

EV Charging Program - 2018

Project Update



Case Number: 2015-00355



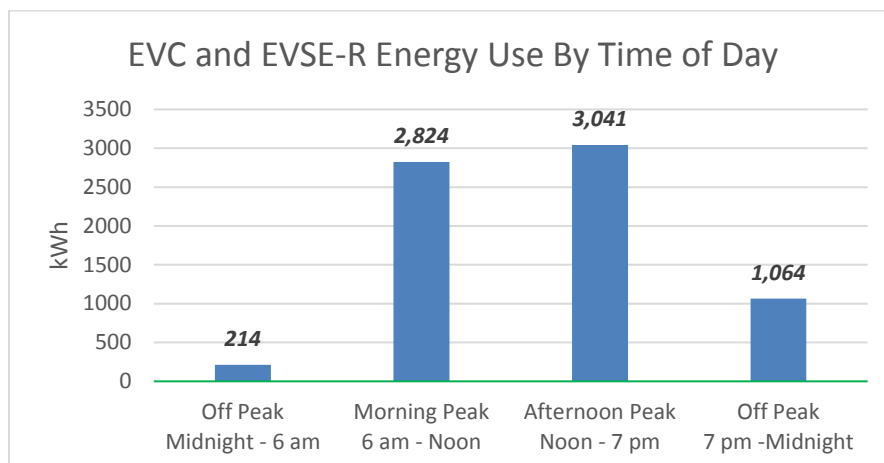
Program Metric Snapshot

Louisville Gas and Electric Company (“LG&E”) and Kentucky Utilities Company (“KU”) continued installation of electric vehicle (“EV”) chargers under its EV charging program in 2018. By the end of 2018, 15 charging stations were installed - eight public Electric Vehicle Charging (“EVC”) stations in LG&E territory, five public Electric Vehicle Charging (“EVC”) stations in KU territory, and two hosted Electric Vehicle Supply Equipment Rider (“EVSE-R”) stations in LG&E territory. The Companies continue to work with local governments and parking authorities to allow LG&E and KU to install stations in public parking lots and on public streets. Station utilization improved year-over-year from 2017. Usage is expected to continue trending upward as electric vehicle adoption and customer awareness increase.

Below are 2018 EV charging program metrics.

| | | |
|--|---|--|
| LG&E EVC Stations Deployed  8 of 10 | Total # of EVC Charging Sessions 577 | Average EVC Charging Session Length 2 hr 8 min |
| KU EVC Stations Deployed  5 of 10 | Unique EVC Drivers 160 | EVC Utilization* 9.3% |
| Total # of EVSE-R Charging Sessions 275 | Unique EVSE-R Drivers 7 | Average EVSE-R Charging Session Length 5 hr 8 min |

*Utilization is calculated as a percentage of filed target usage of 4 hrs per day, 7 days per week.



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2018 EVC Station Locations

KU Stations

1. 1 Quality St, Lexington, KY 40507 (KU General Office Customer Parking Lot)
2. 159 E High St, Lexington, KY 40507 (Downtown Lexington)
3. 101 E Main St, Midway, KY 40347 (Midway City Hall)
4. 201 S Main St, Elizabethtown, KY 42701 (E-Town Municipal Lot)
5. 200 County Park Dr, Greenville, KY 42345 (Muhlenberg County Sports Park)

LG&E Stations

1. 1100 Block E Washington St, Louisville, KY 40206 (Butchertown Neighborhood)
2. 1523 Hepburn Ave, Louisville, KY 40204 (Highlands Neighborhood)
3. 315 E Main St, Louisville, KY 40202 (Downtown Louisville)
4. 921 W Main St, Louisville, KY 40202 (Downtown Louisville)
5. 2762 Frankfort Ave, Louisville, KY 40206 (Crescent Hill Library)
6. 3101 Rock Creek Dr, Louisville, KY 40207 (Seneca Park)
7. 9300 Whipps Mill Rd, Louisville, KY 40242 (A.B. Sawyer Park)
8. Chenoweth Park Rd, Louisville, KY 40299 (Charlie Vettiner Park)

LG&E and KU Combined EVC Data Summary

EVC Utilization

| <i>Station</i> | <i>Days in Service</i> | <i>Total Hours of Usage</i> | <i>Actual Utilization*</i> |
|-------------------------|------------------------|-----------------------------|----------------------------|
| KU - KUGO | 365 | 157 | 10.7% |
| KU - High St | 365 | 163 | 11.2% |
| KU - Midway | 365 | 10 | 0.7% |
| KU - Elizabethtown | 235 | 46 | 4.9% |
| KU - Greenville | 4 | 0 | 0.0% |
| LG&E - Butchertown | 365 | 258 | 17.7% |
| LG&E - Highlands | 365 | 190 | 13.0% |
| LG&E - 315 E Main St | 365 | 179 | 12.3% |
| LG&E - 921 W Main St | 365 | 49 | 3.3% |
| LG&E - Crescent Hill | 365 | 160 | 11.0% |
| LG&E - Seneca Park | 70 | 7 | 2.6% |
| LG&E - AB Sawyer Park | 67 | 9 | 3.4% |
| LG&E - Charlie Vettiner | 20 | 0 | 0.0% |
| Total | 3316 | 1228 | 9.3% |

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Total Sessions

| <i>Station</i> | <i>Sessions</i> | <i>Unique Drivers</i> |
|-------------------------|-----------------|-----------------------|
| KU - KUGO | 70 | 22 |
| KU - High St | 87 | 24 |
| KU - Midway | 10 | 8 |
| KU – Elizabethtown | 28 | 18 |
| KU – Greenville | 0 | 0 |
| LG&E - Butchertown | 81 | 31 |
| LG&E - Highlands | 118 | 44 |
| LG&E - 315 E Main St | 75 | 22 |
| LG&E - 921 W Main St | 30 | 14 |
| LG&E - Crescent Hill | 62 | 20 |
| LG&E – Seneca Park | 8 | 7 |
| LG&E – AB Sawyer Park | 8 | 4 |
| LG&E – Charlie Vettiner | 0 | 0 |
| Total | 577 | 160** |

Average Session Length (h:mm)

| <i>Station</i> | <i>Avg. Session Length</i> |
|-------------------------|----------------------------|
| KU - KUGO | 2:12 |
| KU - High St | 1:52 |
| KU - Midway | 1:00 |
| KU – Elizabethtown | 1:38 |
| KU – Greenville | N/A |
| LG&E - Butchertown | 3:11 |
| LG&E - Highlands | 1:36 |
| LG&E - 315 E Main St | 2:23 |
| LG&E - 921 W Main St | 1:37 |
| LG&E - Crescent Hill | 2:34 |
| LG&E – Seneca Park | 0:55 |
| LG&E – AB Sawyer Park | 1:07 |
| LG&E – Charlie Vettiner | N/A |
| Average | 2:08 |

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Energy Use By Time of Day (kWh)

| <i>Station</i> | <i>Energy (12a-6a)</i> | <i>Energy (6a-12p)</i> | <i>Energy (7p-12a)</i> | <i>Energy (7p-12a)</i> |
|-------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| KU - KUGO | 42 | 92 | 355 | 114 |
| KU - High St | 23 | 179 | 274 | 107 |
| KU - Midway | 0 | 15 | 39 | 3 |
| KU – Elizabethtown | 32 | 38 | 141 | 86 |
| KU – Greenville | 0 | 0 | 0 | 0 |
| LG&E - Butchertown | 7 | 492 | 389 | 75 |
| LG&E - Highlands | 16 | 154 | 352 | 204 |
| LG&E - 315 E Main St | 0 | 165 | 279 | 147 |
| LG&E - 921 W Main St | 0 | 45 | 115 | 4 |
| LG&E - Crescent Hill | 0 | 97 | 508 | 153 |
| LG&E – Seneca Park | 2 | 5 | 25 | 0 |
| LG&E – AB Sawyer Park | 0 | 0 | 45 | 0 |
| LG&E – Charlie Vettiner | 0 | 0 | 0 | 0 |
| Total | 122 | 1281 | 2523 | 895 |

*Utilization is calculated as a percentage of filed target usage of 4 hrs per day, 7 days per week.

**A number of drivers are counted as unique users of multiple stations, but only counted once for the total program.

LG&E EVSE-R Data Summary

EVSE-R Utilization

| <i>Station</i> | <i>Days in Service</i> | <i>Total Hours of Usage</i> | <i>Actual Utilization*</i> |
|----------------|----------------------------|---------------------------------|--------------------------------|
| Station 1 | 365 | 1218 | 83% |
| Station 2 | 365 | 196 | 13% |
| Total | 730 | 1414 | 48% |

Total Sessions

| <i>Station</i> | <i>Sessions</i> | <i>Unique Drivers</i> |
|----------------|-----------------|---------------------------|
| Station 1 | 256 | 5 |
| Station 2 | 19 | 2 |
| Total | 275 | 7 |

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Average Session Length (h:mm)

| <i>Station</i> | <i>Avg. Session Length</i> |
|----------------|----------------------------|
| Station 1 | 4:45 |
| Station 2 | 10:19 |
| Total | 5:08 |

Energy Use By Time of Day (kWh)

| <i>Station</i> | <i>Energy (12a-6a)</i> | <i>Energy (6a-12p)</i> | <i>Energy (12p-7p)</i> | <i>Energy (7p-12a)</i> |
|----------------|------------------------|------------------------|------------------------|------------------------|
| Station 1 | 0 | 1495 | 488 | 0 |
| Station 2 | 92 | 48 | 30 | 170 |
| Total | 92 | 1543 | 518 | 170 |