The Sedgwick County Electric Cooperative Association, Inc.

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HOUSE COMMITTEE ON ENERGY, UTILITIES & TELECOMMUNICATIONS

Opponent Testimony for HB 2228 – Net Metering

Feb. 7, 2023

Presented by:
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Sedgwick County Electric Cooperative Association

Chairman Delperdang, Vice Chair Turner and Ranking Member Ohaebosim and members of the House Committee on Energy, Utilities & Telecommunications, thank you for the opportunity to submit comments in opposition to HB 2228. I am Scott Ayres and I serve as Chief Executive Officer for Sedgwick County Electric Cooperative Association, Inc. headquartered in Cheney, Kansas.

Sedgwick County Electric Cooperative has a 9-member Board of Directors guiding our non-profit member-owned Cooperative. We are a small cooperative owned by the members who purchase the power we serve. We focus on responsibly meeting members' needs rather than maximizing profits. We have 20 full-time employees serving about 8,000 meters in 5 Counties: Sedgwick, Kingman, Reno, Harvey and Sumner counties. We serve an average of 6 electric meters per mile with over 1,200 miles of electric lines to maintain.

64.4% of Sedgwick County Electrics power purchased last year was Non-Greenhouse Gas Emitting. We support solar as a part of our fuel mix and have proudly partnered with Today's Power, Inc., a wholly owned subsidiary of Arkansas Electric Cooperatives, Inc. on siting of two utility-scale 1.42-MW solar projects we installed in the communities we serve to help reduce costs to our members. All the electricity that is being produced locally is being used locally, and no excess energy is being sent back to the bulk transmission grid. This type of community or utility-scale installation, on our side of the meter, directly out of the substation, is much more efficient than individual solar installations and the cost benefits our entire system. The utility-scale solar projects were designed to help reduce peak electrical demands when wholesale energy is the most expensive. Sedgwick also helped facilitate utility scale solar projects at 13 other electric cooperatives across the state to help lower the costs of power for each cooperative's members.

Problem 1: HB2228 (Page 4 lines 35-43, Page 5 lines 1-16) Removes appropriate size limits, not to exceed 250 KW of net-metering capacity and provides a formula for calculating the system export capacity. If legislation is passed to allow up to 250 kilowatts to be produced per consumer the consumer would be responsible for thousands of dollars for equipment upgrades for us to be able to import this excess energy onto our system. Customers will be sold larger systems than they need by solar companies exceeding their energy requirements in every instance. On most circuits we would be unable to accommodate this solar request with only 6 members per mile on our rural system.

Sedgwick County Electric's formula has been working well for many years and allowing all our members to interconnect and benefit from solar.

A. We first look at our customer's usage history over the last two years. We specifically look at their shoulder months usage (months where their kilowatt hours usage is lower than the remaining months in that specific year).

B. We average their shoulder months usage in kwh's, divided by 720 (number of hours in a month), divided by 0.2 (this is the typical load factor for most homes). The result gives us the maximum size solar interconnect in kilowatts of alternating current, that we would accept from that specific customer. The average size of all our residential solar interconnects currently using this formula is 11.64 KW.

We currently have solar companies' coming from all over the U.S. to install solar arrays in Kansas. Most solar companies' main objective is to install the largest solar system they can sell to our members to make the most return on investment to the solar company, not our member. They are attaching the cost of solar to some members mortgage with some companies not informing members well on how many years it may take for the return on investment to pay for itself.

We routinely help our members appropriately size their installations to ensure they are maximizing the affordability and rate of return on their investment. Many times, members have approached us with paperwork from an installer to have solar installed on their property to cover the electrical needs of their home and small business. The solar arrays were sometimes over two to three times the size needed for their installation, and we have saved our members hundreds of thousands of dollars by helping them properly size the unit and get a better return on investment.

The fact is that members without solar typically subsidize members with solar. This occurs because of a mismatch between when solar production is at its highest and when members are using the most electricity. Sedgwick has experienced many proposed installations where installers size solar installations based on the kilowatt-hours (kWh) consumed at all hours of the day, and not those that are able to be consumed during daylight hours.

Problem 2: HB2228 increases the penetration rate of solar from 1% to 10%. Our Board of Directors at Sedgwick County Electric Cooperative has already allowed 5% solar penetration instead of the 1% statute sets for investor-owned utilities to be net metered on our distribution system. Sedgwick County Electric is currently already experiencing problems on the grid due to the excess penetration of solar.

The proposed legislation will create unnecessary expenses related to infrastructure and equipment changes in the rural parts of the state. This has already come at a great cost because the distribution and transmission systems were never set up for bi-directional power flow (excess energy being pushed back on the distribution system). These systems impact the protection systems to help provide safe operation of the grid. The cost to replace this equipment that supports reverse flow of energy is very expensive and is very hard to acquire during these supply chain shortages. The transformers and wire are rated to the members load and not "excess" energy production. Who should pay for all the expensive new equipment that regulates current, voltage, and protective system regulation to accommodate bi-directional solar? The members with solar at their home or business, or should it be all Sedgwick members?

Our power supply contract does not allow the bi-directional flow of electricity onto the "transmission" line that we do not own. Therefore, we have areas that have been inundated with solar penetration such that we cannot accommodate member owned solar requests. We have a few circuits on our system, where any additional interconnects could potentially cause some disruptions in the normal operations of those circuits as well as the substations that supply power to those circuits. Removing the individual size limits and increasing compensation for excess energy will only add to this growth and result in even more solar requests that we cannot accommodate.

Problem 3:
Sedgwick County Electric has spent the last 85 years supplying and maintaining safe affordable power to our members. Solar plays an important role in the energy needs of this state, nation, and the world, but not to the extent that causes our ownership (our members) additional costs in safety, service and maintenance. The solar companies want to power the nation with their panels during the day and let the power companies be the battery during the night (with no kwh sales because they have overproduced during the day) and play no monetary role in what it takes to keep an electrical grid up and running.

It is a simple fact, the solar companies need the electrical utility to interconnect to be successful because without us to interconnect with, when the sun doesn't shine or it is nighttime, we are the ones keeping the lights on. If someone wants to go off-grid, and supply their home with solar and batteries, they can, but solar companies know it is not currently cost effective. We should not be dictated by the solar companies as to how much and how many KW of solar/wind we will have to accommodate per year, no matter what it costs our membership (our owners).

I have worked on the electric grid at Sedgwick County Electric Cooperative for 32 years as a lineman, engineer and CEO. Sedgwick County Electric Cooperative does the right thing for the right reasons. The proposed Net Metering changes would limit our ability to help protect our members from installers who do not have our members' best interests in mind and increase subsidization from members without solar to those with solar. This creates costly and unnecessary infrastructure challenges in our state where most Cooperatives are declining in kilowatt hour sales in rural areas. It is clear the proponents of this bill have do not understand what it takes to keep a high voltage electrical grid affordable, reliable, resilient, sustainable and secure.

Thank you again for the opportunity to share our concerns with HB 2228. We respectfully request the committee to refrain from advancing the bill. If the committee does act on HB 2228, we request **Cooperatives be excluded** from the bill. If you have any questions regarding our testimony, please feel free to contact me.

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