

Electric Drive and Advanced Battery and Components Testbed (EDAB)

March 5th through December 5th 2012

Description / Specification

Vehicle

Configuration	Series PHEV
Traction Motor	UQM 145 kW / single-speed gearbox
APU	UQM 145 kW / 5.3L gasoline engine

Battery Pack

Manufacturer	EnerDel
Model	Type I EV Pack (A306)
Chemistry	Li-ion
Cathode	Mixed Oxide (Modified NMC)
Anode	Amorphous Hard Carbon
Configuration	4 parallel strings of 96 cells
Rated Capacity (Ah)	70
Nominal Voltage (V)	345
Pack mass (kg)	285
Cooling Type	Passive (sealed enclosure)



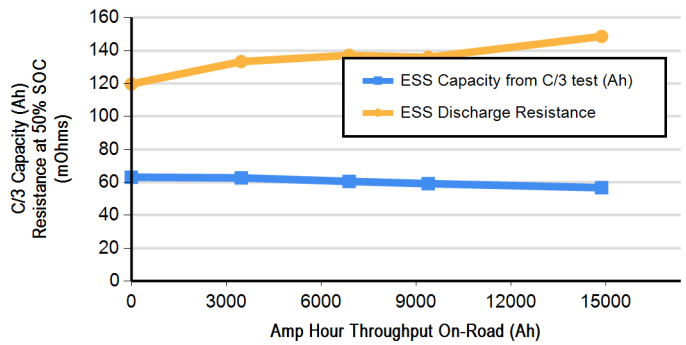
ESS Reference Performance Testing Results

Initial Measured Capacity (BOL) (Ah)	63.2
Present Measured Capacity (Ah)	56.8

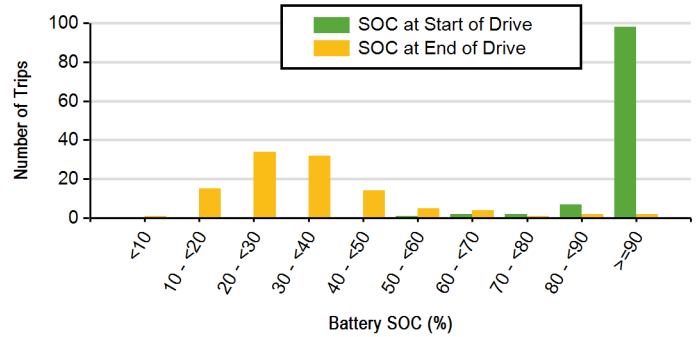
ESS On-road Testing Results

Miles driven	8,622.7
City % of miles	52%
Hwy % of miles	48%
Amp Hours throughput lifetime	14,858.7
Avg. energy consumption (DC Wh/mi)	232.2

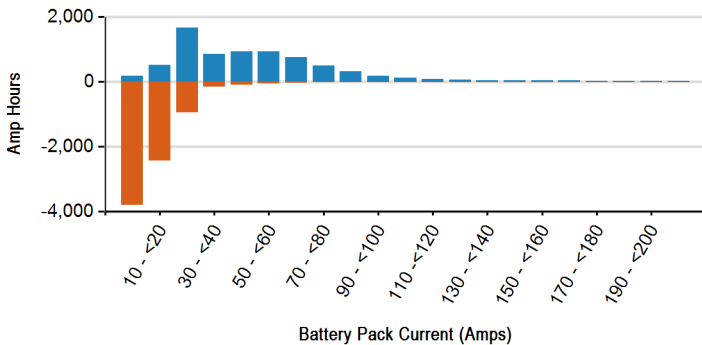
ESS Capacity and Resistance from RPT



ESS SOC at Start and End of Drives



Lifetime Ah throughput On-road



Lifetime Ah throughput On-road

