# Recommendations to Refine the Oct 27 VGI Straw Proposal by CPUC-CARB staff

November 29, 2017

Jeremy Whaling, American Honda Motor Company; George Bellino, EPRI; Dave McCreadie, Ford Motor Company; Rich Scholer, Fiat Chrysler Automobiles; Jim Tarchinski, General Motors; Mike Bourton, Kitu Systems; Abigail Tinker, PG&E, Ralph Troute, Sacramento Municipal Utility District; Dean Taylor SCE; Josh McDonald SCE

Recommendation: Clarify End-to-End Architecture Definitions Including the EVSE Role
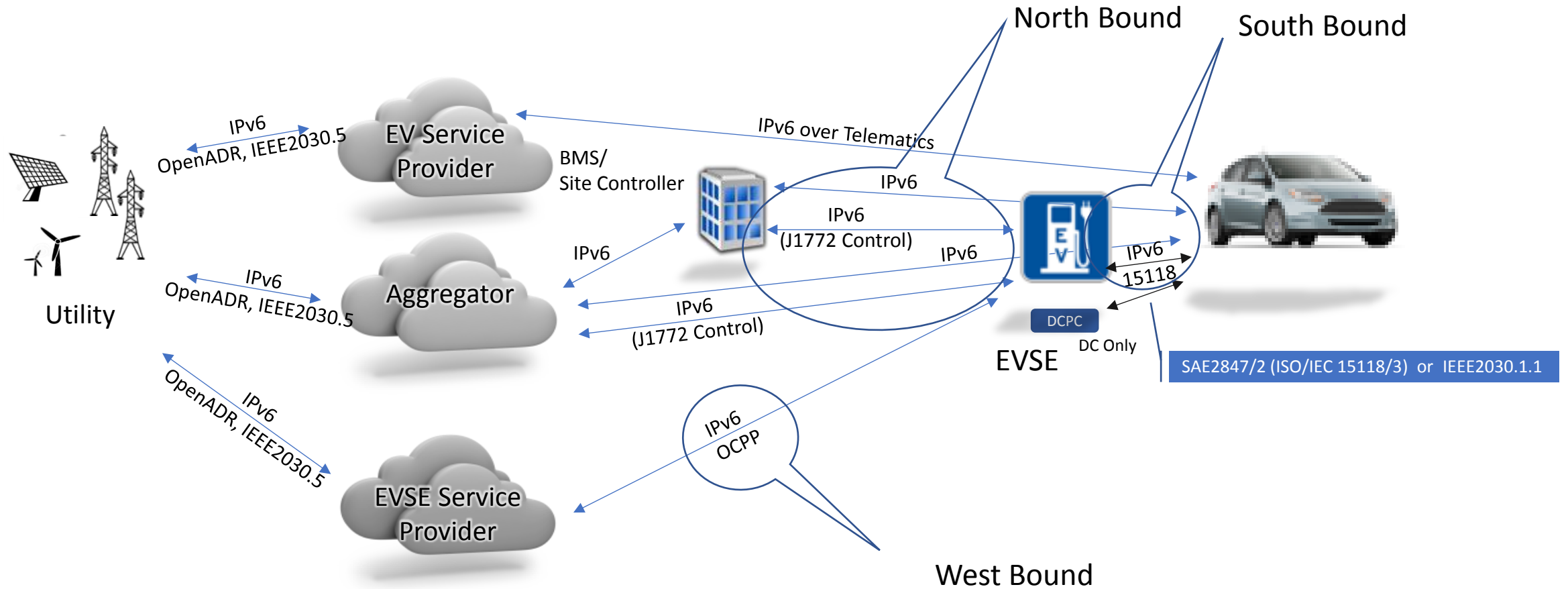
Note: Telematics is not northbound, southbound or westbound because it by-passes the EVSE

Protocol layer mapping to EVSE interfaces with clarifications

Hardware Functionality Mandated (Futureproofing)

Layer	West	North	Cannectivity	South
Application (Layer 7)			To Support Protocol Translation:Secure Processor and Memory and Security Mechanismns that can be certified to UL2900	
Network/Transport (Layer 2, 3)	IPv6	IPv6	Bridge/Routing - IEEE2030.5 or any Future Internet based applications	IPv6
Physical (Layer 1)	Deployment dependent	Deployment dependent		HP-GP

Software Applications not Mandated (Site Host Choice)

Layer	West	North	Cannectivity	South
Application (Layer 7)	OCPP	OpenADR2.0b, IEEE2030.5		ISO15118 or End to End IP Protocol (E.g. OpenADR2b, IEEE2030.5)

Red Font indicates additions/clarifications to the Oct 27 CPUC-CARB staff proposal

Recommend additional clarifications to include in final report

- Recommend explicitly continuing to allow the ability to load control EVs via J1772 PWM
- Recommend explicitly allowing alternative architectures for site hosts that are managing multiple EVSEs
  - E.g., BMS or site controller in order to provide flexibility to site hosts to lower costs
- Recommend defining "multi-use" to mean only AC, level 2, public-access locations including workplaces or common areas in MUDs with unassigned parking
  - Exclude non-publicly accessible locations including home, fleet and workplace locations