

Central Base Load & Distributed Peak Generation makes Kansas common sense, HB 2228

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In 2020, the Kansas Legislative Coordinating Council authorized a study concerning retail rates of Kansas electric public utilities. It found the 2018 rate base to customer ratio for both Westar (Eversource Central) nearly doubled (92% above) the average for utilities for our region.¹ Former KCP&L was 23% above. Yet with the rebuild of its transmission & distribution system beginning in 2020, Eversource's STP "proposes to increase the book value of all electric assets and equipment in service - a portfolio of assets and equipment that took over 100 years for the utilities to amass - by 51.5 % in just 5 years."² "Eversource's capital investment plan continues to escalate year by year. The 2022 five-year plan increased over the 2021 five-year plan by more than \$1 billion (18.27%), which in turn increased over the 2020 five-year plan by nearly another \$1.1 billion.³ Resulting rate increases will cause capital flight out of the Kansas economy for decades. But we have a choice.

Transmission and distribution design is based on the highest electric usage a line will experience. These are the hours hot utility lines sag into trees, and transformers fail. So a typical residential line is used over half its capacity, only 15% of the time. Reductions in electricity demand at these times can lead to deferrals of new investments or upgrades in electric generation, distribution and possibly transmission facilities, and/or avoidance of higher prices or demand charges from wholesale power suppliers. If these peaks can be generated at their point of use, it doesn't have to be sent across these very expensive lines. These results can lead to reductions in the utility's overall cost of service, which can benefit all customers when the reductions are passed on through retail rates. The benefits apply especially to distribution-only utilities such as municipals and doubly to rural electric cooperatives which have an average of 3.2 members per mile of line instead of the 32 meters Eversource has.

In Kansas the hottest period since hourly temperatures were recorded, was Summer 2012: 94% of those critical peak days were cloudless, and another 4% were less than half cloudy. Solar energy is extraordinarily reliable on all of our critical peak days. The same applies to our coldest days which are invariably clear. Storage, and demand management encouraged by Time-of Use pricing can fill in the rest. Unfortunately, in 2012, solar energy hadn't yet become cheaper than natural gas, coal, or even nuclear generation. Today solar is competing only with wind as the least cost electricity. And it can be quietly, cleanly generating where people live and work...avoiding the costs of peak delivery. Except for not requiring fuel, centralized utility scale solar performs much like natural gas generation. Peaks still have to be transmitted on overloaded power lines.

Dr. Ahmad Faruqi represented Westar/Eversource as their utility rate expert in the last three rate cases against rooftop solar. Today he writes "I had found a flaw in my reasoning. It rested on the presumption that through NEM the "poor subsidized the rich.... There were a whole bunch of cost shifts in rate design. It was only looking at a portion of the truth, not the whole truth"

"Other than me and a few other witnesses making those cost shift arguments *ad nauseum*, no one else was making those arguments. We were not gaining a big following. In fact, we had no following at all to speak of. There were no public rallies opposing NEM. There were no editorials opposing NEM...In fact, I never ran into a person, rich or poor, who was opposed to installing solar panels." (*Eversource's customer survey found 91% of Kansans favor solar generation.*)

"I am confident my reformed vision is in line with reality... They enhance affordability and green energy. When paired with batteries, they enhance local resilience. They lower investments in the distribution and transmission system."

.... "I also believe that states where solar deployment is in the early stages, and where less than 5% of customers have deployed solar roofs are at a very different stage of the game and should stick with NEM in its current form."⁴

¹ Study of Retail Rates of Kansas Electric Public Utilities, prepared for Kansas Legislative Coordinating Council ("LCC") by London Economics International LLC, January 8, 2020, Pg 59

² Eversource's Sustainability Transformation Plan: Placing Shareholder Interests Ahead of Kansas, Kansans, and the Environment December 31, 2021, Pg 7

³ Glenda Duboise, director Kansas AARP, KS Reflector, Dec 1, 2022

⁴ *Why did I reform my views on Net Energy Metering (NEM)?*, Ahmad Faruqi, Sept 27, 2022