OAK RIDGE NATIONAL LABORATORY

MANAGED BY UT-BATTELLE FOR THE DEPARTMENT OF ENERGY

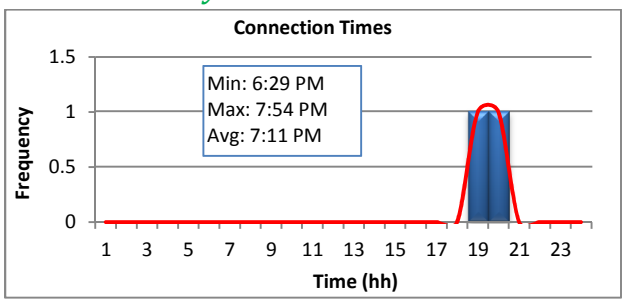
EV Project Solar-Assisted Charging Infrastructure Summary Report

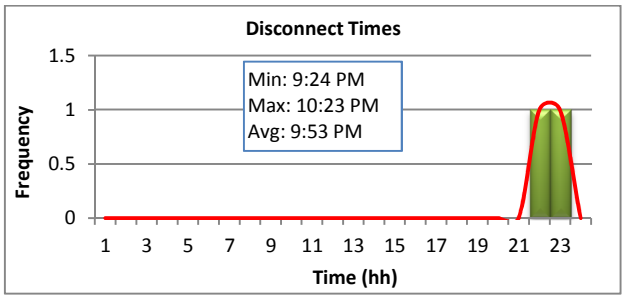
EVSE Grouping/Region: Knoxville Coliseum
Report Period: January 1-March 31, 2015 (Quarter 1, 2015)
Number of EV Charging Stations: 6

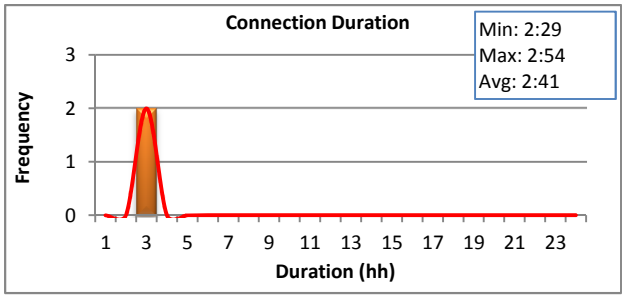
Usage Statistics	Q1	Q2	Q3	Q4
Number of charging events	2	-	-	-
Percent of time (connected vehicles)	0.0%	-	-	-
Percent of time (charging vehicles)	0.0%	-	-	-

Installation Statistics	Q1	Q2	Q3	Q4	2015 Totals
Solar-energy generated (MWh)	4.19	-	-	-	4.19
Energy consumed (MWh)	0.01	-	-	-	0.01
Net energy generation (MWh)	4.18	-	-	-	4.18
Total distance traveled (mi)[i]	34	-	-	-	34

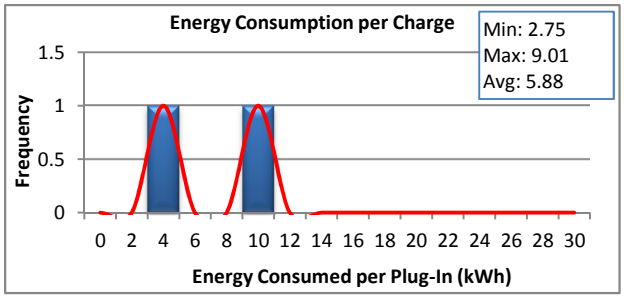
Time Series Analysis

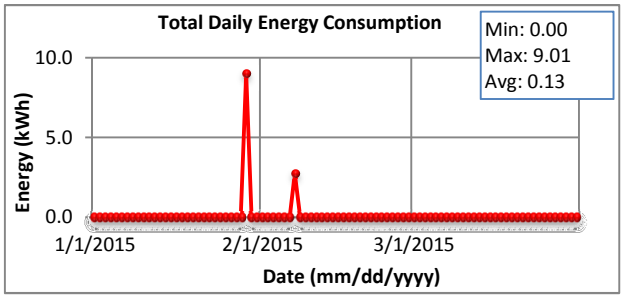


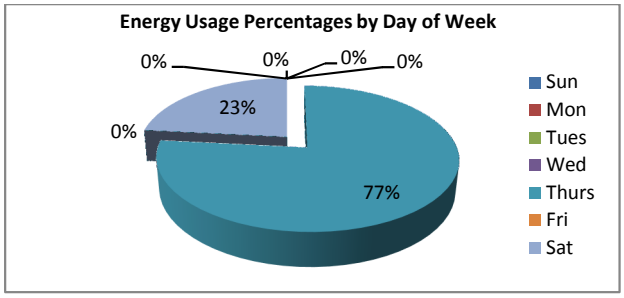


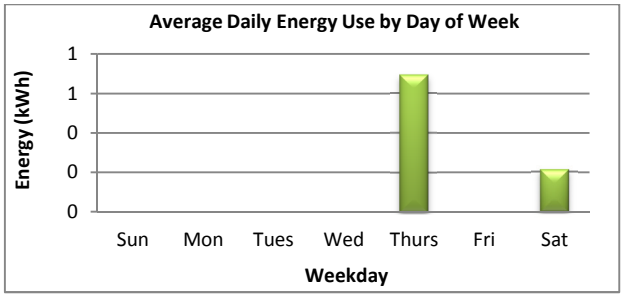


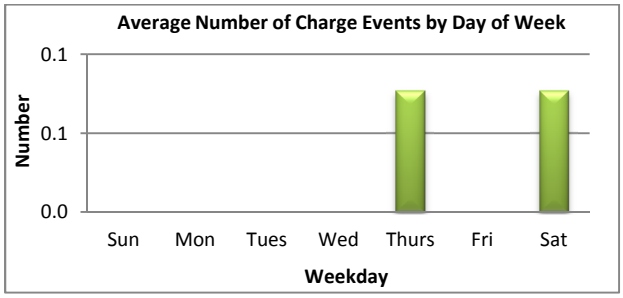
Energy Consumption Analysis



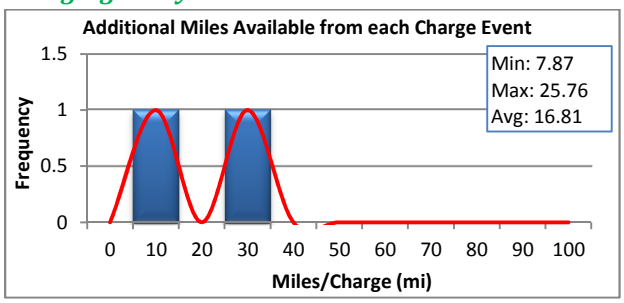


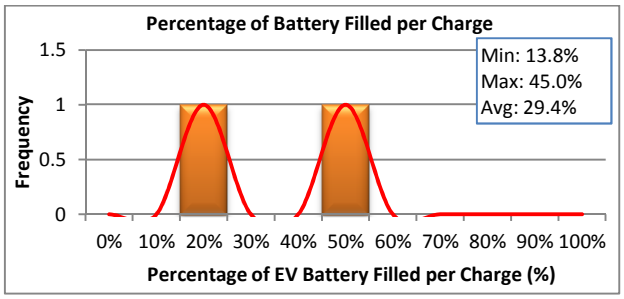




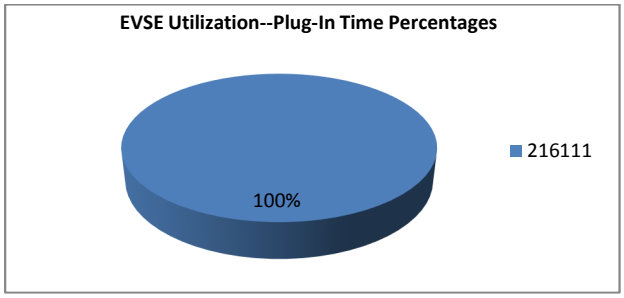


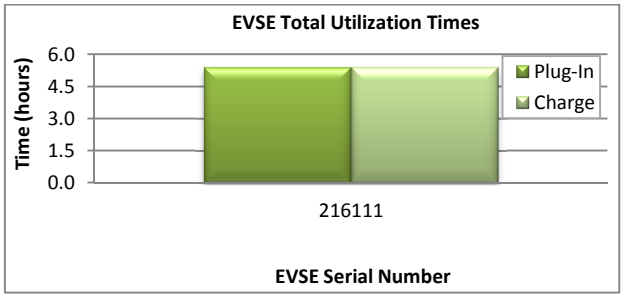
Charging Analysis





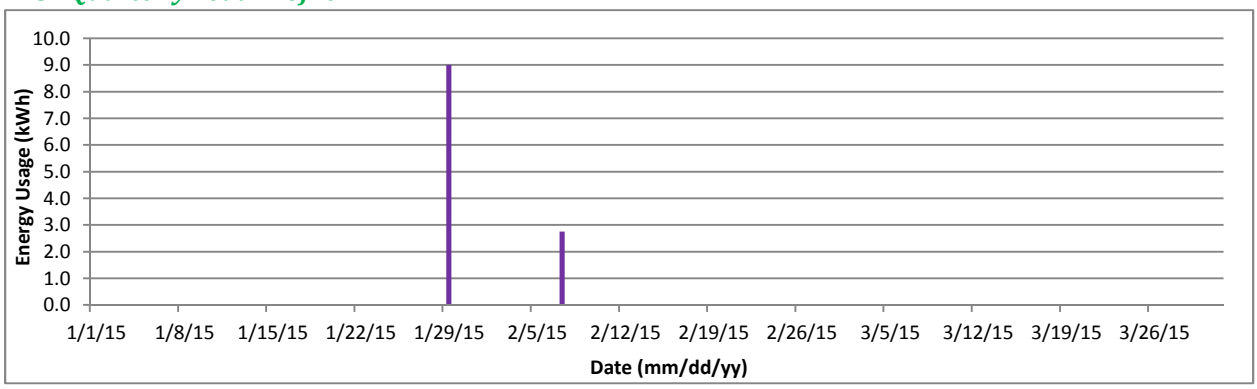
EVSE Analysis



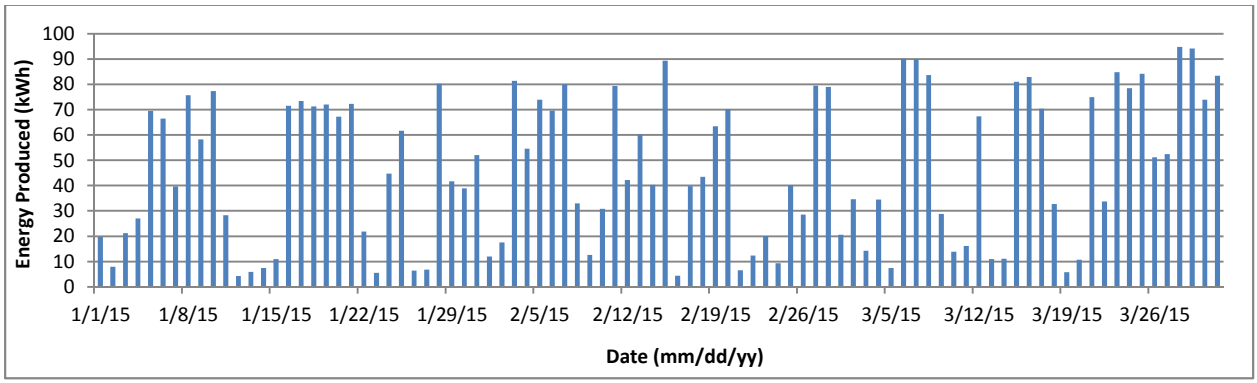


Report Period Summary	Q1	Q2	Q3	Q4
Average connection duration (hrs.)	2.7	-	-	-
Average charge duration (hrs.)	2.7	-	-	-
Average miles per charge[i]	16.8	-	-	-
Average % of battery filled per charge event[ii]	29.4%	-	-	-

EVSE Quarterly Load Profile



PV Array Quarterly Power Generation Profile



[i] Based on the total energy consumption and an average of miles per kWh for the Nissan Leaf (2.94 mi/kWh) and Chevy Volt (2.78 mi/kWh). Values taken from http://www.fueleconomy.gov/.
[ii] Based on energy consumption and size of battery for the Nissan Leaf (24 kWh) and Chevy Volt (16 kWh).