

DOCKETED

Docket Number:	18-MISC-04
Project Title:	Vehicle Grid Integration Roadmap Update
TN #:	224775
Document Title:	Olivine Inc.'s comments on the Vehicle Grid Integration Roadmap Update
Description:	N/A
Filer:	System
Organization:	Olivine
Submitter Role:	Public
Submission Date:	9/21/2018 4:22:06 PM
Docketed Date:	9/21/2018

Comment Received From: Hitesh Soneji
Submitted On: 9/21/2018
Docket Number: 18-MISC-04

Olivine Inc.'s comments on the Vehicle Grid Integration Roadmap Update

Additional submitted attachment is included below.



September 21, 2018

Eli Harland
California Energy Commission
VGI Roadmap Facilitation

Re: Vehicle Grid Integration Roadmap Update – Public Comment Towards 2 Day Workshop

Submitted online via California Energy Commission (CEC) Web Comment Submittal Form

Olivine supports the Energy Commission's efforts to update the Roadmap and address tracks that still need attention. The proposed Vehicle Grid Integration (VGI) Roadmap Update covers a broad set of topics and shows that careful attention has been given to the topics to be included in the update.

Olivine is active in the VGI space, and involved in several EPIC projects that aim to demonstrate VGI at scale as well as Vehicle-to-Grid (V2G) functionality: value to the grid, and economic value to the resource owner. In the California E-Bus-to-Grid Integration Project (EPC-16-065), Olivine observed the challenges faced by the Antelope Valley Transit Authority in full scale transit electrification: including deployment of charging infrastructure, availability of technology, and concerns over fuel costs.

The Energy Commission staff seeks comments on whether there are "goals missing or issues or problems not identified."¹ The challenges we have faced in our VGI efforts inform our recommendations on issues and goals that should be included in the VGI Roadmap Update:

- Issue: Regulatory impasse over enabling export of power to the grid from batteries. Without resolution of this issue, Behind the meter (BTM) V2G power flow will remain a pilot-only concept. The CEC should make an explicit goal to enable BTM V2G. Progress can only be made on V2G by engaging key stakeholders from the relevant organizations, including the Independent System Operator, utilities, CEC, and CPUC. Goal: Develop an electricity market for V2G
- Issue and Goal: Rate Design -- Develop rate structures that do not inherently hinder electrification of medium and heavy-duty fleets with punitive, and possibly unnecessary maximum demand charges
- Issue and Goal: Demand Charge reform: broadly speaking, non-coincident demand charges do not clearly target grid stress, reduce emissions, or result in time critical load response. Demand charge reform is alluded to by the Roadmap Matrix excel workbook's reference to the issue of "smart charging to minimize the costs of electrification" in cell C2, Roadmap Matrix worksheet. Further down, however, in the Customer Experience section (cell C14), an identified issue is that "consumer information such as optimal time for charging and managed charging methods, incentives and utility bill savings is not disseminated at the scale necessary to achieve PEV goals"; this appears to assume that utility bill savings exist to incent investment at scale. Olivine's experience does not bear this assumption out. The issue is more clearly presented in the Policy section further down in the Roadmap Matrix, in cell C34, with a reference to the fact that "rapidly evolving RPS, rate designs, and infrastructure incentive policies influence the usefulness of VGI", but the issue in this cell is then defined as the lack of certainty, as opposed to problems caused by rate design.

We appreciate this opportunity to offer our input and look forward to participating in the workshops.

Sincerely,
Hitesh Soneji
Sr. Solutions Design Engineer, Olivine Inc.

¹ : Vehicle-Grid Integration Roadmap Update Proposed Approach, Framework, and Topics, at 3.