Dear Working Group Stakeholders:

Thank you for all the attention you’ve dedicated to developing the terms and definitions and use cases. This has been a terrific effort and is providing very useful information in bringing us closer together in our understanding of the issues in front of us.

This email is intended to provide some clarifications on the working group objectives and offer further specific direction to the participants who have submitted use cases to the Use Case Sub-Working Group.

1. **Follow up from June 12 in-person meeting**

We have posted a written meeting summary and the participant presentations on the CPUC website: <http://www.cpuc.ca.gov/vgi/>.

1. **General observations and clarifications**

First, we want to reiterate that the goal of our work is to increase electric car ownership and reduce emissions. In considering VGI, it must be through the lens of whether or not this effort will lower the overall costs of ownership or increase the value perceived by the customer in order to incentivize electric vehicle adoption.

Second, regarding the specific objective of the working group, the workplan states the following objective:

“Assess how and whether the adoption of a communications protocol or protocols is necessary to enable Plug-In Electric Vehicle-Grid Integration (VGI) resources to more economically engage with the electricity grid and markets at scale.”

The CPUC initiated this discussion of communications protocols because we are currently reviewing investor-owned utility proposals to accelerate transportation electrification in the state. Many of their proposals include projects to install EV charging infrastructure and we are examining how to ensure their investments enable EV adoption and do not result in stranded assets. In our evaluation of these utility proposals, we are considering whether we need to require any protocol(s) for the utility procurement or qualification of EVSE. Because CPUC jurisdiction is over the utilities and their investments, the type of protocol(s) CPUC could potentially require for utility investments is one between the EVSE and the EV. While there are many additional ways the CPUC can facilitate VGI, for the purposes of this working group, we are focusing on a whether a communications protocol(s) is necessary between the EV and EVSE.

To evaluate the specific question of the necessity of communications or “intelligence” within the EVSE to enable VGI, we need to understand the broader network architecture required by various VGI use cases. We are examining a more comprehensive set of VGI requirements and the general value of those VGI products for the CPUC to ultimately answer a very specific question regarding the need for a communication standard(s) between the EV and EVSE to unlock the value of VGI. The Working Group outputs will also help inform the California Air Resources Board SB 454 Electric Vehicle Charging Open Access Act activities and allow the CEC allow the CEC to understand how to better characterize electric vehicle load and infrastructure flexibility as part of the Integrated Energy Policy Report and CEC’s investment programs.

1. **Specific direction to the participants that have submitted use cases**

Based on feedback we heard during the June 12 meeting, the state agencies are trying to more clearly articulate the outcomes and information necessary for our decision-making processes. For all participants that have submitted a use case to the Use Case Sub-Working Group, please complete the attached Use Case Requirements Template in Excel for your use case according to the instructions below.

The purpose of this Excel file is to extract all of the requirements for each of the submitted use cases, without requiring an additional sub-group to complete this task. Once we have defined the requirements for each use case, the next step will be to map which communications protocols meet the defined requirements.

For each use case you have submitted that has been reviewed by the use case sub-group, please fill out one row of this Excel file. You will find the example, “Demand fee mitigation, in public charging at a commercial building” already populated. Please complete each column based on the column descriptions provided in row 3 of the attached Use Case Requirements Template.

Please submit the completed template within one week after your use case’s review has been completed by the Use Case Subgroup. If your use case has already been reviewed by the Subgroup, please fill out and submit the Excel sheet as soon as possible. Email your completed Excel file to Stephanie Palmer at Stephanie.palmer@arb.ca.gov,  who will compile all responses into one worksheet that will be posted on the Google drive.

We will be asking for a few (2-3) volunteers at the next Working Group meeting (June 26th), who will review this information and present a consolidated, accurate view of the requirements to the VGI Working Group. Please contact the VGI working group email (vgiworkinggroup@cpuc.ca.gov) or Stephanie Palmer if you have any questions or if you would like to volunteer to review the consolidated requirements template.

For each use case, please identify the following:

•             Tags based on the use case categories in the VGI Roadmap

•             All actors involved in the use case

•             Requirements to complete the use case using shall, should, and could statements as defined in the “definitions” tab of the Use Case Requirements Template.

•             Communication Paths between the different actors identified in columns O through X. Identify whether each of the 10 communication paths is primary, secondary, optional, alternative, or none as defined in the “definitions” tab of the Use Case Requirements Template.

Who: all participants that submitted a use case to the Use Case Sub-Working Group

What: complete one row of the attached Excel template per use case

When: within one week of your use case being reviewed during the Use Case Sub-Working Group

Where to submit: email excel file to Stephanie Palmer at ARB Stephanie.palmer@arb.ca.gov