

INTERIM JOINT COMMITTEE ON NATURAL RESOURCES AND ENERGY

Minutes of the 7th Meeting of the 2017 Interim

December 7, 2017

Call to Order and Roll Call

The 7th meeting of the Interim Joint Committee on Natural Resources and Energy was held on Thursday, December 7, 2017, at 1:00 PM, in Room 149 of the Capitol Annex. Representative Jim Gooch Jr., Chair, called the meeting to order, and the secretary called the roll.

Present were:

Members: Senator Jared Carpenter, Co-Chair; Representative Jim Gooch Jr., Co-Chair; Senators C.B. Embry Jr., Ernie Harris, Ray S. Jones II, Christian McDaniel, John Schickel, Brandon Smith, Johnny Ray Turner, and Robin L. Webb; Representatives John Blanton, McKenzie Cantrell, Tim Couch, Jeffery Donohue, Daniel Elliott, Kelly Flood, Chris Fugate, Dennis Keene, Reginald Meeks, Marie Rader, Jim Stewart III, Jim Wayne, and Jill York.

Guests: Senator Brandt Hershman, Majority Floor Leader, Indiana State Senate; Adam Benshoff, Deputy General Counsel, Regulatory Affairs, Edison Electric Institute; Matt Partymiller, Member, Kentucky Solar Energy Industry Association (KYSEIA); Jamie Clark, Member KYSEIA; and Ken Scott, Ph.D., P.E., Owner, Wilderness Trace Solar.

LRC Staff: Stefan Kasacavage, Janine Coy-Geeslin, Tanya Monsanto, and Rachel Hartley.

Net Metering Reform Efforts in Indiana

Senator Hershman stated Indiana's focus was on developing a broad energy policy that incorporated all relevant changes in the regulatory environment and would make the energy sector as competitive as possible. There are coal, wind, and now solar generation installations in Senator Hershman's district.

Indiana reexamined net metering in the 1990s and allowed some net metering, but at very low caps. The caps were as low as 10 kilowatts, but have now increased to one megawatt. Caps were also added to baseload generation so participants in net metering could not exceed one percent of the summer peak capacity. There were significant incentives to participate, but the only issue was how much you could sell back to the electric utilities and at what rate. If a small number of people net meter then they are

required to purchase at the retail rate. In Indiana, the retail rate is 300-350 percent more than the wholesale price. Any business that has to pay three times more for raw materials is forced to shift the cost to the customer.

As technology advances the cost of solar panels has decreased significantly. It has become cheaper to independently produce power. In Indiana, the rate of adoption of solar power is increasing by 1000 percent a year. The participants in net metering will have a distortive impact on the wholesale price.

Senate bill 309 promoted agriculture business, co-generation, and transparency in the review process for net metering. Indiana supported alternative energy and wanted more participants to generate their own power. The baseload cap was increased to 1.5 percent from 1 percent. All current participants in net metering and those who installed by the end of 2017 would continue to receive the full retail compensation for 30 years. Participants who install within the next five years would receive the full retail compensation for 10 years and those who install after the next five years would be compensated at the average wholesale price plus 25 percent.

Senator Hershman believes net metering is a broad energy policy that is not always in the interest of all consumers, and he conducted research that supported this finding. The Massachusetts Institute of Technology issued a 330 page report detailing how net metering is not in the best interest of solar technology. An excessive subsidy will create an eventual cost shift and consumers would face a financial burden.

In response to Representative Gooch, Senator Hershman said with the current state of technology and types of power production, the issue is the sun and the wind are not always available. The backup capacity is important to meet the excessive demand. A few years ago there was a rolling brown out in Texas due to renewable energy sources not generating enough electricity. Conversely, in California there is an issue with over capacity of renewable energy in the marketplace. The capacity cap at 1.5 percent of baseload generation is not likely to be enough to have a negative impact on their ability to generate power. The issues with net metering are how many participants will be allowed and what their compensation rate will be for excess power. The only aspect that is lacking for broad expansion of renewable generation is a robust storage capacity to reserve power for peak demand. In Indiana, solar panels are installed on households, schools, and commercial businesses and cannot be owned by a third party.

In response to Representative Wayne, Senator Hershman stated utilities can receive a cheaper rate during peak demand than they are paying to private generators. There are times when the reverse is true, which is why Indiana looked at the wholesale rate over time. The compensation rate in Indiana will take effect in five years so there will be opportunity to amend. The one percent cap was to limit the number of participants. The utilities have not reached that cap; however, the rate of growth is increasing.

Representative Gooch stated there was currently no bill for net metering, and the purpose of the meeting was to educate the committee members on issues regarding net metering.

Updating Net Metering Policies

Adam Benshoff provided a basic understanding of net metering. The rate construct of net metering is not new.

Mr. Benshoff stated there are three myths regarding net metering. One is that owning a private solar energy system means you can be totally off the grid. Another myth is there is no cost shifting caused by net metering, and if there is, the value of clean energy is a benefit that justifies it. Lastly, it is a myth that net metering is not a problem when private solar energy penetration is low. In reality, net metering customers continue to use and have a need for the energy grid, because if you are not connected to the energy grid, you cannot buy or sell power. Also, rates can be designed in a fair, equitable, technology-neutral manner, while still protecting necessary energy grid investment.

For a private solar energy customer, the rooftop system will not meet all the energy needs. The customer will still use the energy grid in the morning and evening, during cloud shear and during high loading times.

There are two key components regarding the cost shift. One is determining the appropriate rate to buy and sell electricity. The second is ensuring that private solar energy customers are contributing their equal share to the upkeep of the energy infrastructure.

Volumetric based rates create a cost price mismatch. Residential rates are typically designed to cover most of the costs of residential service on the basis of energy consumption, with most fix costs and capacity-related costs rolled into a volumetric charge. Net metering at the retail rate perpetuates this cycle of payment for volume rather than service. The net metering customers are underpaying for the essential grid service they utilize.

Rocky Mountain Power in Utah performed a study on the extent of the net metering cost shift. In 2014, there were 3,000 rooftop solar connects with a \$1.1 million annual cost shift to non-rooftop customers. By 2020, Utah is projected to have 50,500 rooftop solar connects with an estimated \$26.5 million annually cost to non-rooftop customers.

Two studies in California and Louisiana show that the cost shift is regressive. In California, the median annual income for customers with private solar is \$90,000 while customers without was \$54,000. In Louisiana, the median annual income for customers with private solar is \$60,460 while customers without was \$44,673.

There are several states that are looking at options beyond retail net metering that still provide incentives for new energy, but keep costs fair for everyone.

In response to Representative Wayne, Mr. Benshoff stated he does not have any statistics for Kentucky regarding the wholesale price during peak times and that it is much lower than what they are paying to private solar energy generators. One of the common misconceptions is power must be the most expensive when demand is highest. When the power is the most expensive, the private solar energy is not producing.

Kentucky Solar Energy Industry Association

Matt Partymiller operates Solar Energy Solutions in Lexington and provided the perspective of the solar industry.

The Kentucky Solar Energy Industry Association (KYSEIA) was founded in 2017 to represent the interests of the solar industry. The current membership is primarily local, small solar installers. The goal is to promote affordable energy through sound, free-market policy.

Kentucky is approaching around 1,000 Kentuckians that participate in net metering tariffs with their monopoly utility. Of those, a percentage produces excess energy during especially sunny periods of the day and are credited for that energy, which they draw back in the evening or other times of high household consumption. Net metering is a transaction in which energy is swapped with the utility. Customers are never paid for excess production, and they have no incentive to produce more energy than they use. Net metering is conducive to introducing competition into a market otherwise devoid of choice. The current net metering market is the whole state of Kentucky, with the exception of the area served by the Tennessee Valley Authority.

There are currently 23 different monopoly utilities in various regions in the state. They all file their own rate structures in periods that range from a couple years to multiple decades. The KYSEIA is certain that increased regulation of the solar industry will result in a large monopoly and private businesses will not be able to participate in the market. This means less private solar, which benefits the utility monopolies owned by out-of-state utility investors.

When regulatory proceedings are constantly introduced there is a resulting element of business uncertainty. No new solar business wants to operate in a market where only monopolies are granted certainty.

For most Kentuckians, solar is the first choice they have had in determining the source of their electricity. It is also an option that would allow them to ensure their energy bills do not increase. Eliminating consumer options will only benefit monopoly utilities.

The policy that will work best will follow principles of the free market that allows for competitive markets.

Net metering is currently a very small market. There is still time to study the issue and have the right solar policy. Data from the Kentucky Energy and Environment Cabinet show that solar is 0.00009 percent of the current energy sources. The current net metering statute limits solar generation to one percent of a utilities consumption. The one percent needs to increase to ensure a free market. Regulation without a guaranteed rate of return will result in failure.

Solar energy is rapidly becoming the least cost energy source. It has been roughly one-third of all new power generation nationally since 2013 and more than one-half in 2016. Solar and other generation sources will increasingly need to co-exist.

In response to Representative Gooch, Mr. Partymiller stated the intent of his presentation was to express that KYSEIA was weary of any legislation that would cause their industry to be involved in regulatory proceedings. They do not want to hire lawyers to participate in rate cases. Their goal is to find a way to continue to participate in generating power.

Ken Scott stated the changes made to net metering affected Wilderness Trace Solar. They formed in April 2015 and their mission is to design, install, and service grid solar power systems. They also manufacture, install, and service off-grid solar power kits. They also manufacture specialty solar panels.

The effects of major changes in net metering policy include the residential solar power market would be destroyed, the for-profit businesses would be damaged, the employment opportunities in the solar industry would reduce, the solar companies would be affected financially, and it would reduce Kentucky utilization of renewable energy.

Jamie Clark stated he hears the same talking point regarding net metering. The current law has poor people subsidizing the utility bills of rich people with solar panels. He believes this is a very misleading statement. The vast majority of solar energy customers are retirees who want energy independence.

Solar panels will generate more electricity than a household requires. The excess is fed to a net meter and is bought by the utilities for \$1. The utilities then give the customer \$1 in credit. The utilities are selling the excess power at the same rate to non-solar customers. It is not a subsidy because it is a dollar for dollar transfer.

In response to Representative Gooch, Mr. Clark stated federal tax incentives are a subsidy; however, net metering is not. In Kentucky, there are more lobbyists working for

the utilities than people working for the solar industry. The regulation is not necessary and will only create a utility monopoly.

Documents distributed during the meeting are available in the LRC Library.

There being no further business, the meeting was adjourned.