Environment & Energy Commission

City of Columbia & County of Boone
City Hall, Conference Room 1A
March 7, 2017
Comments regarding the 2017 Renewable Energy Report

The Environment and Energy Commission is disappointed to see that the quantity of renewable energy purchased in 2016 has declined for the 3rd year in a row. Columbia is not on track at 6.68%, or the 12.35% expected in 2017, to meet our 2018 renewable energy goal of 15%. It is important that goals are met, and if possible, exceeded.

In addition, issues EEC raised in the last two years regarding net metering calculations have not been resolved. Calculations to reflect the cost of net metering confuse opportunity costs with paid costs. This results in a cost for renewable energy that is misleading and inflated. If there is some reason for this calculation, we welcome an explanation from those who authored the report to further our understanding. Otherwise, we urge the City Council to request a different method to account for net metering inputs.

As an example, this paragraph from the Renewable Energy Report contains an explanation of the way renewable energy from net metering is calculated:

> "Net metered customer production: These customer-owned photovoltaic developments are also connected to the Columbia Water & Light electric distribution system, so they operate behind the meter in MISO. For calendar year 2016, the average real-time Columbia LMP for the hours when customer-owned solar resources were producing energy was $26.62 per megawatt hour. The average retail energy price is $80.88 per megawatt hour. The difference in these two values is the renewable cost of $54.27 per megawatt hour." (Renewable Energy Report, page 6)

The EEC agrees that 754 MWH should be attributed to net metered energy production as a portion of meeting the stated renewable energy goals. **However, in the report, the calculated cost of net metered energy is based upon the total energy generated, 754 MHW, rather than the portion of it that was actually net metered into the CWL distribution system**.

There are two measurements used by Columbia Water & Light:

1. kWh delivered from distribution system to the house
2. kWh net metered into the distribution system from the house

Using the method and amounts mentioned above:

kWh delivered from distribution system to the house	$80.88 per megawatt hour average retail price
	-
kWh net metered into the distribution system from the house	$26.62 per megawatt hour/Local Market Price
	=
Total cost for net metering	$54.26 This amount does NOT include energy used by the house before net metering to CWL

We believe that only the portion which is net metered into the distribution system should be used for estimating the cost of renewable energy. The best data currently available is that more than 50% of the energy generated by renewable systems is used by the house before net metering to the distribution system. This implies that the Energy Efficiency Report claims twice as much cost as it should.

We recognize there is a concern that customers with renewable energy installations are not paying their fair share of the cost of distribution, and perhaps this is why the utility made the decision to use this calculation. However, we feel that reduced energy needs caused by customer conservation and/or renewable production by customer systems should not be counted as a "cost" to CWL.

We ask that you please ask the utility to cease the use of a calculation that undervalues renewable energy and overestimates its cost. Continuing this practice gives the impression that using 53.3% of available funds to purchase 6.68% renewable energy means we will not be able to afford 25% renewable energy in 2022. The 30% goals for 2028 is even more unreachable using this calculation. We believe that the 30% goal is achievable and affordable.

Respectfully Yours,

Jan Dye
Environment & Energy Commission
Chair