

MOSAIC POWER

has a unique aspect of its service which sets it apart from almost all other energy providers: We pay the client for implementing our program within their apartment complexes.



Most ask how is this possible? The answer is fairly straight forward and can be summarized as follows, the Regional Transmission Organization (RTO), which in our area is PJM, pays us to provide a service called Frequency Regulation.

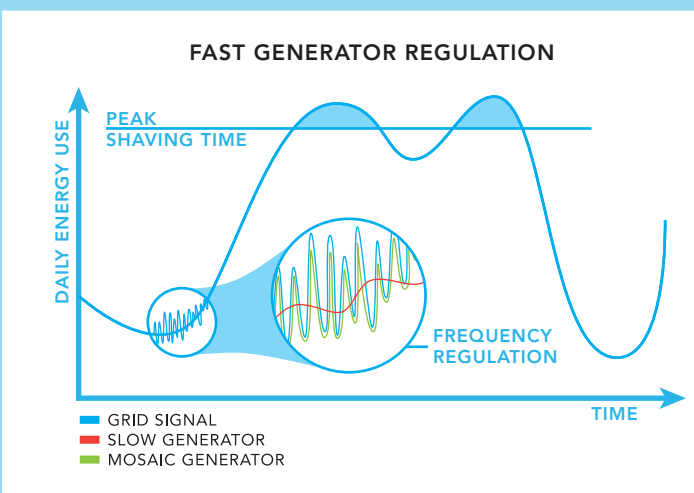


ENERGY MARKET

The RTO energy market is very similar to most of the stock exchanges around the world. Mosaic Power makes money by trading energy within these RTO energy markets. Bids on energy are placed, and these bids go through a clearing process. When Mosaic wins a bid, we are paid for the energy we provide.

UP UNTIL RECENTLY,

the RTO energy markets only had three trading levels: "years ahead," "days ahead," and "hours ahead." On October 1st 2012 PJM created a "fast-regulation" market platform that trades for real time electricity optimization. This is where Mosaic Power trades and where the revenue is generated which allows us to pay our clients for participating in our program.



Energy Traded Like Stock Markets

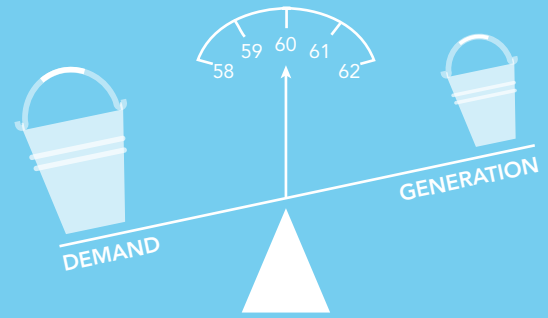
- Years ahead
- Day ahead
- Hour ahead
- Fast regulation





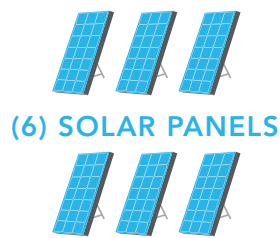
BALANCING THE GRID

Frequency Regulation is the ability to help keep the grid stable and balanced through energy optimization. An RTO must maintain energy parity by ensuring that the grid has the same amount of electricity being produced as it has being used. Here in the United States this balance sits at 60 Hertz or 60 cycles/second.



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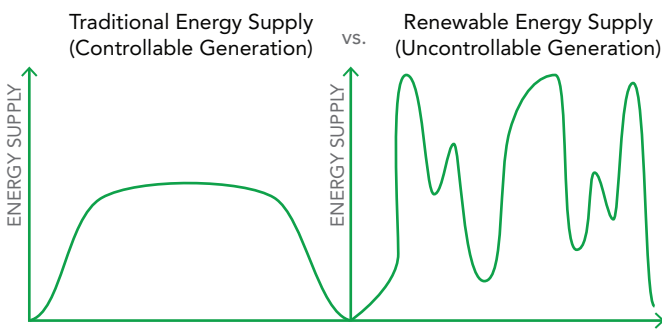
AND OFFSETS

1.5 TONS OF CO₂



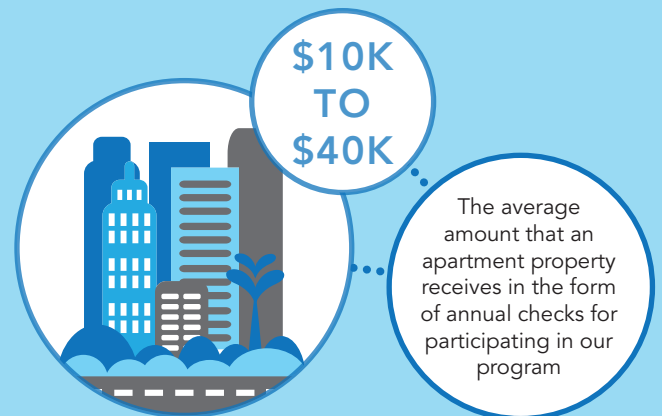
Today most RTOs use fossil fuel generators to respond to their needs in frequency regulation. When demand is high, generators must be sped up, and when demand is low, generators must be slowed down. Generators are almost always "spinning" because they cannot be turned off if they are standing by for frequency regulation.

Fossil fuel generators can only respond to grid fluctuations once every 20 minutes. By comparison the Mosaic Power solution can respond to optimization requirements once every 4 minutes! Mosaic can accomplish this by its continuous monitoring of numerous hot water heaters all working together as one.



RENEWABLES CAN MAKE BALANCING DIFFICULT

Electric water heaters all across the Mid-Atlantic States are connected through the internet to the Mosaic Power control center where we add a layer of intelligence to your equipment. We turn water heaters on or off based on grid fluctuations, constantly tracking the usage, minute-by-minute and second-by-second. "Using the natural thermal storage capacity of electric water heaters allows Mosaic Power to more precisely match electricity supply and demand in our power grid.



WE PAY YOU.

Mosaic optimizes the power used by many electric water heaters (hence the name Mosaic) and feeds that energy back into the grid without disrupting the hot water system. Mosaic Power needs access to the electric water heaters and an internet connection. By signing up, heat owners can both lower their carbon footprint and receive a yearly rebate check from Mosaic Power.