June 30, 2014

Advice Letter: 4343-E

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

SUBJECT: MoSCE, PG&E, SDG&E Request to Implement a Plug-In Electric Vehicle Sub-Metering Pilot in Compliance with D.13-11-002

Dear Mr. Cherry:

Advice Letter 4343-E is effective as of June 26, 2014, per Resolution E-4651 approved June 26, 2014.

Sincerely,

Edward Randolph
Director, Energy Division
January 21, 2014

ADVICE 2993-E  
(Southern California Edison Company – U 338-E)

ADVICE NO. 4343-E  
(Pacific Gas and Electric Company – U 39 M)

ADVICE NO. 2566-E  
(San Diego Gas & Electric Company – U 902 M)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA  
ENERGY DIVISION


In compliance with the California Public Utilities Commission (Commission) Decision 13-11-002 (D.13-11-002 or Decision), dated November 14, 2013, Southern California Edison Company (SCE), on behalf of itself, San Diego Gas & Electric Company (SDG&E), and Pacific Gas and Electric Company (PG&E), (collectively, the IOUs) hereby submits this advice letter for a Plug-In Electric Vehicle (PEV) Submetering Pilot (Pilot). The new Pilot tariff sheets and forms are listed on Attachment A, the Preliminary Pilot Program Budgets of each IOU are listed on Attachment B, the Pilot Evaluation Process Timeline is listed on Attachment C and are attached hereto.

1. D.13-11-002 was issued on November 19, 2013.
2. PG&E and SDG&E have each authorized SCE to file this Advice Letter on their behalf pursuant to Rule 1.8(d) of the Commission’s Rules of Practice and Procedure.
PURPOSE

The purpose of this advice letter is to provide the information required by the Commission in Ordering Paragraph (OP) 2, OP 3, and OP 6 of D.13-11-002. In addition to the required information and forms, this advice letter establishes a pro-forma tariff, Schedule PEV, Plug-In Electric Vehicle Submetering Pilot (PEVSP), to support the implementation of this Pilot program.

BACKGROUND

In July 2011, the Commission adopted D.11-07-029 (Phase 2 Decision), which established requirements for PG&E, SCE, and SDG&E, collectively referred to as the investor-owned utilities (IOUs), to develop rules to incorporate customer-owned submeters into their billing and metering system for PEVs. D.11-07-029 required the IOUs to submit a completed Submetering Protocol.

On October 1, 2012, the IOUs submitted to the Commission’s Energy Division (ED) a draft report, entitled Strawman for Plug-In Electric Vehicle Submetering Protocol (IOU Strawman). The IOU Strawman proposed a set of rules and requirements for types of customer-owned submetering technology and configurations that could be used by customers for separately billing their PEV load.

On November 19, 2013, the Commission issued D.13-11-002 modifying the PEV Submetering Protocol requirements set forth in D.11-07-029 by adopting the California Public Utilities Commission Energy Division Staff Plug-In Electric Vehicle Submetering Roadmap³ for a two-phase pilot. OP 2 of D.13-11-002 requires 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 orders the IOUs to submit a preliminary budget for the submetering pilots, and allows it to be filed in the same Tier 2 Advice Letter required by OP 2. OP 6 of the same decision orders the IOUs to submit a timeline for the submetering pilot program evaluation process, and allows it to be filed in the same Tier 2 Advice Letter required by OP 2. Accordingly, the IOUs are submitting this joint advice letter in compliance with these OPs.⁴

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³ Attachment 1 of D.13-11-002.
⁴ On January 13, 2014, CPUC Executive Director, Paul Clanon, issued a letter to extend this advice letter filing until January 20, 2014. However, January 20, 2014 is an observed holiday for the Commission. The IOUs will be filing this advice letter the following day which is January 21, 2014.
DISCUSSION

Implementing Phase 1 of the Submetering Plug-In Electric Vehicle Submetering Pilot

The Phase 1 of the Pilot is available to a maximum of 500 eligible PEV participating meters within each IOU service territory. All residential and commercial customers may participate except streetlight customers\(^5\) and customers taking Direct Access, Community Choice Aggregation, and Community Aggregation service. This pilot will not be available to Direct Access, Community Choice Aggregation, or Community Aggregation customers as the analysis involved in the subtractive billing of those schedules would be administratively burdensome and may add little value to the pilot study. Also, the submetered data may not meet the meter quality or billing timing needs desired by the Electric Service Providers, Community Choice Aggregators (CCAs), or Community Aggregators, so as an initial matter, this new tariff does not allow these customers to participate.\(^6\) Eligible customers with participating meters may charge a plug-in electric vehicle which is connected to the same meter at the premises that registers usage of the customer’s primary load and where the connected PEV load is measured by a submeter (submeter load). The submeter load will be subtracted from the load from the customer’s primary meter and billed, each month, on an applicable Utility PEV rate schedule. Eligibility conditions require that customers have an interval data recorder type meter as their primary meter. The PEV submeter must be used for the sole purpose of measuring electricity used to charge the PEV.

A Submeter Meter Data Management Agent (Submeter MDMA) will be responsible for enrolling customers with PEVs into the Pilot program. To facilitate such enrollment, the IOUs established a pro-forma tariff along with associated forms, as outlined below, which contain the provisions to implement Phase 1 of the two-phase PEV Submetering Pilot.

Collaboration with Prospective Submeter Meter Data Management Agents

In an effort to collaborate with third parties interested in participating in the Pilot as Submetering Meter Data Management Agents, the IOUs held a meeting on January 8, 2014, with representatives from ChargePoint, Inc., EV Charge America, Glen Canyon Corporation, NRG EV Services, Energy Solutions, and General Motors. The purpose of this meeting was to present the IOUs’ proposed approach for implementing the Electrical Vehicle Submetering Pilot program, solicit feedback, and consider such feedback in developing the Pilot. The IOUs have considered the feedback provided

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\(^5\) Streetlights do not have adequate capability for PEV load.

\(^6\) However, PG&E is willing to consider allowing changes necessary to permit CCA customers to participate in this pilot, assuming that a CCA expresses such interest. PG&E anticipates that some modifications to existing Rule 23 requirements or processes may be needed, perhaps at an additional cost. These issues will need to be comprehensively detailed and discussed with the CCAs, and agreed to by the CPUC, prior to CCA participation in this pilot.
and, to the extent feasible and appropriate, incorporated suggestions into the Pilot design.

**Applicable Electric Vehicle Rates for Billing of the PEV Submeter Load**

The IOUs differ in the availability of existing electric vehicle (EV) rates for this Pilot. SCE currently offers EV rates that can accommodate residential and commercial customer participants. PG&E and SDG&E, however, currently offer an EV rate for residential customers only. Therefore, each IOU is proposing its own unique rates for billing the PEV submeter load under this Pilot.

**SCE:**

Where the Primary Meter qualifies for Residential Service:
- All PEV submeter usage will be billed on Schedule TOU-EV-1

Where the Primary Meter qualifies for Commercial/Industrial Service:
- PEV submeter usage with a maximum demand of 20 kW and below will be billed on Schedule TOU-EV-3
- PEV submeter usage with a maximum demand above 20 kW and up to 500 kW will be billed on Schedule TOU-EV-4

**SDG&E:**

Where the Primary Meter qualifies for Residential Service:
- All PEV submeter usage will be billed on Schedule EV-TOU

Where the Primary Meter qualifies for Commercial/Industrial Service with demands less than 20 kW:
- PEV submeter usage will be billed on Schedule A

Where the Primary Meter qualifies for Commercial/Industrial Service with demands 20 kW and above:
- PEV submeter usage and demand will be billed on Schedule AL-TOU

**PG&E:**

Where the Primary Meter qualifies for Residential Service, including service to multi-dwelling units:
- All PEV submeter usage and demands will be billed on Schedule EV, option B

Where the Primary Meter qualifies for Commercial/Industrial Service:
- All PEV submeter usage and demands, as applicable, will be billed under Schedule A-6 or A-10.
Preliminary Budget Forecasts for PEV Submetering Pilot

In compliance with OP 3 of D.13-11-002, the IOUs each developed preliminary budgets for the Pilot, please see Table 1 below.

Table 1

<table>
<thead>
<tr>
<th>IOU</th>
<th>SCE</th>
<th>PG&amp;E</th>
<th>SDG&amp;E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Amount</td>
<td>$4,270,000</td>
<td>$3,020,000</td>
<td>$3,298,000</td>
</tr>
</tbody>
</table>

The preliminary budgets for the Pilot, including the incentive payment for participating Submeter MDMAs, the shared cost for the third party evaluator, and the costs of NEM / non-NEM submeter billing, are proposed in Attachment B of this advice letter.

Plug-In Electric Vehicle Pilot Enrollment Incentive Payments

As ordered by the Commission, the IOUs propose that Submeter MDMAs will be paid a one-time $200 enrollment incentive for each customer enrolled in the Pilot, payable 60 days after the date of each customer enrollment. This incentive fee is aligned with participation incentives the IOUs have provided in other pilot programs. Submeter MDMAs will receive an additional $10 for performing MDMA services for each month the participant remains on the Pilot, assuming the Submeter MDMA complies with the Pilot requirements. This monthly payment reflects the IOUs' estimates of the avoided costs of providing MDMA services, such as meter reading, meter data validation, maintenance and testing, based on fee schedules for analogous MDMA services in the IOU's existing tariffs. The analogous tariffs reviewed by the IOUs range from approximately $3 to $10 per month for MDMA services. The IOUs selected the highest current fee schedule as a reasonable payment for Submeter MDMA services that may provide broader benefits beyond the individual participants and Submeter MDMAs involved in the Pilot, as ordered by the Commission. This monthly fee will be paid to the Submeter MDMA 60 days after the end of each quarter. 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.

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7 To the extent that D.12-05-037 (Phase 2 Decision Establishing Purposes and Governance for Electric Program Investment Charge and Establishing Funding Collections for 2013-2020) imposes any limitations on the use of EPIC funds for third party incentives, we interpret the order in D.13-11-002 as an exception requiring the IOUs to use EPIC funds for the incentive payments.
Submetering Pilot Evaluation Process

Ordering Paragraph 6 of D.13-11-002 requires that “Pacific Gas and Electric Company shall file a Tier 2 Advice Letter detailing a timeline for the submetering pilot program evaluation processes no later than 60 days after the date of this decision.”10 The decision also provided the option for the timeline to be filed jointly as a component of this Advice Letter, and as such, it is included herein as Attachment C.

Modified Net Energy Metering Customer Enrollment Cap of 10 Percent

D.13-11-002 found that NEM customers are a key demographic of PEV adopters, and therefore shall be eligible to participate in the Pilot. The Commission limited the number of NEM customer participants to 125 submeters (25 percent of 500) per IOU to contain any additional costs associated with the subtraction of PEV load from their net load. The decision further allowed the IOUs to propose to change this limit in this Advice Letter.11 Accordingly, the IOUs propose to limit NEM customers to 10 percent of the enrollment cap (50 customers) per IOU for each pilot phase based on the extensive manual labor costs associated with subtractive billing of NEM customers. Incidentally, the costs for subtractive NEM billing listed in the preliminary budgets in Attachment C herein do not include the costs of adding Net Generation Output Meters which may be recommended for Phase 2. The IOUs will revisit the participation caps for NEM customer participation in Phase 2 based on the results of Phase 1.

PROPOSED TARIFF CHANGES

The IOUs propose the establishment of the following tariffs:

1. Pro-Forma Tariff - Schedule PEV, Plug-In Electric Vehicle Submetering Pilot (Phase 1)
2. Submetering MDMA Registration Form for PEV Submetering Pilot
   a. Submetering MDMA Registration Form (EV Submeter Pilot Phase 1 Submeter MDMA Registration Agreement)
   b. Metering requirements provided by Energy Division to the utilities (included in EV Submeter Pilot Phase 1 PERFORMANCE STANDARDS FOR METERING AND METER DATA MANAGEMENT AGENTS)
   c. Draft versions of the data format template (included in MDMA Registration Agreement as Attachment 2 "EV Submeter Pilot Phase 1 Data Reporting and Transfer Requirements")
   d. MDMA Service Requirements (included in MDMA Registration Agreement as Attachment 1 "EV Submeter Pilot Phase 1 PERFORMANCE STANDARDS FOR METERING AND METER DATA MANAGEMENT AGENTS")

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10 D.13-11-002, p. 49.
11 D.13-11-002, pp. 27.
3. PEV Submetering Pilot Customer Enrollment Form (Customer Enrollment Agreement - Electric Vehicle Submetering Pilot (Phase 1))

These jointly developed tariff and forms, listed in Attachment A are intended as generic versions. Once this advice letter is approved, the IOU-specific forms will be implemented by each IOU and made available to all customers. Also, upon approval of this advice letter, each IOU will file a new Tier 1 advice letter to propose the IOU-specific tariff and request immediate approval.

This advice filing will not increase any rate or charge, cause the withdrawal of service, or conflict with any other schedule or rule.

TIER DESIGNATION

In accordance with OP 2, OP 3 and OP 6 of D.13-11-002, this advice letter is submitted with a Tier 2 designation.

EFFECTIVE DATE

SCE respectfully requests that this filing become effective on February 20, 2014, which is 30 calendar days after the date filed.

NOTICE

Anyone wishing to protest this advice filing may do so by letter sent via U.S. Mail, facsimile, or electronically, any of which must be received by the Energy Division and SCE no later than 20 days after the date of this advice filing. Protests should be mailed to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, California 94102
E-mail: EDTariffUnit@cpuc.ca.gov

Copies should also be mailed to the attention of the Director, Energy Division, Room 4004 (same address above).

In addition, protests and all other correspondence regarding this advice letter should also be sent by letter and transmitted via facsimile or electronically to the attention of at the addresses shown below on the same date it is mailed delivered to the Commission:
There are no restrictions on who may file a protest, but the protest shall set forth specifically the grounds upon which it is based and shall be submitted expeditiously.

In accordance with Section 4 of General Order (GO) 96-B, SCE is serving copies of this advice filing to the interested parties shown on the attached GO 96-B, R.09-08-009 and R.13-11-007 service lists. Address change requests to the GO 96-B service list should be directed to (626) 302-4039 or by electronic mail at AdviceTariffManager@sce.com.
For changes to all other service lists, please contact the Commission’s Process office at (415) 703-2021 or by electronic mail at Process.Office@cpuc.ca.gov.

Further, in accordance with Public Utilities Code Section 491, notice to the public is hereby given by filing and keeping the advice filing at SCE’s corporate headquarters. To view other SCE advice letters filed with the Commission, log on to SCE’s web site at https://www.sce.com/wps/portal/home/regulatory/advice-letters.

For questions, please contact Amy Liu at (626) 302-4019 or by electronic mail at Amy.Liu@SCE.com.

Southern California Edison Company

/s/ Megan Scott-Kakures
Megan Scott-Kakures

MSK:al:jm
Enclosures
Company name/CPUC Utility No.: Southern California Edison Company (U 338-E)

Utility type: ELC
Contact Person: Darrah Morgan
Phone #: (626) 302-2086
E-mail: Darrah.Morgan@sce.com
E-mail Disposition Notice to: AdviceTariffManager@sce.com

EXPLANATION OF UTILITY TYPE

<table>
<thead>
<tr>
<th>ELC = Electric</th>
<th>GAS = Gas</th>
<th>PLC = Pipeline</th>
<th>HEAT = Heat</th>
<th>WATER = Water</th>
</tr>
</thead>
</table>

Advice Letter (AL) #: 2993-E
Tier Designation: 2

Subject of AL: Southern California Edison Company, San Diego Gas & Electric Company and Pacific Gas and Electric Company request to implement a Plug-In Electric Vehicle Sub-Metering Pilot in Compliance With Decision 13-11-002

Keywords (choose from CPUC listing): Compliance, Metering

AL filing type: ☑ One-Time

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: Decision 13-11-002

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: 

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

Confidential treatment requested? ☑ Yes

If yes, specification of confidential information:
Confidential information will be made available to appropriate parties who execute a nondisclosure agreement.
Name and contact information to request nondisclosure agreement/access to confidential information: 

Resolution Required? ☑ Yes

Requested effective date: 2/20/14
No. of tariff sheets: -0-

Estimated system annual revenue effect: (%): 
Estimated system average rate effect (%): 

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: 

Service affected and changes proposed: 

Pending advice letters that revise the same tariff sheets: None

1 Discuss in AL if more space is needed.
Protests 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:

For SCE:

Megan Scott-Kakures  
Vice President, Regulatory Operations 
Southern California Edison Company  
8631 Rush Street, Rosemead, California 91770  
Facsimile: (626) 302-4829  
E-mail: AdviceTariffManager@sce.com

Leslie E. Starck  
Senior Vice President, Regulatory Policy & Affairs  
c/o Karyn Gansecki  
Southern California Edison Company  
601 Van Ness Avenue, Suite 2030, San Francisco, California 94102  
Facsimile: (415) 929-5544  
E-mail: Karyn.Gansecki@sce.com

For SDG&E:

Megan Caulson  
Regulatory Tariff Manager  
8330 Century Park Court, Room 32C, San Diego, CA 92123-1548  
Facsimile No. (858) 654-1879  
E-mail: M Caulson@semprautilities.com

For PG&E:

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

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Avenue, San Francisco, California 94102  
E-mail: EDTariffUnit@cpuc.ca.gov
Attachment A

Pro-Forma Rate Schedule and Agreements
Schedule PEVSP
Plug-In Electric Vehicle Submetering Pilot (Phase 1)
UTILITY PRO FORMA TARIFF

APPLICABILITY

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 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.

Customers must have a SmartMeter™ or interval data recorder (IDR) type meter as their primary meter to participate in this Pilot.

The PEV submeter must be used for the sole purpose of measuring electricity used to charge PEVs.

TERRITORY

Within the entire territory served.

RATES

All charges and provisions of the customer’s otherwise applicable tariff (OAT) shall apply to the primary meter, except that the PEV usage, as measured by the submeter, will be billed on an applicable PEV rate schedule.

PEV Submeter Usage Billing:

[SCE:

Where the Primary Meter qualifies for Residential Service:

• All PEV submeter usage will be billed on Schedule TOU-EV-1

Where the Primary Meter qualifies for Commercial/Industrial Service

• PEV submeter usage with a maximum demand of 20 kW and below will be billed on Schedule TOU-EV-3
• PEV submeter usage with a maximum demand above 20 kW and up to 500 kW will be billed on Schedule TOU-EV-4.]

(Continued)
Schedule PEVSP
Plug-In Electric Vehicle Submetering Pilot (Phase 1)
UTILITY PRO FORMA TARIFF
(Continued)

RATES (Continued)

[SDG&E:
Where the Primary Meter qualifies for Residential Service:

• All PEV submeter usage will be billed on Schedule EV-TOU

Where the Primary Meter qualifies for Commercial/Industrial Service with demands less than 20 kW:

• PEV submeter usage will be billed on Schedule A

Where the Primary Meter qualifies for Commercial/Industrial Service with demands of 20 kW and above:

• PEV submeter usage and demand will be billed on Schedule AL-TOU.]

[PG&E:
Where the Primary Meter qualifies for Residential Service, including service to multi-dwelling units:

• All PEV submeter usage and demands will be billed on Schedule EV, option B

Where the Primary Meter qualifies for Commercial/Industrial Service

• All PEV submeter usage and demand, as applicable, will be billed under Schedule A-6 or A-10.]

Net Energy Metering rate schedules may be a rider, as applicable, to this Schedule.

PLUG-IN ELECTRIC VEHICLE PILOT ENROLLMENT INCENTIVE PAYMENT

A one-time enrollment payment of $200 will be provided to the Submeter MDMA for each 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. UTILITY 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 October 31, 2015.

SPECIAL CONDITIONS

1. Pilot Term: Phase 1 begins on May 1, 2014, and ends 18 months thereafter, on October 31, 2015.

2. Pilot Participation Cap: 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.

(Continued)
SPECIAL CONDITIONS (Continued)

3. Pilot Participation Period: Customers may participate for up to 12 consecutive billing cycles. Customers may disenroll from the Pilot at any time, but may not re-enroll in Phase 1 of the Pilot.

4. Customer Enrollment: The Submeter Meter Data Management Agent (Submeter MDMA) is responsible to enroll eligible customers and such enrollment will become effective with the start date of the customer’s next billing cycle. 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.

5. Enrollment Period: The enrollment period is May 1 – October 1, 2014, 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 (Exclusivity Period), each Submeter MDMA will have “Exclusivity Rights” to enroll a pre-determined number of submeters into the Pilot. This number will be determined by dividing the Pilot’s enrollment cap of 500 by the number of Submeter MDMA's participating in the Pilot. 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 MDMA's are required to provide, own, and maintain the submeters used in this Pilot. The standards for qualified meters are contained in the Submeter MDMA Performance Standards. Additionally, accuracy requirements are set at +/- 5% for this pilot, which is below accuracy standards required by UTILITY for its own meters. For purposes of this pilot, UTILITY will bill participating customers as if the submeters satisfied the UTILITY's accuracy requirements.

Submeter MDMA's are required to perform meter data management services (Submeter MDMA services) related to providing properly formatted, accurate, and timely data submission to UTILITY. These requirements are listed in the Submeter MDMA Performance Standards. The Submeter MDMA is required to submit a completed Submeter MDMA Registration Agreement (Form xxxx) for approval to participate in this pilot prior to April 1, 2014. This agreement requires the Submeter MDMA to state (1) the number of submeters that have agreed to participate as of the date it submits the form, and (2) the total number of submeters that it plans to enroll, with expected breakdown of customer class (Domestic/Residential, Non-Residential/Commercial, or Agricultural) and NEM participation.
### SPECIAL CONDITIONS (Continued)

7. **Primary Meter and Submeter Bill Calculation:** All customers served under this Schedule will be provided separate primary meter bill charges and PEV submeter bill charges on a single billing statement. 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 primary meter billed amount calculation excludes the PEV submeter usage and demand. The PEV submeter billed amount will be based upon data delivered to UTILITY 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.

9. **Disenrollment, Changes of Address:** 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 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.

10. **Pilot Eligibility:** 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.

11. **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 UTILITY’s specific safety requirements. There will be no more than 5 submeters allowed for each primary meter.

12. **Submeter Meter Data Management Agent (Submeter MDMA):** 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. 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 Form to UTILITY. The Submeter MDMA cannot be the COR.

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(To be inserted by utility)  
Issued by  
(To be inserted by Cal. PUC)  

| Advice  | PEVSP Pro Forma | Decision | 13-11-002 | Date Filed | Effective | Resolution |
SPECIAL CONDITIONS (Continued)

13. 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 its Submeter MDMA 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 maximum demand, if applicable, metered at its premises and billed in accordance with the customer’s current tariff.

e) Submeter Billed Amount: 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.

f) Customer of Record (COR): The person in whose name service is rendered as evidenced by the signature on the application, contract, or agreement for that service, or, in the absence of a signed instrument, by the receipt and payment of bills or Summary Bills regularly issued in his/her name regardless of the identity of the actual user of the service. A customer may also be a party with whom UTILITY is doing business with or without a billing relationship. The entire bill is the responsibility of UTILITY’s COR. The primary meter customer is the Customer of Record for the submeter.
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 Southern California Edison (SCE)/Pacific Gas and Electric (PG&E)/San Diego Gas and Electric (SDG&E), and customer that receives electric service from SCE/PG&E/SDG&E (hereafter, “Participant,” “Customer,” or “you”). SCE/PG&E/SDG&E and Participant are referred to jointly as “Parties.”

A. Purpose and Overview of the Phase 1 Pilot

SCE/PG&E/SDG&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 the Customer’s electric vehicle service provider (EVSP). This Pilot is available to eligible customers within all of SCE’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 25% of the participation cap.

As a Participant in this Pilot, you agree to install an eligible Customer- or EVSP-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 SCE/PG&E/SDG&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 May 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 SCE/PG&E/SDG&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. Additionally, you may be required to provide access to your home or facility for the evaluator to perform tests on your submeter. 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.

**B. ELIGIBILITY**

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

1. Have an active SCE/PG&E/SDG&E service account;
2. Have an eligible SCE/PG&E/SDG&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 customer (i.e. does not participate in Direct Access (DA), Community Choice Aggregation (CCA), or Community Aggregation (CA) service).

**C. DUTIES AND OBLIGATIONS OF SCE/PG&E/SDG&E:**

SCE/PG&E/SDG&E will:

1. Enroll you in the Pilot beginning with your next SCE/PG&E/SDG&E billing period, provided that you or your Submeter MDMA has submitted your complete customer enrollment form 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. Provide you a monthly summary bill reflecting all of your charges, including your submetered EV usage;
5. After 12 consecutive billing cycles SCE/PG&E/SDG&E will close your submeter account. Your entire usage will then be charged at your otherwise applicable rate.

**D. DUTIES AND OBLIGATIONS OF PARTICIPANT:**

Participant or its agent will:

1. Install a qualified submeter\(^1\) 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 SCE/PG&E/SDG&E with your submeter usage data as scheduled in the required format in compliance with the MDMA performance requirements (copy available upon request).

---

\(^1\) See CPUC’s Energy Division’s Temporary Submetering Performance and Data Communication Requirements for IOU / MDMA Plug-In Electric Vehicle Submetering Pilots, Phase 1.
Electric Vehicle Submeter  
Phase 1 Pilot

Participant will:

1. Provide an independent third party evaluator with feedback on your experiences with Pilot participation, including enrollment, equipment installation, and billing.  
2. Acknowledge that the EV submeter usage information may not meet the accuracy 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.  
3. If selected, provide access and assistance to facilitate random meter testing by an independent 3rd Party Evaluator.

E. TERMINATION:

1. This Agreement shall be effective for no more than 12 consecutive billing cycles after Pilot enrollment.  
2. SCE/PG&E/SDG&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. SCE/PG&E/SDG&E shall have the right to modify or immediately terminate this Agreement upon written notice to Participant if SCE/PG&E/SDG&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. 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.  
5. 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.  
6. Participant shall notify SCE/PG&E/SDG&E promptly if Participant no longer desires to participate in the Pilot.

F. NOTICES

SCE/PG&E/SDG&E will provide notices to Customer about this Pilot by email or mail to the Customer name and address listed on the customer enrollment form. Notices from Customer to SCE/PG&E/SDG&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 SCE/PG&E/SDG&E:

SCE/PG&E/SDG&E Contact Info

G. LIMITATION OF LIABILITY:
1. Participant shall indemnify, hold harmless and defend SCE/PG&E/SDG&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 SCE/PG&E/SDG&E.

2. In no event shall SCE/PG&E/SDG&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 SCE/PG&E/SDG&E’s negligence or willful misconduct, and except as expressly stated otherwise in this Agreement, SCE/PG&E/SDG&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 SCE/PG&E/SDG&E’s aggregate liability or damages shall not exceed ten thousand dollars ($10,000.00).

3. Participant acknowledges that SCE/PG&E/SDG&E has not promised Participant energy or bill savings from use of the EV submeter and/or participation in the Pilot.

4. 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.

H. WARRANTY DISCLAIMER:

SCE/PG&E/SDG&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.

K. 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 either set forth at SCE/PG&E/SDG&E company website as applicable to this Pilot or that are subsequently made a part of SCE/PG&E/SDG&E’s tariffs as part of the further implementation of this Pilot. This Agreement supersedes all prior representations and discussions between SCE/PG&E/SDG&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.

L. APPLICABLE SCE/PG&E/SDG&E RATES FOR PILOT PHASE 1:

SCE:
Electric Vehicle Submeter
Phase 1 Pilot

Where the Primary Meter qualifies for Residential Service:

• All PEV submeter usage will be billed on Schedule TOU-EV-1

Where the Primary Meter qualifies for Commercial/Industrial Service:

• PEV submeter usage with a maximum demand of 20 kW and below will be billed on Schedule TOU-EV-3
• PEV submeter usage with a maximum demand above 20 kW and up to 500 kW will be billed on Schedule TOU-EV-4

SDG&E:

Where the Primary Meter qualifies for Residential Service:

• All PEV submeter usage and demands will be billed on Schedule EV-TOU

Where the Primary Meter qualifies for Commercial/Industrial Service with demands less than 20 kW:

• PEV submeter usage will be billed on Schedule A

Where the Primary Meter qualifies for Commercial/Industrial Service with demands of 20 kW and above:

• PEV submeter usage will be billed on Schedule AL-TOU

PG&E:

Where the Primary Meter qualifies for Residential Service, including service to multi-dwelling units:

• All PEV submeter usage and demands will be billed on Schedule EV, option B

Where the Primary Meter qualifies for Commercial/Industrial Service

• All PEV submeter usage and demand, as applicable, will be billed under Schedule A-6 or A-10.

Special Notes:
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.

All charges and provisions of the customer’s current tariff shall apply to the primary meter, except that the PEV usage, as measured by the submeter, will be billed on an applicable PEV rate schedule.
Plug-In Electric Vehicle Submetering Pilot (Phase 1)
Customer Enrollment Form

Customer Enrollment Agreement Instructions

Instructions to Customer:

STEP 1: Read the Plug-In Electric Vehicle Submetering Pilot (Phase 1) Participation Agreement in its entirety

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

STEP 3: Install an eligible Submeter(s) owned or leased by you or your Electric Vehicle Service Provider (EVSP)

STEP 4: Retain the services of an SCE/PG&E/SDG&E-approved Submeter Meter Data Management Agent (Submeter MDMA)

STEP 5: Complete this Customer Enrollment Agreement (Your Submeter MDMA may assist you with completing the form)

STEP 6: Sign the last page of this form (Section 5) to authorize the entire Agreement

STEP 7: Have your Submeter MDMA sign the last page of this form (Section 5) to authorize the entire Agreement

STEP 8: You or your Submeter MDMA must submit this Customer Enrollment Agreement to SCE/PG&E/SDG&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
  - You or your Submeter MDMA may submit this Agreement to SCE/PG&E/SDG&E by one of the following methods:
    - Mail: XX
    - Fax: (XXX) XXX-XXXX
    - Email: XXX@XXX.com
    - Commercial Customers supported by a SCE/PG&E/SDG&E Representative may be provided this form directly

SCE/PG&E/SDG&E Processing:
SCE/PG&E/SDG&E will review the Agreement and reply as follows:
  - If Agreement is incomplete: Submeter MDMA notified, completes Agreement and resubmits to SCE/PG&E/SDG&E
  - If Agreement is complete: Enrollment process continues. Upon completion, SCE/PG&E/SDG&E will inform you and your Submeter MDMA when your EV Submetering Pilot (Phase 1) participation begins

For questions or for more information, call SCE/PG&E/SDG&E at (XXX) XXX-XXXX

1
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 specific acts and functions:

1. Request rate changes necessary for me to participate in the Electric Vehicle Pilot (Phase 1).
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).

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 SCE/PG&E/SDG&E Form (XXXXX).

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 Utility SCE reserves the right to verify any authorization request submitted before releasing information or taking any action on my behalf. I authorize SCE/PG&E/SDG&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 SCE/PG&E/SDG&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.

REVOCATION:

Customer may cancel this Authorization at any time by contacting SCE/PG&E/SDG&E at (XXX) XXX-XXXX. Consent from the Submeter MDMA is not required for Customer to cancel this Authorization. To the extent the 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 either set forth at SCE/PG&E/SDG&E company website as applicable to this Pilot or that are subsequently made a part of SCE/PG&E/SDG&E’s tariffs as part of the further implementation of this Pilot. This Agreement supersedes all prior representations and discussions between SCE/PG&E/SDG&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  SCE/PG&E/SDG&E Customer Account Information**

2 – __ __ – __ __ __ – __ __ __ __
Customer Account Number (Appears below your name on your SCE/PG&E/SDG&E bill)

__ __ __ __ __ __ __ __
Primary (Utility) Electric Meter ID Number (Appears below the “Compare the Electricity You Are Using” header section on the first page of your bill; Enter 9s for non-metered service)

_________________________________________________ ____________________   ______  __________
First and Last Name (As it appears on your bill)  Print Name

_________________________________________________ City  State  Zip
Customer Account Street Address

__ __ __ __ __ __ __ __ __ __ _________________________________@_________________________
Telephone Number  Email (Address to be used for communications regarding Pilot)

* Alternate Mailing Address (Provide if applicable):

_________________________________________________ ____________________   ______  __________
Street Address  City  State  Zip

**Section 3  Submeter Information (If multiple Submeters, attach separate sheet)**

Submeter unique identifier (Appears on the Submeter)

Date Submeter(s) installed: __ __ / __ __/ __ __

Expected charging demand (kW): ____________
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

_________________________________________________ Authorized Customer Name (Print)

Telephone Number

Executed this _______ day of ___________ _______ at ________________________________
Month Year City and State Where Executed

*********

I (Submeter MDMA), hereby release, hold harmless, and indemnify the Utility 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.

_________________________________________________ ________________________________________
Agent Signature

_________________________________________________ Agent Name (Print)

Company Name

_________________________________________________ City State Zip

Street Address

__________________________ _______________________________@_________________________
Telephone Number Email Address

Executed this _______ day of ___________ _______
Month Year
EV Submeter Pilot Phase 1
Submeter Meter Data Management Agent

Submeter MDMA Registration Agreement

Version 13.0

Date
1.0 Instructions for Qualifying as a Submeter Meter Data Management Agent

Background

On November 19, 2013, the Commission issued D.13-11-002 modifying the PEV Submetering Protocol requirements set forth in D. 11-07-029 by adopting the California Public Utilities Commission Energy Division (ED) Staff 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 form, the customer enrollment form, and MDMA Service Requirements.

All Submeter MDMAs must submit a Notice of Participation to the Commission’s Energy Division by April 1, 2014, to participate in the pilot. Submeter MDMAs 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 October 31, 2015.

The Commission may require that potential Submeter MDMAs comply with certain IOU 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 xxx and attached hereto as Attachment 1.

Registration Agreement

An entity desiring to act as a Submeter MDMA must complete the attached Registration Agreement and submit it the ED or, if so delegated, to SCE/PG&E/SDG&E at the contact below:

SCE/PG&E/SDG&E Contact Name
Title
SCE/PG&E/SDG&E
Address line 1
Address line 2
Voice: (###) ###-####
Fax: (###) ###-####
E-Mail: Email Address

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 e-mail. The approving entity 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 MDMAs to resubmit that portion of the application and restart the ten-day review process.
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 MDMAAs 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 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 approval to the utilities, in which case the Registration Agreement should be submitted directly to SCE/PG&E/SDG&E.

1. Upon receipt of the Submeter MDMA’s Registration Agreement, SCE/PG&E/SDG&E will electronically forward a copy of its data exchange requirements to the Submeter MDMA.

Submeter MDMA Registration Process

1. IOUs to send final Submeter MDMA Registration Agreement for Phase 1 of Pilot to participating Submeter MDMAAs once January 13, 2014 Advice Letter is approved.

2. Submeter MDMA submits Registration Agreement to the ED, or SCE/PG&E/SDG&E (if so delegated), by April 1, 2014:
   a. Provides documents to qualify submeter data accuracy and intervals per Performance Standards
   b. Provides sample data file that meets pilot requirements

3. If the ED delegates the Registration approval process to the IOUs, the IOU will use reasonable efforts to send a response in 10 business days:
   a. Preliminary Approval: Must pass a data transmission qualification test (i.e., send formatted data file to the IOU that meets IOU requirements)
   b. Rejected:
      i. Registration Agreement incomplete, complete and resubmit
      ii. EVSP/MDMA fails to meet pilot requirements, correct and resubmit
      iii. EVSP/MDMA fails to meet pilot requirements and cannot correct the failure, forward to CPUC for final disposition

4. Submeter MDMA receives final approval, may submit Customer Enrollment Forms to SCE/PG&E/SDG&E starting May 1, 2014.

5. Submeter MDMAAs shall enroll submeters on a first-come, first-served basis subject to Exclusivity Period and Enrollment Cap.

Enrollment Reporting
1. Submeter MDMAs must report the balance of unenrolled customers to the utility 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. SCE/PG&E/SDG&E will notify Submeter MDMAs of remaining spaces available via email by Wednesday of the following week.

3. Beginning at the fourth month Submeter MDMAs are able to enroll additional submeters on a first-come, first-served basis, reporting enrollments to the utility daily.

**Submeter Testing and Calibration**

Submeter MDMAs 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 MDMAs are required to obtain access from their participants.

**Data Format**

Submeter MDMA must satisfy SCE/PG&E/SDG&E’s Data Exchange Requirements, attached hereto as Attachment 2.

**Format Testing**

After SCE/PG&E/SDG&E receives the completed qualification documentation, the Submeter MDMA may contact SCE/PG&E/SDG&E to schedule the format acceptance test to ensure it can produce a secure data file that satisfies SCE/PG&E/SDG&E’s Data Exchange Requirements. To schedule the test, please contact XX.

**Security and Confidentiality**

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. 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.

**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. SCE/PG&E/SDG&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”.

**Jurisdiction**
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.

**Indemnification**

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, 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.

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

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<thead>
<tr>
<th>Signature of Authorized Agent of Company</th>
<th>MDMA Company Name</th>
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<tbody>
<tr>
<td>Name of Authorized Agent of Company (Print)</td>
<td>Executed on (Date)</td>
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<tr>
<td>Phone Number</td>
<td>City and State Where Executed</td>
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</table>
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.

SCE/PG&E/SDG&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 the utility 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 the utility daily.

This registration is for Phase 1 only and expires on October 31, 2015:

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<tr>
<th>Submeter MDMA NAME</th>
<th>Contact Person</th>
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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.

2. **Interval of Measurement.** The submeter shall have the capability to measure energy consumption in time intervals equal to the interval used by the utility, but submeters
are not be 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 the utility.

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 the utility.

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 the utility 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.

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. MDMAs 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. The utility 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.

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**E. Transfer of Submeter Data from Submeter MDMA 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 the utility. 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 the utility to efficiently receive data from the Submeter MDMA. These options may be offered to 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 the
Utility. The Transfer Testing may use the Minimum Transfer Requirement or the Alternative Transfer Requirement if offered by the Utility.

6. **Process Updates.** Utilities may make periodic changes to the standard format for the MDMA to submit meter data. Submeter MDMAs 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 Form (shown below) 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 MDMAs 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. The ED may elect to delegate this responsibility to the IOUs.

G. **SUBMETER MDMA VEE PERFORMANCE STANDARDS**

1. Meet requirements established in the “EV Submeter Pilot Data Reporting and Transfer Requirements” (Attachment 2 below)

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. The Utility will accept the Submeter MDMA’s data as being “valid” or VEE’d and bill both EV and primary accounts accordingly. Rather, the Submeter MDMA is not required to follow 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”). Provide link here.
3. The Submeter MDMA must provide all of its EV submeter data to the utility within 3 business days of the utility’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 the Utility 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 5% 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.

Testing requirements will be determined by the 3PE but may include:

- Electric Meter Accuracy Test: This test documents the meter accuracy at various load conditions. It is a common practice to test meters for accuracy at light load, full load, and power factor conditions.

- Meter Data Verification: Meter data verification ensures the usage recorded by the meter is the same as the usage passed on to the billing system by the Submeter MDMA. This test ensures all meter parts, data communication, and data processing systems are working and configured properly.

Submeter Manufacturer Certification & Accuracy: 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 number.
Attachment 2
EV Submeter Pilot Phase 1
Data Reporting and Transfer Requirements
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 MDMA s are expected to meet certain performance standards in the EV Submetering Pilot\(^1\), 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 MDMA s 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 draft.

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 signup customers for the Electric Vehicle Submetering Pilot. These additional activities are referenced herein, but the details are outside of the scope of this document. See Relevant References item 1, 2 and 3.

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.

**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.

\(^1\) See: Phase One Performance Standards For Metering And Meter Data Agents Participating In California’s Electric Vehicle Submetering Pilot
**UUID** - Universally Unique Identifier. UUID is used to identify entities such as Customer and Submeter MDMAs.

**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.

**Minimal Transfer Requirement**

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

**Spreadsheet Data Format**

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

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Field Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Party UUID</td>
<td>Assigned by IOU after the Submeter MDMA completes registration with the IOU.</td>
</tr>
<tr>
<td>Customer UUID</td>
<td>Assigned by IOU after a Registered Submeter MDMA completes the Customer enrollment with the IOU.</td>
</tr>
<tr>
<td>Submeter Serial Number</td>
<td>The submeter device identifier provided by the Submeter MDMA during the Customer enrollment process. The Submeter Serial Number is unique to each 3rd Party. (Formatted alpha-numeric)</td>
</tr>
<tr>
<td>Interval Duration</td>
<td>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 Subtractive Billing processes.</td>
</tr>
<tr>
<td><strong>Read Date &amp; Time</strong></td>
<td>Date &amp; Time for the end of the data interval. Read Date &amp; Time is expected to be at the top of the hour for 60 minute intervals (i.e., 10:00, 11:00), or on the quarter hour for 15 minute intervals (i.e., 10:15, 10:30, 10:45, 11:00). A read Date &amp; Time record is required for every interval every day, even when the Read Quantity is zero. (GMT Zero expected, formatted date time: YYYY-MM-DD HH:MM)</td>
</tr>
<tr>
<td><strong>Read Quantity</strong></td>
<td>Interval value in Watt hours. (Formatted Decimal 12/6)</td>
</tr>
<tr>
<td><strong>Date Processed</strong></td>
<td>Date the data was loaded into the spreadsheet by Submeter MDMAs. (GMT Zero expected, formatted date time: YYYY-MM-DD HH:MM)</td>
</tr>
</tbody>
</table>

Below is an example of the spreadsheet file:

![Spreadsheet File Name Structure](image-url)
The CSV spreadsheet files transferred by the Submeter MDMA to SCE/PG&E/SDG&E shall use the following file naming structure:

“MDMA-DUNS_IOU-DUNS_EVSP_YYYYMMDDHHMMSS.CSV”

<table>
<thead>
<tr>
<th>File Name Component</th>
<th>Component Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDMA-DUNS</td>
<td>The nine digit DUNS Number of the Submeter MDMA registered with the IOU and provided to the IOU as part of the Submeter MDMAs Registration process. (Format numeric 9, all formatting dashes omitted)</td>
</tr>
<tr>
<td>IOU-DUNS</td>
<td>The nine digit DUNS Number of the IOU and provided by the IOU as part of the Submeter MDMA Registration process. (Format numeric 9, All formatting dashes omitted)</td>
</tr>
<tr>
<td>EVSP</td>
<td>Hard coded “EVSP” to identify the file as part of the EV Submetering pilot application.</td>
</tr>
<tr>
<td>YYYYMMDDHHMMSS</td>
<td>The date and time the spreadsheet file was created by the Submeter MDMA.</td>
</tr>
</tbody>
</table>

Example file name: “987654321_123456789_EVSP_20130428245959.csv”

**Provision of UUIDs to Submeter MDMAs**

The provisioning of UUIDs consists of transferring the 3rd Party UUID and the Customer UUIDs from the IOU to the Submeter MDMA. The 3rd Party UUIDs are assigned by IOU after the MDMA’s approved registration into the EV Submetering Pilot. The Customer UUIDs are assigned by IOU after a Registered Submeter MDMA submits a valid Customer Enrollment form with IOU. The UUIDs are sent by encrypted email from IOU to the MDMA.

The Customer UUIDs will be sent to the Submeter MDMA in a CSV file containing both the UUID and the corresponding submeter account number for the customer’s service.
Attachment B

Preliminary Pilot Program Budget for each IOU
# SCE's Preliminary Budget
## Phase I and Phase II of EV Submetering Pilot
### January 2014

<table>
<thead>
<tr>
<th>Phase I</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT</td>
<td>338,000</td>
</tr>
<tr>
<td>Program Management</td>
<td>331,000</td>
</tr>
<tr>
<td>Enrollment Processing and Support (RSO - PS)</td>
<td>205,000</td>
</tr>
<tr>
<td>Manual Bill Processing (RSO - Billing)</td>
<td>208,000</td>
</tr>
<tr>
<td>Manual NEM Billing Data (RSO - Billing)</td>
<td>300,000</td>
</tr>
<tr>
<td>Training Development/Delivery</td>
<td>153,000</td>
</tr>
<tr>
<td>Incentives</td>
<td>160,000</td>
</tr>
<tr>
<td>Customer Experience Evaluation</td>
<td>500,000</td>
</tr>
<tr>
<td><strong>Total Phase I</strong></td>
<td><strong>$ 2,195,000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase II</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT</td>
<td>45,000</td>
</tr>
<tr>
<td>Program Management</td>
<td>514,000</td>
</tr>
<tr>
<td>Enrollment Processing and Support (RSO - PS)</td>
<td>234,000</td>
</tr>
<tr>
<td>Manual Bill Processing (RSO - Billing)</td>
<td>219,000</td>
</tr>
<tr>
<td>Manual NEM Billing Data (RSO - Billing)</td>
<td>300,000</td>
</tr>
<tr>
<td>Training Development/Delivery</td>
<td>103,000</td>
</tr>
<tr>
<td>Incentives</td>
<td>160,000</td>
</tr>
<tr>
<td>Customer Experience Evaluation</td>
<td>500,000</td>
</tr>
<tr>
<td><strong>Total Phase II</strong></td>
<td><strong>$ 2,075,000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase I and Phase II</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT</td>
<td>383,000</td>
</tr>
<tr>
<td>Program Management</td>
<td>845,000</td>
</tr>
<tr>
<td>Enrollment Processing and Support (RSO - PS)</td>
<td>439,000</td>
</tr>
<tr>
<td>Manual Bill Processing (RSO - Billing)</td>
<td>427,000</td>
</tr>
<tr>
<td>Manual NEM Billing Data (RSO - Billing)</td>
<td>600,000</td>
</tr>
<tr>
<td>Training Development/Delivery</td>
<td>256,000</td>
</tr>
<tr>
<td>Incentives</td>
<td>320,000</td>
</tr>
<tr>
<td>Customer Experience Evaluation</td>
<td>1,000,000</td>
</tr>
<tr>
<td><strong>Total Phase I and Phase II</strong></td>
<td><strong>$ 4,270,000</strong></td>
</tr>
</tbody>
</table>

Note: Costs will be recovered through the Electric Program Investment Charge (EPIC) pursuant to D.13-11-002 -- All costs will be tracked in a memo account and if Phase I and Phase II costs exceed EPIC funding estimated amount of $3.2 million, SCE will seek cost recovery.
While the recent EPIC decision, D.13-11-025, authorizes SDG&E to use EPIC funds for the submetering pilot, it is unclear whether the decision authorizes SDG&E to execute its submetering pilot program as part of its EPIC portfolio. SDG&E has recently filed a Petition for Modification of D.13-11-025 requesting clarification. SDG&E will file an advice letter to open a memorandum account to track costs with the Commission shortly.
### PG&E’s Estimated Costs for Phase 1 and 2 of EV Submetering Pilot

#### Phase 1

<table>
<thead>
<tr>
<th>TASK</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management</td>
<td>225,000</td>
</tr>
<tr>
<td>Process enrollments</td>
<td>20,000</td>
</tr>
<tr>
<td>Set up/Bill Non NEM</td>
<td>135,000</td>
</tr>
<tr>
<td>Set Up/Manually Bill NEM</td>
<td>65,000</td>
</tr>
<tr>
<td>Handle Customer Inquiries</td>
<td>10,000</td>
</tr>
<tr>
<td>Pay Incentives (500 Maximum)</td>
<td>160,000</td>
</tr>
<tr>
<td>Identify Evaluator</td>
<td>60,000</td>
</tr>
<tr>
<td>Evaluator contract (Phase 1)</td>
<td>500,000</td>
</tr>
</tbody>
</table>

Phase 1 subtotal: 1,175,000

Contingency 20%: 235,000

**Phase 1 Total**: 1,410,000

#### Phase 2

<table>
<thead>
<tr>
<th>TASK</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management</td>
<td>110,000</td>
</tr>
<tr>
<td>Process Enrollments</td>
<td>15,000</td>
</tr>
<tr>
<td>Handle Customer Inquiries</td>
<td>10,000</td>
</tr>
<tr>
<td>Set up/Bill Non-NEM</td>
<td>130,000</td>
</tr>
<tr>
<td>Set up/Bill NEM*</td>
<td>30,000</td>
</tr>
<tr>
<td>Automation of Manual Processes (ABS Updates)</td>
<td>85,000</td>
</tr>
<tr>
<td>Evaluator Contract (Phase 2)</td>
<td>500,000</td>
</tr>
<tr>
<td>Payment Incentives (500 Maximum)</td>
<td>160,000</td>
</tr>
<tr>
<td>Automation for ESPI (IT)</td>
<td>300,000</td>
</tr>
</tbody>
</table>

Phase 2 subtotal: 1,340,000

Contingency 20%: 270,000

**Phase 2 Total**: 1,610,000

**Total cost for both Phases**: 3,020,000

* Does not include PV submeter costs.

** $2.5M out these funds to come from EPIC
Attachment C

Pilot Evaluation Process Timeline
# Planning Details for Selection of EV Pilot Third Party Evaluator

<table>
<thead>
<tr>
<th>Area</th>
<th>Milestone</th>
<th>Completion Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planning Details</strong></td>
<td>Review Planning Details with IOUs</td>
<td>1/10/2014</td>
<td>Finalize overall planning / Milestone details with IOUs</td>
</tr>
<tr>
<td><strong>Requirement Development</strong></td>
<td>Start Requirements Development</td>
<td>1/6/2014</td>
<td>Create and review requirements details</td>
</tr>
<tr>
<td></td>
<td>Complete Requirements Development</td>
<td>3/7/2014</td>
<td>Finalize requirements</td>
</tr>
<tr>
<td><strong>RFP</strong></td>
<td>Start RFP Development</td>
<td>3/10/2014</td>
<td>Create and review RFP details</td>
</tr>
<tr>
<td></td>
<td>Complete RFP Development</td>
<td>4/4/2014</td>
<td>Finalized RFP details</td>
</tr>
<tr>
<td><strong>Publish</strong></td>
<td>Publish RFP</td>
<td>4/14/2014</td>
<td>Publish RFP to selected vendors</td>
</tr>
<tr>
<td><strong>Vendor Response</strong></td>
<td>Vendor Meeting</td>
<td>4/28/2014</td>
<td>Review and provide clarification to Vendor questions</td>
</tr>
<tr>
<td></td>
<td>Vendor Response Due</td>
<td>5/9/2014</td>
<td>Response due from Vendors</td>
</tr>
<tr>
<td><strong>Vendor Selection</strong></td>
<td>Complete Initial Scoring</td>
<td>5/12/2014</td>
<td>Complete initial selection based on the response</td>
</tr>
<tr>
<td><strong>Initial Review</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>First Round</strong></td>
<td>Complete First Round of Reviews</td>
<td>5/23/2014</td>
<td>Conduct in-person demo / reviews with the shortlisted vendors</td>
</tr>
<tr>
<td><strong>Second Round</strong></td>
<td>Complete Second Round of Reviews</td>
<td>6/10/2014</td>
<td>Conduct in-person demo / reviews with the shortlisted vendors</td>
</tr>
<tr>
<td><strong>Final Selection</strong></td>
<td>Select Vendor</td>
<td>6/20/2014</td>
<td>Complete vendor selection</td>
</tr>
<tr>
<td><strong>Contract Negotiation</strong></td>
<td>Start Contract Negotiation</td>
<td>7/1/2014</td>
<td>Start contact negotiation with a selected vendor</td>
</tr>
<tr>
<td></td>
<td>Finalize Contract</td>
<td>8/15/2014</td>
<td>Complete contract negotiations</td>
</tr>
<tr>
<td></td>
<td>Signoff Contract</td>
<td>8/31/2014</td>
<td></td>
</tr>
<tr>
<td>Company Name</td>
<td>Legal Firm</td>
<td>Company Name</td>
<td>Legal Firm</td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
<td>--------------</td>
<td>------------</td>
</tr>
<tr>
<td>1st Light Energy</td>
<td>Douglass &amp; Liddell</td>
<td>OnGrid Solar</td>
<td>Pacific Gas and Electric Company</td>
</tr>
<tr>
<td>AT&amp;T</td>
<td>Downey &amp; Brand</td>
<td>Pacific Gas and Electric Company</td>
<td>Praxair</td>
</tr>
<tr>
<td>Alcantar &amp; Kahl LLP</td>
<td>Ellison Schneider &amp; Harris LLP</td>
<td>Regulatory &amp; Cogeneration Service, Inc.</td>
<td>SCD Energy Solutions</td>
</tr>
<tr>
<td>Anderson &amp; Poole</td>
<td>G. A. Krause &amp; Assoc.</td>
<td>SCE</td>
<td>SDG&amp;E and SoCalGas</td>
</tr>
<tr>
<td>BART</td>
<td>GenOn Energy Inc.</td>
<td>SECO</td>
<td>SPURR</td>
</tr>
<tr>
<td>Barkovich &amp; Yap, Inc.</td>
<td>GenOn Energy, Inc.</td>
<td>San Francisco Public Utilities Commission</td>
<td>Seattle City Light</td>
</tr>
<tr>
<td>Battle Wells Associates</td>
<td>Goodin, MacBride, Squeri, Schlotz &amp; Ritchie</td>
<td>Sempra Utilities</td>
<td>SoCalGas</td>
</tr>
<tr>
<td>Braun Blaising McLaughlin, P.C.</td>
<td>Green Power Institute</td>
<td>Southern California Edison Company</td>
<td>Spark Energy</td>
</tr>
<tr>
<td>CENEGY POWER</td>
<td>Hanna &amp; Morton</td>
<td>Sun Light &amp; Power</td>
<td>Sunshine Design</td>
</tr>
<tr>
<td>California Cotton Ginters &amp; Growers Assn</td>
<td>In House Energy</td>
<td>TecoGen, Inc.</td>
<td>Tiger Natural Gas, Inc.</td>
</tr>
<tr>
<td>California Energy Commission</td>
<td>International Power Technology</td>
<td>TransCanada</td>
<td>Utility Cost Management</td>
</tr>
<tr>
<td>California Public Utilities Commission</td>
<td>Intestate Gas Services, Inc.</td>
<td>Utility Power Solutions</td>
<td>Utility Specialists</td>
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