

## Electric Drive and Advanced Battery and Components Testbed (EDAB)

March 5 2012 - Feb 25 2013

### 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)



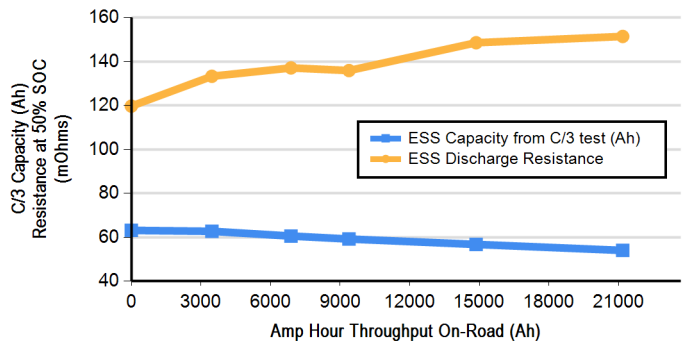
#### ESS Reference Performance Testing Results

Initial Measured Capacity (BOL) (Ah)	63.2
Present Measured Capacity (Ah)	54.0

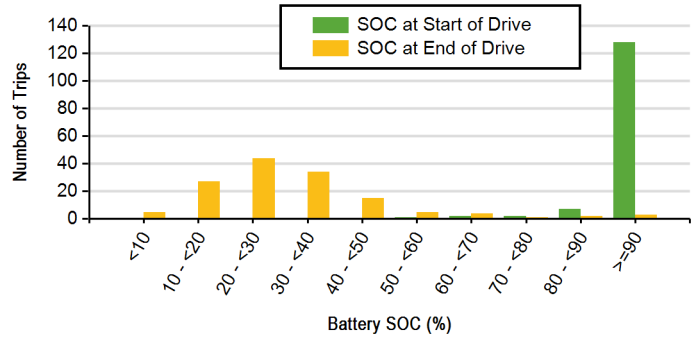
#### ESS On-road Testing Results

Miles driven	12,021.5
City % of miles	52%
Hwy % of miles	48%
Amp Hours throughput lifetime	21,281.1
Avg. energy consumption (DC Wh/mi)	240.5

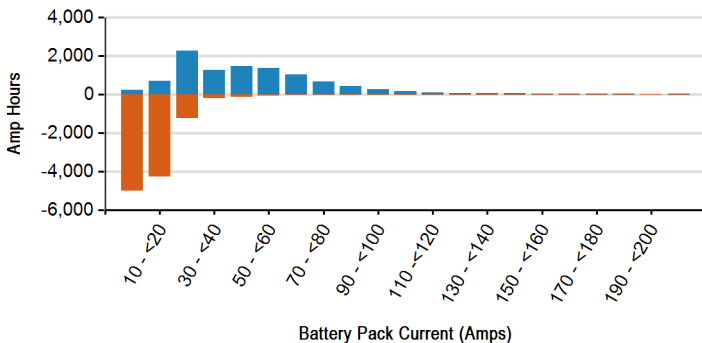
ESS Capacity and Resistance from RPT



ESS SOC at Start and End of Drives



Lifetime Ah throughput On-road



Lifetime Ah throughput On-road

