehicle	Install or have installed a qualified submeter for the exclusive use of tracking the energy used to charge your electric vehicle	Inserted “or have installed” - FINAL RESOLUTION: pg 22, section (b)
34	Page 3		The Submeter MDMA must report a customer drop out or change of address to PG&E within 10 days.	Inserted Item no. 5 Section D DUTIES AND OBLIGATIONS OF PARTICIPANT - FINAL RESOLUTION: pg 16, section (f)
35	Page 3	Acknowledge that the EV submeter usage information may not meet the accuracy	Agree that the EV submeter and submeter usage information may not meet the accuracy standards or metering tariff standards required by PG&E for general billing purposes, and waive all rights and remedies related to such accuracy standards	Corrected language to clarify.

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Customer Enrollment Agreement				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
		standards required by SCE/PG&E/SDG&E for billing purposes, though for purposes of the Pilot Participant's EV usage will be billed based on the submeter data provided by the Submeter MDMA, who is solely responsible for the accuracy and timely delivery to SCE/PG&E/SDG&E of submeter usage information.	and metering tariffs, including any information provided to Participant based on such submeter usage or other information through other PG&E programs or services . In addition, for purposes of the Pilot, Participant's EV usage will be billed solely based on the submeter data provided by the Submeter MDMA, which is solely responsible for the accuracy and timely delivery to PG&E of submeter usage information.	
36	Page 3		In the event the participant has a change of address, be allowed to re-enroll for the remainder of the participant's pilot term. For customers that relocate within the service territory: 1) their MDMA must submit a separate Customer Enrollment Agreement for their new service address at least five days before the end of the current billing period; and 2) they are eligible to reenroll in the Pilot after the Enrollment Period. Similarly, for customers that relocate to another IOU's service territory, they may reenroll if the Utility's 500 submeter limit has not been met	Inserted Item no. 4 Section D DUTIES AND OBLIGATIONS OF PARTICIPANT under PARTICIPANT WILL - FINAL RESOLUTION: pg 17, section (f)
37	Page 3	Customer will retain sole responsibility for paying the entire monthly bill including EV and	Retain sole responsibility for paying the entire monthly bill including EV and other charges regardless of any agreement between you and your Submeter MDMA.	Deleted 'Customer Will' and Moved from Termination Section E to Item no. 5 in Section D

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Customer Enrollment Agreement				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
		other charges regardless of any agreement between you and your Submeter MDMA.		DUTIES AND OBLIGATIONS OF PARTICIPANT under PARTICIPANT WILL
38	Page 4	Late or incomplete EV submeter usage information will be disregarded (treated as if there was no EV usage for the time interval(s) involved). As a result, any actual EV charging during these intervals will be billed at your current rate and will not be adjusted in any future bills if any EV usage data is subsequently received.		Deleted from Termination Section E and moved to Section D: DUTIES AND OBLIGATIONS OF PARTICIPANT
39	Page 4	Customer will retain sole responsibility for paying the entire monthly bill including EV and other charges regardless of any agreement between you and your Submeter MDMA.		Deleted from Termination Section and moved to Section D: DUTIES AND OBLIGATIONS OF PARTICIPANT

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Customer Enrollment Agreement				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
40	Page 4		PG&E will notify the customer if the Submeter MDMA service is terminated and the customer may complete the remainder of the pilot subject to completing the requirements to re-enroll with an alternative Submeter MDMA.	Included new item no. 5 in Section E: TERMINATION - FINAL RESOLUTION: pg 14 & 15, section (c)
41	Page 4	To SCE/PG&E/SDG&E: SCE/PG&E/SDG&E Contact Info	To PG&E: PG&E Records Unit PO Box 8329 Stockton, CA 95208 1-800-PGE-5000 (1-800-743-5000)	Deleted "SCE/SDG&E" Inserted PG&E Address
42	Page 5	Participant will hold SCE/PG&E/SDG&E harmless for its inability to participate in any other SCE/PG&E/SDG&E programs or features, such as My Account, Green Button, Budget Assistant, PTR, and Rate Analyzer, as a result of participating in this pilot.	Participant will hold PG&E harmless for its participation in and use of any other PG&E programs or features during the course of this Pilot. Programs such as My Account and Green Button may be available to customers participating in this Pilot but the data may not be all inclusive.	Corrected language. Final Resolution pg 22& 23 section (e)
43	Page 5		Participant will hold PG&E harmless for its inability to participate in PG&E's Automatic Payment and Balance Payment Plan, during the course of this Pilot.	Final Resolution pg 22& 23 section (e) Direct Pay Plan for PG&E is Automatic Payment Plan. Level Pay Plan for PG&E is Balance Payment Plan.

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Customer Enrollment Agreement				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
44	Page 5	L. APPLICABLE SCE/PG&E/SDG&E RATES FOR PILOT PHASE 1:	L. APPLICABLE PG&E RATES FOR PHASE ONE OF THIS PILOT: 1. Where the Primary Meter qualifies for Residential Service: •Rate Schedule EV, option B 2. Where the Primary Meter qualifies for Commercial/Industrial Service Rate Schedule A1 (customers < 75 kW) Rate Schedule A10 (customers > 75 kW < 500 kW) Rate Schedule A6 (customers with demands < 500 kW) Rate Schedule NEM may be applied as a “rider” to all the schedules above and would be applicable to customers with photovoltaic (PVs) meeting the tariff requirements. More detail on these rates can be found at http://www.pge.com/tariffs/ERS.SHTML#ERS	Deleted “SCE/SDG&E” - Specific IOU rate
45	Page 6	STEP 2: Call SCE/PG&E/SDG&E at (XXX) XXX-XXXX to enroll in the Electric Vehicle Pilot (Phase 1) and applicable Pilot (Phase 1) EV rate		Deleted Step 2: Call SCE/PG&E/SDG&E at (XXX) XXX-XXXX to enroll in the Electric Vehicle Pilot (Phase 1) and applicable Pilot (Phase 1) EV rate - FINAL RESOLUTION: pg 24, section (g).
46	Page 6	STEP 7: Form may be submitted to PG&E at the contact below:	PG&E Records Unit PO Box 8329 Stockton, CA 95208 1-800-PGE-5000 (1-800-743-5000)	Inserted PG&E specific contact information.
47	Page 7	(1) Request rate changes necessary for me to participate in the Electric Vehicle Pilot (Phase 1).	(1) Yes <input type="checkbox"/> No <input type="checkbox"/> Request rate changes necessary for me to participate in the Electric Vehicle Pilot (Phase 1).	Included “Yes”, “No” check boxes in item 1 - Based on verbal approval of the ED during a telephone conference on June 18, 2014 we are giving the customer the opportunity to choose if they want to authorize the

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Customer Enrollment Agreement				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
				MDMA these two acts/functions by adding Yes and No checkboxes
48	Page 7	(2) Receive a copy of my monthly SCE/PG&E/SDG&E bill for the duration of my participation in the Electric Vehicle Pilot (Phase 1).	(2) Yes <input type="checkbox"/> No <input type="checkbox"/> Receive a copy of my monthly SCE/PG&E/SDG&E bill for the duration of my participation in the Electric Vehicle Pilot (Phase 1).	Included "Yes", "No" check boxes in item 1 - Based on verbal approval of the ED during a telephone conference on June 18, 2014 we are giving the customer the opportunity to choose if they want to authorize the MDMA these two acts/functions by adding Yes and No checkboxes
49	Page 7		I understand that if my submeter MDMA provides remittance payments to PG&E, I cannot participate in either the Balance Payment Plan or Automatic Payment Plan options offered by PG&E for the duration of my participation in this Pilot. If I am already enrolled in one of these plans, I must unenroll for the duration of my participation in this Pilot.	Included the statement - FINAL RESOLUTION pg 17 & 18 section (g).
50	Page 9	Section 3 Submeter Information (If multiple Submeters, attach separate sheet)	Section 3 Submeter Information (If customer elects to have multiple Submeters, up to 19, please attach separate sheet for each submeter. Note: Multiple level submeters not allowed.)	Changed sentence to include "up to 19 submeters". Included "Note: Multiple level submeters not allowed" - FINAL RESOLUTION pgs 18 & 19 section (i).

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Submeter MDMA Registration Agreement				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
51	Page 2	All Submeter MDMA's must submit a Notice of Participation to the Commission's Energy Division by April 1, 2014, to participate in the pilot.	All Submeter MDMA's must submit a Notice of Participation to the Commission's Energy Division by July 11, 2014 to participate in the pilot.	Replaced "April 1, 2014 by July 11", 2014 - FINAL RESOLUTION page 47
52	Page 2	Phase 1 of the Pilot ends after 12 billing cycles for a customer participant and no later than October 31, 2015.	Phase 1 of the Pilot ends after 12 billing cycles for a customer participant and no later than February 28, 2016.	Replaced "October 31, 2014" with February 28, 2016 - FINAL RESOLUTION page 47
53	Page 2	The approving entity will review the submitted documentation, determine if the prospective Submeter MDMA's standards meet the requirements established by the Commission, and notify the Submeter MDMA whether its request is approved via email.	The ED will review the submitted documentation, determine if the prospective Submeter MDMA's standards meet the requirements established by the Commission, and notify the Submeter MDMA whether its request is approved via e-mail.	Removal of "approving entity", replaced with "ED" - FINAL RESOLUTION page 24, sec (b).
54	Page 2	The approving entity will make reasonable efforts to review the documentation and respond to the Submeter MDMA request within ten business days.	The ED will make reasonable efforts to review the documentation and respond to the Submeter MDMA request within ten business days.	Removal of "approving entity", replaced with "ED" - FINAL RESOLUTION page 24, sec (b).
55	Page 2	The determination is based on the ED's review of the Submeter MDMA's written application, completed documents, and the ability to meet SCE/PG&E/SDG&E's EV Submeter Pilot Phase 1 Data Reporting and Transfer Requirements (Data Exchange Requirements), attached hereto as Attachment 2. The ED may elect to delegate this review and	The determination is based on the ED's review of the Submeter MDMA's written application, completed documents, and the ability to meet PG&E's EV Submeter Pilot Phase 1 Data Reporting and Transfer Requirements (Data Exchange Requirements), attached hereto as Attachment 2.	Removed 2 nd sentence "The ED may elect to delegate this review and approval to the utilities, in which case the Registration Agreement should be submitted directly to SCE/PG&E/SDG&E - FINAL RESOLUTION page 24, sec (b)."

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Submeter MDMA Registration Agreement				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
		approval to the utilities, in which case the Registration Agreement should be submitted directly to SCE/PG&E/SDG&E.		
56	Page 3		The Submeter MDMA's are allowed ten days to report a customer drop out or change of address to the IOUs.	Added new item 4 in Requirements Section - FINAL RESOLUTION page 16 sec (f).
57	Page 3		The Submeter MDMA's must notify Energy Division and all IOUs in which they are providing services in the event that they terminate service prior to the end of the Pilot Term.	Added new item 5 in Requirements Section - FINAL RESOLUTION page 25 sec (b).
58	Page 3	Submeter MDMA Registration Process, Step 1 - IOUs to send final Submeter MDMA Registration Agreement for Phase 1 of Pilot to participating Submeter MDMA's once January 13, 2014 Advice Letter is approved.		Removed for clarification. IOUs will not be sending final agreement to the MDMA's.
59	Page 3	Submeter MDMA submits Registration Agreement to the ED, or SCE/PG&E/SDG&E (if so delegated), by April 1, 2014	Submeter MDMA submits Registration Agreement to Adam Langton (adam.langton@cpuc.ca.gov) or Noel Crisostomo (noel.crisostomo@cpuc.ca.gov) of the CPUC's Energy Division by July 11, 2014. Reasonable efforts will be made to acknowledge receipt of the Registration Agreement within ten business days of receipt. The Energy Division may request additional information, as needed, to approve the MDMA's registration request for this phase of the Pilot.	Removed " or SCE/PG&E/SDG&E (if so delegated)" . Replaced April 1, 2014 with July 11, 2014 - New schedule in FINAL RESOLUTION page 47 Added Energy Division contact information. Removed parts (a) and (b).
60	Page 3	Submeter MDMA receives final approval,	Submeter MDMA receives final approval, may submit	Replaced May 1, 2014 with

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Submeter MDMA Registration Agreement				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
		may submit Customer Enrollment Forms to SCE/PG&E/SDG&E starting May 1, 2014.	Customer Enrollment Agreements to PG&E starting September 1, 2014.	September 1, 2014 - New schedule in FINAL RESOLUTION page 47
61	Page 3	Submeter MDMA's must deliver the results of submeter compliance and calibration testing to SCE/PG&E/SDG&E. The Third Party Evaluator retained by the IOUs may randomly field test no more than 5% of the submeters for accuracy. Submeter MDMA's are required to obtain access from their participants.	Submeter MDMA's are not required to provide compliance and testing data to the IOUs if they have otherwise complied with the application process and demonstrated consistency with the Performance Standards for Metering and MDMA's. The Third Party Evaluator retained by the IOUs may randomly field test no more than five percent of the submeters for accuracy. By virtue of a customer's enrollment with submeter service by the IOU, the Independent Evaluator and Submeter MDMA's may obtain access from their participants for testing and calibration, if selected as part of the evaluation.	FINAL RESOLUTION pg 26 & 27 section (d).
62	Page 4	Submeter MDMA must comply with data security and confidentiality requirements specified in the CPUC's Privacy Rules and SCE/PG&E/SDG&E's Electric Rule XX and attached hereto as Attachment 3.	Submeter MDMA must comply with data security and confidentiality requirements specified in the CPUC's Privacy Rules and PG&E's Electric Rule 27.	Removal of "and attached hereto as Attachment 3" – IOUs will not Attach respective rules to MRA.
63	Page 5	I, Submeter MDMA, hereby release, hold harmless, and indemnify SCE/PG&E/SDG&E from any liability, claims, demands, causes of action, damages, or expenses resulting from my participation in the	I, Submeter MDMA, hereby release, hold harmless, and indemnify SCE/PG&E/SDG&E from any liability, claims, demands, causes of action, damages, or expenses resulting from my participation in the submetering pilot under this Registration Agreement,	Included "and provided such Utility action is consistent with applicable CPUC orders, tariffs and regulations" - FINAL RESOLUTION pg

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Submeter MDMA Registration Agreement				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
		submetering pilot under this Registration Agreement, including but not limited to the use of customer information obtained pursuant to the prior express, written consent of customers participating in the pilot, and from the taking of any action, including changes in services or rates of customers participating in the pilot, pursuant to this Registration Agreement.	including but not limited to the use of customer information obtained pursuant to the prior express, written consent of customers participating in the pilot, and from the taking of any action, including changes in services or rates of customers participating in the pilot, pursuant to this Registration Agreement, and provided such Utility action is consistent with applicable CPUC orders, tariffs and regulations.	42, section Part 4.iv.
64	Page 6	This registration is for Phase 1 only and expires on October 31, 2015.	This registration is for Phase 1 only and expires on February 28, 2016.	Removal of "October 31, 2015", included "on February 28, 2016" - FINAL RESOLUTION pg 47.
65	Page 5, Attachment 1	Entities seeking to offer Submeter MDMA services for an electric vehicle (EV) submeter shall be required to submit a Submeter MDMA Registration Form (shown below) if EVSP or entity seeks to offer such services.	Entities seeking to offer Submeter MDMA services for an electric vehicle (EV) submeter shall be required to submit a Submeter MDMA Registration Agreement if EVSP or entity seeks to offer such services.	Removal of "shown below" - IOUs will not show MRA below – "shown below" will be removed.
66	Page 6, Attachment 1	EVSE providers shall provide the respective utilities with documentation of their compliance with the CPUC "Temporary Submetering Performance and Data Communication Requirements" in general and the results of accuracy testing specifically for each submeter by serial	EVSE providers shall provide the respective utilities with documentation of their compliance with the "EV Submeter Pilot Phase 1 Performance Standards for Metering and Meter Data Management Agents" in general and the results of accuracy testing specifically for each submeter by serial number.	Removal of "CPUC "Temporary Submetering Performance and Data Communication Requirements". Included "EV Submeter Pilot Phase 1 Performance Standards for Metering and Meter Data

ADVICE LETTER 4458-E, ATTACHMENT 2
REFERENCE TO REVISIONS MADE

Submeter MDMA Registration Agreement				
Line Item	Page Number	Jan 21 Advice Letter Language	Changed To	Reason
		number.		Management Agents" - FINAL RESOLUTION pg 28 & 29 section (c).

**PG&E Gas and Electric
Advice Filing List
General Order 96-B, Section IV**

AT&T	Douglass & Liddell	Occidental Energy Marketing, Inc.
Alcantar & Kahl LLP	Downey & Brand	OnGrid Solar
Anderson & Poole	Ellison Schneider & Harris LLP	Pacific Gas and Electric Company
BART	G. A. Krause & Assoc.	Praxair
Barkovich & Yap, Inc.	GenOn Energy Inc.	Regulatory & Cogeneration Service, Inc.
Bartle Wells Associates	GenOn Energy, Inc.	SCD Energy Solutions
Braun Blaising McLaughlin, P.C.	Goodin, MacBride, Squeri, Schlotz & Ritchie	SCE
CENERGY POWER	Green Power Institute	SDG&E and SoCalGas
California Cotton Ginners & Growers Assn	Hanna & Morton	SPURR
California Energy Commission	In House Energy	San Francisco Public Utilities Commission
California Public Utilities Commission	International Power Technology	Seattle City Light
California State Association of Counties	Intestate Gas Services, Inc.	Sempra Utilities
Calpine	K&L Gates LLP	SoCalGas
Casner, Steve	Kelly Group	Southern California Edison Company
Center for Biological Diversity	Linde	Spark Energy
City of Palo Alto	Los Angeles County Integrated Waste Management Task Force	Sun Light & Power
City of San Jose	Los Angeles Dept of Water & Power	Sunshine Design
Clean Power	MRW & Associates	Tecogen, Inc.
Coast Economic Consulting	Manatt Phelps Phillips	Tiger Natural Gas, Inc.
Commercial Energy	Marin Energy Authority	TransCanada
Cool Earth Solar, Inc.	McKenna Long & Aldridge LLP	Utility Cost Management
County of Tehama - Department of Public Works	McKenzie & Associates	Utility Power Solutions
Crossborder Energy	Modesto Irrigation District	Utility Specialists
Davis Wright Tremaine LLP	Morgan Stanley	Verizon
Day Carter Murphy	NLine Energy, Inc.	Water and Energy Consulting
Defense Energy Support Center	NRG Solar	Wellhead Electric Company
Dept of General Services	Nexant, Inc.	Western Manufactured Housing Communities Association (WMA)
Division of Ratepayer Advocates	North America Power Partners	