February 15, 2017 Testimony of Jessica Lucas On behalf of the Climate + Energy Project House Energy, Utilities and Telecommunications Neutral for HB 2166



Chairman Seiwert and Honorable Members of the Committee, thank you for the opportunity to provide testimony about the electric vehicle market and the impact of HB 2166 on this emerging industry.

Currently Electric Vehicles (EV) comprise about 1% of the US auto market. A February report in Ward's Auto says that could all change within a few short years.

EV battery prices are falling faster than expected and could be lower than \$100 per kilowatt-hour by 2020. That is significant because in 2010, the Department of Energy set a cost goal of \$125 per kilowatt hour, because that would make electric propulsion systems equal to the cost of an internal combustion engine. Seven years ago that was thought to be an unattainable goal. Today, EV experts say those costs will be under \$100 per kilowatt-hour by 2020 and down to about \$80 per kilowatt-hour shortly after that. According to General Motors product chief Mark Reuss, cells used in the new Chevy Bolt cost \$145 per kilowatt-hour, if that number dropped to \$100, the battery pack would cost \$4,000 less, a price decrease that could be passed on to customers.

There are varying opinions on the timing and rate of EV penetration ranging from a new report from Carbon Tracker, Imperial College of London that says EVs may take 19-21 percent of the road transport by 2035 to a report from BP projecting only 6 percent market share over the same time frame.

Despite disagreements on the timing, what everyone does agree on is the price of an electric vehicle must come down (which it is) and we need more not less EV charging infrastructure.

With the creation of KCP&L's Clean Charge Network, the Kansas City Metro is seeing the highest year-over-year growth in drivers charging with ChargePoint Inc., the EV infrastructure company exclusively providing stations for KCP&L. In the second quarter of 2016, sales of battery electric vehicles grew 51 percent, compared to 39 percent nationwide. Kansas City is behind only Los Angeles, San Francisco and Las Vegas.

Despite this growth, the electric vehicle industry is in its infancy. If Kansas wants to capitalize on electric vehicles in the advanced energy economy, we need a long term state-wide strategy. Stakeholders should discuss charging infrastructure growth, cost equity to roads, the roll of solar on EV infrastructure.

Stakeholders should be looking beyond this bill, beyond today and into the future for long-term, common ground solutions to advance the clean energy economy.