Explaining Electricity with Net Metering

By Bobbi Walker, December 2024

Energy Sources: Renewable (Solar/Wind/Hydro/Geothermal/Biomass) and Non-Renewable (Coal, Natural Gas, Nuclear)
Energy Providers: Self (Homeowners/Business Owners/Organizations) and Utilities (Non-Profit, Cooperatives, For-Profit)
Energy Customers: Homeowners, Businesses, Organizations
Supplier Customers: Customers who purchase machinery to create all or part of their electricity needs.

Customers in Missouri are restricted to Utility Providers that service their location, but are allowed to provide a secondary Source themselves, making them Supplier Customers and lowering their reliance on that Utility Provider. Missouri also allows for 'net-metering' which is sending excess electricity from the Supplier Customer back to the Utility Provider. How that excess electricity is accounted for monetarily depends on the State Regulations and the Utility Provider.

Making energy from any source requires machinery.

The Utility Provider pays for the machinery and rents end of use meter to Customers.

The Supplier Customer pays for the machinery in order to save money over time on their energy consumption.

The net-metering situation at my location is as follows:

Electricity needed by the Supplier Customer is drawn first from the Secondary Source (stopping the forward progression of the Utility Provider's meter). It is possible to receive electricity from both the Utility Provider and the Secondary Source at the same time if the load exceeds the output of the Secondary Source alone; thereby moving the forward progression of the meter by just the input from the Utility Provider needed to accommodate the extra load.

Electricity output that exceeds the Supplier Customer load is sent to the Utility Provider causing the meter to go backward. During a specified time frame, the amount of electricity being sent to the Utility Provider may exceed the amount previously provided by the Utility Provider, however, the meter does not move below the previously provided amount (known as 'zero'). This means that the Utility Provider does not compensate the customer for any electricity received beyond the amount previously provided. (In some jurisdictions, Supplier Customers are compensated below 'zero' at the wholesale price paid by the Utility Providers to their primary energy source partners. Making the 'cost' of the Supplier Customer's electricity exactly the same as that of the other energy suppliers.)

The resulting accountability is that net-metering simply reduces the total amount of electricity that the Supplier Customer purchases from the Utility Provider during a specified time frame; just like doing any energy conservation practices (such as: adding insulation, turning off lights, changing to highly efficient lights/appliances, lowering [winter]/raising [summer] the thermostat, etc.) It does not, however, lower the rental fee for the meter or other fees and taxes.

The argument that net-metering raises prices for other Customers because the Utility Provider is paying the retail rate for the excess electricity generated by the Supplier Customer is pure fiction.

The Supplier Customer is simply receiving a ***credit*** at the retail rate for the amount of electricity they are providing to themselves up to the amount they have purchased from the Utility Provider during the specified time frame. Any electricity beyond that amount received by the Utility Provider is completely free to the Utility Provider (or, in some jurisdictions, is compensated to the Supplier Customer at the same rate the Utility Provider pays their primary source partners).

Such an arrangement with a Supplier Customer has absolutely no bearing on what the Utility Provider chooses to charge the other Customers.