

VGI WORKING GROUP

Policy Recommendations Clarification and Consolidation Notes

Working Group Call 3/27

Clarification and Consolidation of 120 Policy Recommendations – Proposed Process

1. Clarify recommendations via CPUC comments and responses to comments
2. Consolidate into fewer discrete recommendations by policy topic per existing 13-18 topics
3. Separate out recommendations that CPUC is doing anyway (put into a Final Report annex)
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 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)?

Example consolidation for Topic #1 Dynamic TOU Rates (recommendations 1.5, 1.6, 1.7, 1.8, 1.10). The supporting information provided in the individual recommendations, along with the CPUC comments, could be added to a “supporting discussion” section after the consolidated recommendation.

Establish EV TOU rates that (a) don’t require separate metering or submetering; (b) pass through time- and location-specific price signals that reflect, at a minimum, energy, delivery, and GHG; and (c) are not too complex for customers to understand and use. All EV charging should be subject to TOU rates and rates should be consistent to the extent practical and appropriate across IOUs (i.e., time windows for off-peak rates) and should reflect “realistic” costs of energy and grid conditions. Allow commercial and industrial customers to opt to switch to a commercial EV fleet TOU rate that eliminates monthly demand charges in favor of some modified form of more-dynamic demand charges.

Below are further clarification and consolidation comments from:

- Honda
- CalETC

Honda (Charlie Botsford)

The following are my observations on the 13 CPUC topics consolidation exercise. The document lists only 10 topics, which have 41 total recommendations. This leaves **58 recommendations** from the 3.18 spreadsheet not listed. Of the “13 topics” list, whittling those down to a much smaller number looks straightforward.

For example, 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.

The three “Cost-Benefit Analysis” recommendations could probably be collapsed to one: **“perform detailed cost-effectiveness analyses for every rate-payer funded program and use that as guidance.”** Again, CPUC is probably required to do this.

The others are:

- Customer-side load management/energy management systems – 2 recommendations, As with other topics it’s not clear CPUC needs to set a policy
- School Bus V2G pilots – 3 recs, These topic recommendations should be placed in the long-term bin
- Demand Response/Resource Adequacy – 9 rec, This topic needs work to consolidate recommendations
- V2G Powered Microgrids – 2 recs, These topic recommendations should be placed in the long-term bin
- Non-Generator Resources (NGR) – 4 recs, This topic needs work to consolidate recommendations
- SGIP Incentives for V2G – 5 recs, This topic needs work to consolidate recommendations. May not have much consolidation
- NEM or other value for export – 3 recs, probably consolidate to one recommendation
- Dynamic TOU Rates – 5 recs, This topic needs work to consolidate recommendations
- LCFS credit value – not listed in document
- Building Codes for V2G enabling capacity – not listed in document
- ME&O regarding costs and EVs – not listed in document

What happens to the other **58** policy recommendations not listed? Could these be put into “other” bucket? CPUC has commented on many of them.

CalETC (Dean Taylor)

CalETC comments in Red underline on the Energy Division suggested VGI policy topics to consolidate the ~ 130 policy action list. *A few examples in italic (from CalETC's letter)*

1. Dynamic TOU rates (should be broader – Time variant rates)
 - a. *Optional whole house or commercial rates to accommodate day-time solar*
2. NEM or other value for export
3. SGIP (or SGIP-type) incentives for V2G (should be broader and include V1G)
4. Non generator resources (NGR)
5. V2G powered microgrids (should be broader and include all non-exporting-to-grid V2H, V2B and V2M)
 - a. *Note - CalETC recommends the final report have a glossary on these V2G related terms*
6. Demand response/resource adequacy
7. Rule 21 interconnection topics (should include AC and DC V2G)
8. LCFS credit value
9. Building Codes for V2G enabling capacity
10. ME&O regarding costs and EVs
11. School bus V2G pilots (should be broader and renamed “Demonstrations for V1G and V2G”)
 - a. *CalETC's VGI Acceleration proposal to CEC to fund California agencies to select many promising complex VGI use cases for large scale demonstrations¹*
12. Customer-side load management/energy management systems
13. Cost-benefit analysis
14. VGI studies and expert forums
 - a. *Grid impact studies to 2040*
 - b. *Data expert program*
 - c. *Net value studies*
 - d. *Submetering forum*
15. Technical standards, communication protocols and platforms
 - a. *Open standards in agency regulations and incentives - especially for utilities , charging networks and site hosts and for connectors, payment, access, VGI communication, and site host choice*
 - b. *Low cost, multiple VGI communication control pathways to stimulate healthy competition amongst VGI aggregators and service providers to lower the cost of VGI solutions and reduce grid impacts*
16. Consistency and Coordination Between State Agencies and State Policy Goals
 - a. *Non duplicative efforts by agencies, better understanding of agency roles, consistent VGI vision and policies by the agencies, increased coordination at staff and executive levels*
 - b. *Avoid meetings on the same day, coordinate between agencies to not overload the stakeholder community in a month or quarter*
 - c. *State agencies should work to support state goals for adoption of light, medium and heavy duty EVs as well as non-road TE including TE with very little flexible load*
17. Lower KW charging per EV served
 - a. *Justification: help the grid integrate the huge numbers of EVs that are coming and also save money on both sides of the meter. See SMUD studies on the large value*
 - b. *Higher level charging should have a price signal for demand in the long-term*
 - c. *Incentivize multiple EVs using a single charging station*
18. Other - non VGI topics
 - a. *The joint automakers have examples in their comments*

¹ that will accelerate adoption, validate reliability, security, acceptance, value and help automakers and charging networks make business decisions to commercialize VGI at scale