January 29, 2021

To Whom It May Concern,

This letter is in support of the Bill SB2295 for multiple reasons. The 2 big reasons are jobs and the way current utilities pay for local utilities ends up double charging transmission and distribution fees for any local energy produced that touches the grid. What is so disturbing about the second big reason is local energy has no inherent transmission and negligible distribution so why are these fees attached to local people's energy? This is extremely unfair to the people of North Dakota.

According to the January 2017 DOE US Energy and Employment report (See Table 1, Page 29) when it comes to generating electricity solar has more jobs than coal, natural gas, wind, and nuclear combined. Yet North Dakota probably still ranks last in the nation as it has for many years when it comes to solar energy production, likely still under 1MW for the entire state. A huge advantage of solar is it can be generated across the entire state with decent production, so every community can benefit from its use, even urban areas. It is truly unfortunate that our state has missed out on the biggest job producer from solar installations because it pays some of the lowest rates in the nation for its energy.

The 2 utilities that service Fargo offer some of the worst rates in the nation when it comes to paying people for generating local energy. This happens because basically the utilities arbitrarily charge transmission and distribution fees to the local energy producer for every kWh touching the grid. These fees add up to approximately 75% of the value of the local kWh produced. With one utility the local producer gets 2.4 cents/kWh with the utility keeping the remaining 7.6 cents/kWh out of 10, the second utility the local producer gets 2.8 cents/kWh with the utility keeping the remaining 8.2 cents/kWh out of 11. The utilities then charge the local consumer the same transmission and generation fees on the same energy a second time. Double charging fees on the same energy to two different North Dakotans is clearly unfair. What makes it even worse is local energy at the level suggested in the bill is generated grid ready to go having the right voltage and frequency. Local energy bypasses the transmission process that upscales the voltages, moves it a long distance, then downscales the voltages. Yet this transmission fee is attached to local solar energy even though there is no transmission process. Local energy at the level of the bill also has negligible distribution costs travelling especially urban areas very short distances when it is used by neighbors, as my solar energy generated never leaves my block with someone always using it. The consequence is the local producer spends all the money on building the local energy generation system with the local utility spending nothing on the system, but for any energy touching the grid the local utilities in Fargo keep an astounding 75% of the overall energy value. This relationship is extremely unfair to the people of North Dakota. A real-life example of this is last year my company, Community Electrification, has an opportunity to potentially build a solar panel system from \$60 000 donated to the local YWCA women's shelter. Unfortunately, Covid prevented the project from happening. Had it actually been built with the current payback by Fargo utilities the YWCA depending on how much energy it used immediately without going to the grid would get ~\$60 000 over 30 years of generation, but the local utility would get the remaining ~\$60 000 of the total \$120 000 economic value in the time period from the donation without spending a dime. The local utility according to its yearly reports to investors is doing very well financially.

Here is a summary of all the positive aspects of local energy production especially solar that are being lost because of the low rates utilities pay for local energy:

1) Local solar energy is fabulous for directly handling long-term energy loads at an individual level.

2) Local energy production is designed to save people in North Dakota money from their energy bills.

3) Local energy is the cheapest form of energy having no transmission costs and very little if any distribution costs. Local energy is generated at the right voltage and frequency making it the best form of energy because it is always used in our community.

4) The 2 small residential solar projects accomplished in Fargo in 2019 involved 4 local companies working together with 10 local people directly working on the installations, strongly promoting local jobs.

5) Local clean energy when generated doesn't hurt or kill people especially our children from toxic pollution & doesn't harm the environment.

- 6) Local solar energy in comparison to other forms of energy has no significant down time.
- 7) In an emergency, our community would want as much local energy production as possible.

In conclusion, I have personal issues selling solar panels to people in North Dakota when I know the utilities are basically giving the worse prices in the country for their energy by double charging transmission and distribution fees on the people's energy when there is no transmission and negligible distribution with the people's energy. My company is more likely to do local energy projects in Moorhead and the surrounding area in Minnesota that gives their people full value for their energy. It is no wonder the utilities like to keep things the same when they invest nothing a project and keep 75% of the value for energy that goes on the grid. I voluntarily asked one local utility to return to giving local producers full value for their energy. The local utility presented completely false information having nothing to do with solar energy on why doing so was bad for the utilities is not a good strategy. There are people in our state wanting to do local energy projects but when they find out how things financially work with their utility the vast majority quickly lose interest. Really the people of North Dakota suffer the most because of this as it is simply not economically viable to generate their own energy or they are missing out on well-paying local energy jobs.

Sincerely,

Dr. John Bagu

Dr. John Bagu President, Community Electrification