VGI WORKING GROUP
WORKING GROUP CALL 4/2
PARTY RESPONSES ON ACTION ITEMS FROM 3/26 WORKING GROUP CALL

Action Item #4. All parties provide any comments on consolidation and/or proposed actual text of consolidated policy recommendations. This applies to any of the policy topics discussed on the 3/26 call, in the 3/19-3/20 workshop, and in the "VGI consolidation notes" document. An example by Gridworks of actual text of a consolidated policy recommendation is given on the first page of that document for the Dynamic TOU topic. This action item also includes feedback on the comments and proposed text by Honda and by CalETC on policy topics and consolidation, also in the "VGI consolidation notes" document.

PG&E (Maria Sanz-Moreno)

- In addition to the recommendations provided in the Word document attached, PG&E agrees to Gridwork's approach to consolidate policy topics as depicted in the example for Topic #1 Dynamic TOU Rates (see document attached). We would like to have the opportunity to review the consolidated policy topics once a draft is available.
- PG&E supports CPUC's suggestion of consolidating topics at a high level and then having a list of specific actions (call on 3/31/2020). These actions can derive from already existing policy recommendations (e.g. those regarding pilots and demonstrations)
- To the extent possible and considering the content of each policy, PG&E recommends using the 18 topics suggested by CalETC to create overarching policy recommendations.

MHDV Team (Naor Deleanu)

We echo many of Nuvve's sentiments regarding V2G wholesale market applications, but have not coordinated on a specific consolidated proposal. Market access for V2G is a common theme that is part of recommendations 1.4, 3.3, 3.4, 3.8, 3.9, 3.10, 3.12, 5.4.

CESA (Jin Noh) – excerpts from submitted PDF (10 pp. dated 3/1), with support from Tesla (Bill Ehrlich)

…As the over 100 policy recommendations are consolidated and prioritized, CESA recommends that the working group strive to conduct this process within an eye toward the broader policies, programs, and issues in place for all distributed energy resources (DERs) and distill the VGI-specific barriers and issues that must be resolved within these broader DER issues. At times, this working group appears to have operated in a policy "silo" in which the VGI barriers and policies are not in line with expectations or realities of current DER policies, programs, or frameworks.

For example, many of the discussions around VGI participating in the Self-Generation Incentive Program (SGIP), providing resource adequacy (RA) services, and/or participating in the wholesale market have not considered the VGI-specific issues of such resources participating in these various pathways. VGI has the

potential to operate as any other smart grid-facing DER, so this working group should strive to identify how current policies, programs, or frameworks are not sufficiently enabling VGI participation, and if not, whether modifications to existing structures or creation of new structures are needed… At the same time, CESA does not seek to confine VGI policies and recommendations to remain within the framework in place for DERs, which could only serve to stifle innovation and new ideas. There may be VGI-specific frameworks or programs that could be appropriate…

Suggested consolidation topic: **Wholesale Market Participation & Access**

1.4: Apply station power concepts to V2G
3.2: Allow telemetry at aggregation level
3.3: Solve critical issues with DERP-NGR to enable MUAs and the economic integration of aggregated BTM V2G in CAISO markets
3.4: Solve critical issues to enable aggregated BTM V2G to provide RA
3.5: Incorporate V1G opportunities in the DRAM program, once reinstated permanently
3.6: Enable aggregations of EVs on managed charging to participate as resources in real-time energy markets and ancillary services market
3.7: Enable aggregations of EVs on managed charging to meet RA requirements
3.10: CAISO allows for BTM resources to participate in Frequency Regulation without 24/7 wholesale settlement
3.11: Allow 100 kW threshold bid for A/S

Suggested consolidation topic: **DER Programs**

2.2: V2G systems become eligible for some form of SGIP incentives
2.13: Co-installation of batteries with high-power/fast charge installations both for public charging and at private sites

Suggested consolidation topic: **Resiliency & PSPS Solutions**

5.2, 5.3: Pilot funding for V2H backup power solutions
5.4: Enable BTM V1G/V2G to provide supply, capacity, or other services in FTM sectionalized microgrids
5.12: Create tariffs specific to electric school buses that potentially account for V2G
5.14: Develop standards and requirements for buildings which will support the use of the EV's main power batteries for customer resiliency

Suggested consolidation topic: **Interconnection**

8.2: Waive second interconnection of V2G
8.4: Adopt interim procedures for validating current limiting functionalities in smart charging
8.5: Interconnection of mobile inverters
8.7: Enable V2G AC interconnection pathway

<u>**GPI (Tam Hunt)**</u>

Responding to Honda's comments: Honda states "the five recommendations under 'Rule 21 Interconnection Topics' could probably be eliminated, or at most collapsed to one: 'Coordinate Rule 21 efforts with SAE, IEEE and other relevant standards organizations.' Since this is already being done, the CPUC doesn't really need to set policy."

GPI notes that there is a dormant V2G AC interconnection subgroup, in the Rule 21 proceeding (R.17-07-007), which convened until earlier this year and issued a report calling for possibly re-convening in July in order to assess progress by standards organizations at that time, and see if the time is then ripe to complete the work required for V2G AC interconnection. So it is not entirely accurate to state that "this is already being done." The Commission should issue guidance on the V2G AC WG report, which it has not yet done, and establish how it will handle the VGI interconnection issues that remain outstanding. Until then, the VGI WG should include interconnection policy recommendations. GPI agrees with the remainder of Honda's comments, except where we note below in our comments on CalETC's recommendations.

CalETC proposed topic areas. GPI agrees with CalETC's long list of [18] topic areas.

Other comments and questions. It is not clear to GPI how the current policy development exercise relates to the DRIVE OIR and the draft TEF report. For example, the last recommendation in the 100 policy recommendations spreadsheet is ME&O for dynamic rate options and VGI opportunities. Recommendation 95 is similar but focused on educating consumers on the reduced cost of driving with EVs. But ME&O is a chapter in the draft TEF report and may well include these specific ME&O topics.

GPI has been active in ME&O discussions in relation to EVs for a decade now. We have submitted comments on this large topic area in the DRIVE OIR on the draft TEF. One of our key recommendations is that funding for ME&O should be substantially increased and that most ME&O funding should be funneled toward third parties but administered by IOUs. IOUs should focus on types of ME&O that they have demonstrated they can do well and third parties should be tapped for other types of ME&O.

UCS (Sam Houston)

In general, I think the process and survey look good. I would note that we may have to do some consensus-building around what falls into the short- versus long-term groups under step 5. For example, Charlie Botsford/Honda put school bus V2G pilots in the long-term bin. However, there are already some school bus V2G pilots ongoing and more should continue in the near term.

I think it is also worth clarifying that recommendations that will be realized in the long-term may require some action in the near term so that programs and markets are ready when the technology is ready and in-demand.

CalETC (Dean Taylor)

1. We recommend all the 120 policy actions be placed in categories (policy topics)- even the ones that are likely being done otherwise (e.g., it can be captured how they can be done faster, larger, better) - and even if we end up with 30 or more categories.
2. We recommend that within the categories, subcategories are assigned to CPUC, CEC, CARB, CAISO or "all agencies."   This last one is a possible simplification to prevent repetition as some of CalETC's recommended policy actions could be assigned to all agencies.
3. We agree with the focus on short-term and mid-term, but also recommend an option called "on-going" as many of the CalETC recommended policy actions fit best as "on-going."
4. In addition, when stakeholders are surveyed we recommend that they are asked if the policy action is applicable to their organization (1-5 scale from low to highly applicable).

Karim Farhat

Process Step #3. Separate out recommendations that CPUC is doing anyway (put into a Final Report annex)

> Suggestion: Distinguish but keep it in the main body of the report?

Survey question: How important is this recommendation (scale 1-5)?

> Replace with: Do you agree/disagree with this recommendation.

Survey question: Considering the use-case scoring results applicable to this recommendation (see associated list to be created), how much value does this recommendation create (scale 1-5)?

I do not support this question. This might risk compromising the integrity and objectivity of the scoring results we already have. The value created by the use-cases has already been decided by the scores. Let's not subjectively score the scores.

PG&E (Maria Sanz-Moreno)

Clarification and Consolidation of ~130 Policy Recommendations – Proposed Process

1. Clarify recommendations via CPUC comments and responses to comments
2. (Former Step #3). Separate out policy recommendations (i.e. ~130 items) ~~that CPUC is doing anyway~~ (put into a Final Report annex)
   - Instead of using the strikethrough text, PG&E recommends that policy recommendations that in view of participants 'current practices already exist, are redundant and/or included in parallel proceedings, are added to the annex
3. (Former Step #2). Consolidate remaining (e.g. ~65 items) policy recommendations into fewer discrete recommendations by policy topic per existing 13-18 topics
   - PG&E recommends using the 18 topics suggested by CalETC to create overarching policy recommendations.
   - These more general objectives could then include of list of more actionable recommendations (e.g. Policy Topic: Time Variant Rates → Action associated: 5.1. action. V2H for PSPS demonstration, # vehicles, budget, short-term).
   - PG&E recommends taking into consideration the applicability of the policy recommendation to the different participants.
   - High priority recommendations should be recommendations that reach the greatest number of drivers throughout all vehicle classes and contribute to a more intelligent grid with less cost associated, even if they get less votes in the survey.
   - In addition, please see recommendation in the survey section.
4. Separate out recommendations for "long-term/future" (put into a Final Report annex)
5. Divide remaining into two groups: Short-term 2020-2021 and Medium-term 2022-2025 (3-5yrs)
6. Prioritize recommendations in each group based on survey by Working Group

For the survey, for each recommendation, ask questions like:
- How important is this recommendation (scale 1-5)?
- How applicable is this recommendation to your organization? (scale 1 (does not apply) – 5 (applies and is relevant))
- How clear and policy-ready is this recommendation (scale 1-5)?
- Do you agree that this recommendation should be short-term (yes/no)?
- Considering the use-case scoring results applicable to this recommendation (see associated list to be created), how much value does this recommendation create (scale 1-5)?

<u>**GPI (Tam Hunt)**</u>

6-Step Process. GPI agrees with #1, #3, #4, #5. For #2, GPI does not agree with a need to consolidate into fewer discrete recommendations. We do agree with a need to consolidate into a clear organizational structure. But such consolidation doesn't necessarily lead to fewer discrete recommendations – that will happen if there is redundancy and overlap, but not if each discrete recommendation is a viable and valuable recommendation.

For #6, GPI agrees with this but should add language after "Working Group" "and Commission and Gridworks staff." This is the case because surveys don't always capture the full picture and will often need to be curated. If parties don't like the additional structure by Gridworks or Commission staff parties may raise concerns in the workshops or by written comments.

Survey. Suggest adding the following survey questions:

- How much effort/expense, on a scale of 1-5, will this recommendation require for implementation?
- Should a cost/benefit analysis of some sort, even qualitative, be required for this recommendation?
- Is there significant overlap or redundancy with other policy recommendations?