1500 SW Arrowhead Road
Topeka, KS 66604-4027

Kansas
Corporation Commission

Phone: 785-271-3100
Fax: 785-271-3354
http://kcc.ks.gov/

Susan K. Duffy, Chair
Dwight D. Keen, Commissioner
Andrew J. French, Commissioner

Laura Kelly, Governor

Before the House Committee on Energy, Utilities, and Telecommunications
February 7, 2023

Neutral Testimony
On House Bill 2228

Submitted by Leo Haynos, Chief Engineer, Utilities Division
On Behalf of
The Staff of the Kansas Corporation Commission

Chair Delperdang, Vice Chair Turner, Ranking Minority Member Ohaebosim, and members of the committee, thank you for the opportunity to provide testimony to your committee today on behalf of the staff of the Kansas Corporation Commission (Commission) to discuss HB 2228.

The Commission Staff takes a neutral position on HB 2228. Because the Bill considerably expands the applicability of net metering requirements, we wanted to address some of the potential unintended consequences that could accompany the expansion.

The law in its current form applies only to investor-owned electric utilities (IOUs) in which customer-generators account for less than 1% of the utility's peak demand. If the popularity of customer-generated renewables results in customer requests to install the cumulative generation that exceeds 1% of the utility's peak demand, the customer can request the Corporation Commission to increase the amount of renewable capacity that a utility must accept for net metering.

In this case, peak demand appears to be the highest demand for any given 15 minute period during the year. In Kansas, there are only two IOUs, both of which have relatively high peak demands, and at this time, renewable penetration has not approached the 1% ceiling level. HB 2228 also proposes to expand net metering mandates to require the 118 municipal and 28 cooperative electric utilities to provide net metering for customer-generators. Because municipal and cooperative operators have significantly smaller peak demand requirements than IOUs, HB 2228 also proposes to increase the capacity ceiling to 10% of any utility's peak demand. This expansion in the capacity ceiling will ensure small electric utilities are required to accept customer-generators. Although the KCC does not regulate municipals or cooperatives, my sense is that a 10% ceiling for customer-owned renewable capacity easily could be reached for any municipal electric system that serves one or two large commercial loads that elect to become customer-generators. If that occurred, any additional customer-generators would need to seek Commission approval pursuant to the evaluation requirements under K.S.A. 66-101d. Under this statute, the Commission could increase the ceiling if such action was deemed just and reasonable.

Given the variety of customer configurations on small systems, there may be a potential issue caused by the intermittent nature of renewable electricity. It is possible that replacing 10% of the demand with customer-owned renewable energy could cause operational problems or delivery

contract problems for small utility operators. Under K.S.A. 66-1264(b)(3), the utility operator could establish operating standards that may address these types of issues. Because of the Commission's limited jurisdiction over municipal and cooperative utilities, it is unclear if the Commission could adjudicate a dispute over operating standards between customer-generators and municipal or cooperative utilities unless the dispute also included the renewable penetration exceeding the demand ceiling.

HB2228 also proposes to change the method by which customer-generators and utility operators are compensated for the net metered energy transactions. HB 2228 proposes to remove the first sentence in 66-1265(d). This revision would require customer-generators to pay the same rates for purchased power, rate structure, and monthly charges as other similar customers that are not generating power.

The current law requires the utility to credit or pay a customer-generator that became operational after 2014 for excess power at a price roughly equal to the utility's average wholesale cost of energy. Under the terms of the bill, the utility would be required to serve as a virtual storage facility for 75% of the excess power generated by the customer-generator for a one-year period. For the obligation of providing the storage service, the utility is allowed to receive the remaining 25% of the excess energy.

The fairness of such an arrangement is unclear to staff. This arrangement does not compensate the utility for the portion of fixed costs that are contained in the volumetric portion of a conventional customer's bill. Also, depending on the price of energy when the excess power is retrieved from the storage account, this arrangement could result in other ratepayers on the system subsidizing (possibly significantly) the customer-generator's purchase of power.

In summary, the arrangement proposed in HB2228 will lead to the customers that are not generators paying more to cover the customer-generator's fixed cost and to cover the potential differential wholesale energy costs between the time intervals when the "virtual storage" is charged or discharged.[1]

It is also unclear to Staff as to how the 25% value was determined. Perhaps a better approach would be to incentivize the utility to participate in such an arrangement by allowing the utility to keep 75% of the excess generation to cover avoided fixed costs and to cover the cost for providing a pricing hedge for delivery of the remaining 25% of the customer-generator's excess energy for future use. This approach would also incentivize the customer-generator to size their generation facility to meet the needs of their consumption rather than develop a business model that is dependent on electricity sales revenue from a utility that may not have a need for the extra supply.

HB2228 also modifies the amount of interconnected generation capacity that a customer-generator may install. In the current law, the maximum amounts for new installations is the lesser of 15 kilowatts (kW) for residential, 100kW for commercial, and 150kW for schools or the expected load of the system. For all customers, regardless of customer class, HB2228 proposes to set the maximum capacity that can be connected to the utility meter as the lesser of 250kW of alternating current (AC) power or the expected load of the customer. The bill then provides a formula to convert energy consumed by the customer (kWh) to a representation of the capacity (kW) required

[1] This topic was addressed in testimony and evidence presented in KCC docket 18-WSEE-320-RTS.

to deliver the average consumption.

It is our understanding the formula presented in the Bill for calculating capacity for solar from the amount of power consumed is a current industry practice. Although we have no data that demonstrates the accuracy of the formula, it provides certainty as to the size a customer-generator will be allowed to construct. In this case, the kW calculated by the formula will be the limiting factor for a typical residential customer, while the maximum of 250kW may be the limiting factor for commercial accounts. Staff notes the 250kW is 1.7 to 2.5 times larger than the amount of capacity currently allowed for commercial accounts.

By stipulating that capacity is measured in alternating current, HB2228 will provide a point of reference for making the capacity calculation as the power available at the point of interconnection to the utility. This approach would provide design certainty for customer-generators as well as allow the customer to expand capacity for any application behind the meter that has no impact on the utility.

Thank you for the opportunity to offer our perspective on the proposed bill and the opportunity to appear before your committee.