<u>Metrics & Methodologies to Evaluate Transportation</u> <u>Electrification Programs</u>

SCHEDULE & AGENDA

May 9, 2019

Session	Speakers	Time
Introductory Remarks	Commissioner Cliff Rechtschaffen	10-10:10 AM
Panel 1: Review of California's existing TE metric collection and program evaluation methodologies OBJECTIVE: Describe current state agency efforts to collect data and compare results across various TE programs Overview of CPUC IOU SB 350 TE Program metrics, evaluation efforts, and key research questions IOU Presentation on current SB 350 TE program evaluation process CARB ZEV adoption and emissions modeling CEC: Benchmarking the costs of charging infrastructure and services	Carrie Sisto, Analyst, Energy Division, CPUC Energy Analyst, Electric Vehicles Ziga Ivanic - Transportation Program Director, Energetics, evaluation lead for IOUs SB 350 Priority Review Projects Joshua Cunningham - Branch Chief, Advanced Clean Cars Branch, CARB Yachun Chow - Manager, Zero Emission Truck and Bus Section, CARB Noel Crisostomo - Air Pollution Specialist, Fuels and Transportation Division, CEC	10:10 -11:20AM
Break		11:20 AM-11:30AM
Panel 1 Discussion (Panelists + Workshop Participants) OBJECTIVE: Identify strategies to better align and streamline state agencies' TE program evaluation efforts	 Are other state agencies currently collecting standard data/metrics to review results from publicly-funded TE programs? If not, how are they developing new programs and regulations? The 2018 SB 350 TE decisions direct the IOUs to work with CPUC and the selected evaluator to develop methodologies to measure: Incremental GHG reductions, Incremental air quality improvements, and Incremental EV adoption associated with their SB 350 TE programs. How could TE pilot program results and other early TE program results be used to fulfill these evaluation requirements? Should data from publicly-funded programs and funding opportunities be centrally aggregated to better inform the 	11:30AM -12:30 PM
	development of future TE programs?	

Panel 2: Leveraging evaluation methods from other emerging technology programs OBJECTIVE: Learn about metrics and methodologies used to evaluate emerging technology investment programs, including TE-related programs, to identify elements that could be leveraged to improve current TE program evaluation efforts.	Speakers: Philip Kreycik, Senior Associate, Cadmus Dan Bowermaster, Program Manager, Electric Transportation, EPRI Austin Brown – Executive Director, University of California, Davis Policy Institute for Energy, Environment, and the Economy Gil Tal – Director, The Plug-in Hybrid & Electric Vehicle Research Center at University of California, Davis	1:30-2:45 PM
Break		2:45 - 3:00 PM
Panel 2 Discussion (Panelists + Workshop Participants) OBJECTIVE: Identify elements of evaluation methodologies presented during both of today's panels that could be leveraged or expanded upon to improve current CPUC TE evaluation efforts.	 Are there lessons learned from prior evaluations/ data collection efforts that could improve the effectiveness of current and future IOU SB 350 TE program evaluations? Is the data currently being collected through the SB 350 templates adequate to complete program evaluation goals, or do additional data fields need to be added to the reporting requirements? Could other existing program evaluation strategies help address current TE program data collection/ evaluation barriers? 	3:00-4:15 PM
Workshop Wrap Up & Next Steps	Carrie Sisto (CPUC)	4:15-4:30 PM

Remote Participation is available:

WebEx:

 $\frac{https://centurylinkconferencing.webex.com/centurylinkconferencing/j.php?MTID=m5423}{aaa86ff96d4c3d91297c815b1861}$

Meeting number: 711 877 374 Meeting password: !Energy1

Join by phone:

Call-In number: 866-702-0062 Participant Code: 5444775

Background Resources

Workshop participants are encouraged to review the following background resources prior to the meeting:

D.18-01-024, D.18-05-040, and D.18-09-034 adopted data collection and reporting templates to streamline the information the IOUs are gathering and sharing from their various TE programs. Those data collection and reporting templates are available at the following links:

- 1. Excel-based Data Collection Template: http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442457045
- 2. Word-based Report Template: http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442457046
- 3. Supplemental Report Template for Large IOU Priority Review Projects (D.18-01-024): http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442457047
- 4. Draft Supplemental Report Template for Large IOU Standard Review Projects (D.18-05-040): http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442457048

The California Energy Commission has held several informative workshops already this year to collect data about existing TE program deployments to support the statewide electric vehicle infrastructure needs assessment required under AB 2127 (Ting, 2018)

The presentations associated with the CEC's March 11, 2019 workshop on light-, medium-and heavy-duty vehicle infrastructure assessments and data needs are available here: https://www.energy.ca.gov/2019 energypolicy/documents/2019-03-11 workshop/2019-03-11 presentations.php

The presentations associated with the CEC's May 2, 2019 workshop on electrification infrastructure assessments and data needs for off-road, port and airport equipment are available here:

https://www.energy.ca.gov/2019 energypolicy/documents/2019-05-02-pm_workshop/2019-05-02_pm_presentations.php