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Bcc:

Subject: Re: Presentation:12/16/11 Submetering Protocol Project Team All Hands

George - PG&E agrees that "non revenue grade" mobile submetering (i.e. no utility subtractive billing relationship, no utility communications interface) is within the definition of non-revenue grade submetering generally and is already legally authorized and permitted by the Phase 1 CPUC EV decision -- no need to wait if GM wishes to install mobile "energy usage monitoring" devices for the benefit of its EV customers, as long as it is not relying on PG&E or the CPUC for any involvement in the bilateral transaction between GM and its customer.

Of course, the law and CPUC regulation could change in the future, but that is our understanding of what the CPUC currently permits. If I misunderstood your question, please feel free to clarify.

Thanks!

Chris Warner  
PG&E

**From:** george.bellino@gm.com [mailto:george.bellino@gm.com]

**Sent:** Sunday, December 18, 2011 11:18 PM

**To:** Chetna.Nanjappa@sce.com

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**Subject:** Re: Presentation:12/16/11 Submetering Protocol Project Team All Hands

*I hope it is not too late to provide comments on the issues addressed at last Friday's all hands meeting.*

*Without clear definition on the technical and certification requirements and specifications,*

determinations on many aspects of the roadmap may be unqualified or subjective. Case in point is the Use Case Timing chart showing Mobile submetering as a long term use case - according to the open issues for the Roadmap under Submetering Project Guiding Principles the mitigation strategy allows for non revenue grade submetering in the near term - mobile submetering in this regard could be used in the near term. PEVs from most OEMs do have the capability to measure the AC from the grid into the vehicle presently. The ability to integrate a revenue grade measurement capability into the vehicle can conceivably be accomplished within two years depending on the determined technical specifications and certification requirements. An embedded firmware technology solution should be the recommended direction and could apply to other location applications such as in the EVSE, cordset, or other convenient customer communications and monitoring devices. Decisions on the allowable technologies would drive the considerations for certification. The primary decision criteria needs to be what is the most convenient and cost effective solution for the customer, which I do not see listed in the Guiding Principles.

The listed required action steps under Submetering Technical Requirements, Compliance, and Standards seem to take this issue into consideration, and notes that many determinations still need to be accomplished. The customer issues are to be addressed as part of the use case evaluation criteria. I am very interested in how well qualified the results will be, especially the customer cost assessment.

I know this is not an easy endeavor and needs more time than allotted, so I do appreciate the effort put into this and the complexities of determining and implementing a protocol. There needs to be a clear focus on not making any decisions today that will negatively affect or preempt the desired long term solutions.

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From: Chetna.Nanjappa@sce.com  
Date: 12/15/2011 12:39PM  
Subject: Presentation:12/16/11 Submetering Protocol Project Team All Hands

Hello everyone, this a reminder about tomorrow's all hands meeting. I have attached the presentation for you to review and come with questions. We expect to provide additional use case information in a separate communication. Thank you for your patience!

Webex information included at the bottom of this email. Thank you in advance for your participation in tomorrow's All Hands!

thanks!  
Chetna Nanjappa

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Date: 12/09/2011 10:57 AM  
Subject: INFORMATION: 12/16/11 Submetering Protocol Project Team All Hands

**FOR INTERNAL USE ONLY**

Hello project team members,

Attached is the agenda for the December 16 Submetering all hands meeting. This was a meeting we proposed at the Nov 10 kick off meeting as a formal check in on the roadmap development process since some participants may not be able to attend all the working meetings. We are looking forward to your attendance at this meeting. Please pass this along to others that may want to join.

**Friday December 16, 2011 10am-12pm PST**

[attachment "IOU SM Protocol Roadmap Update Meeting Agenda 12.16.2011 v2.docx" deleted by Chetna Nanjappa/SCE/EIX]

**Webex Meeting Information**

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Topic: Submetering All Hands Meeting  
Date: Friday, December 16, 2011  
Time: 10:00 am, Pacific Standard Time (San Francisco, GMT-08:00)  
Meeting Number: 803 756 857  
Meeting Password: Dec162011

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For assistance

- 1. Go to <https://sce.webex.com/sce/mc>  
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**Thank you,**

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[attachment "Submetering Protocol Roadmap Update 12.16.2011v7.pptx" removed by George Bellino/C/US/GM/GMC]

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