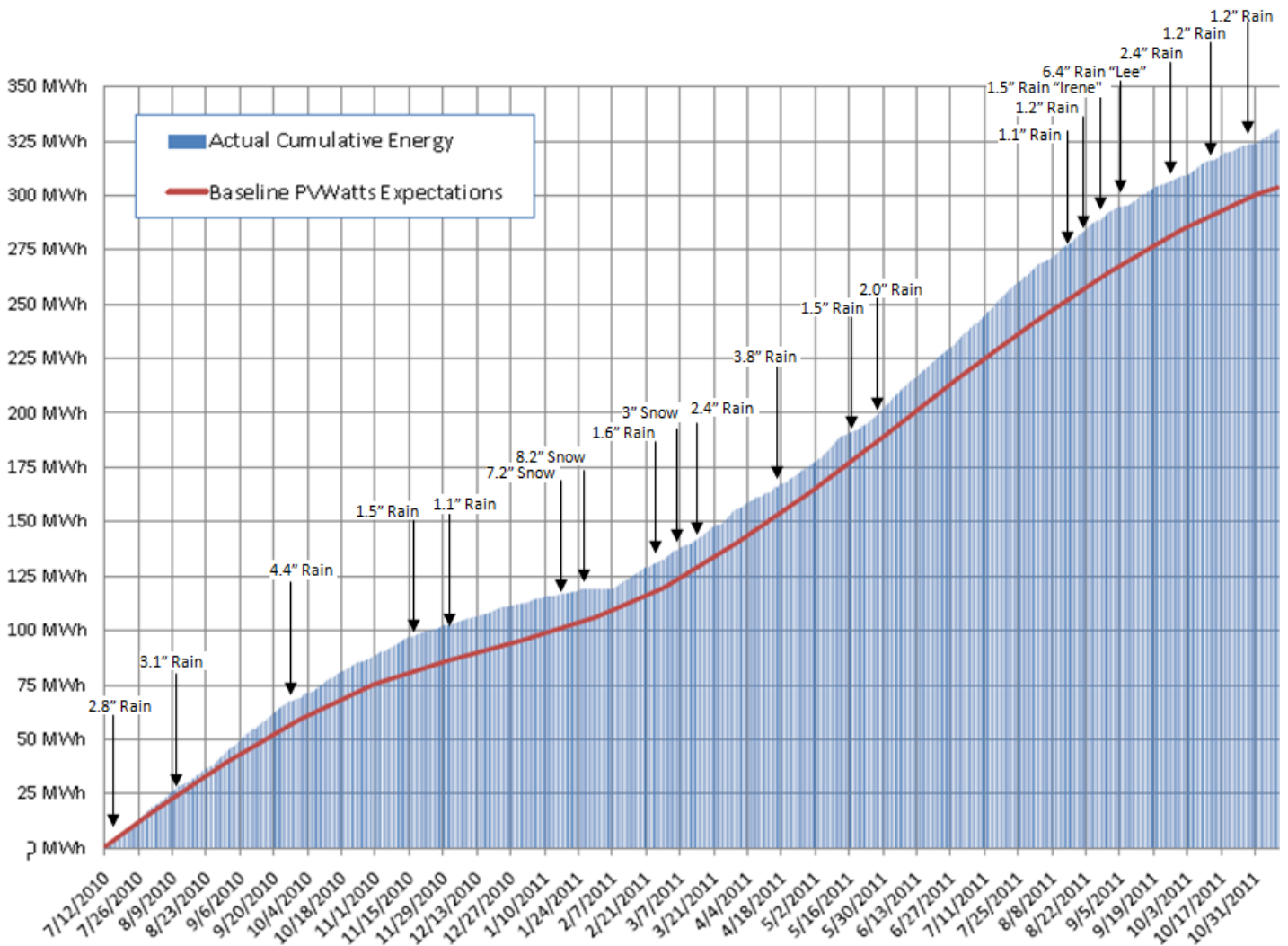
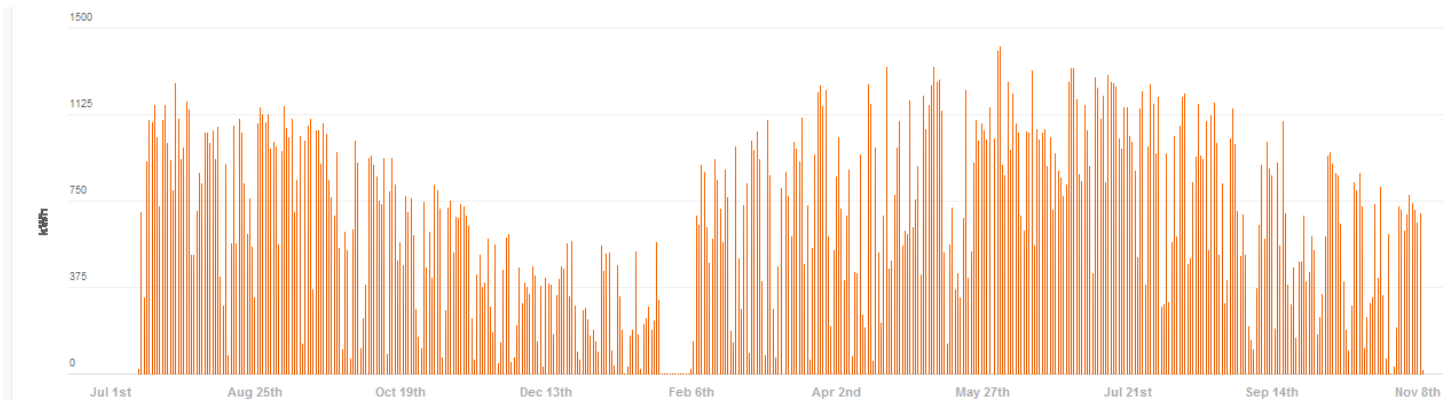


Don't Let the Weather Deter You from Sunny Money

The weather in South-Central Pennsylvania lately would NOT seem to be conducive to solar energy production. Record rainfalls in late August and then September from [Irene](#) and [Lee](#) led to disasters in the northeast U.S. that made [international](#) news. But [even during heavy rain](#), solar panels produce electricity, albeit not optimal. Our long hot summer of 2011 saw great amounts of sunshine. Before that, we got 22.5 inches of snowfall last winter that took some time to melt off the panels, thus bringing solar production and local schools to minimal performance briefly.

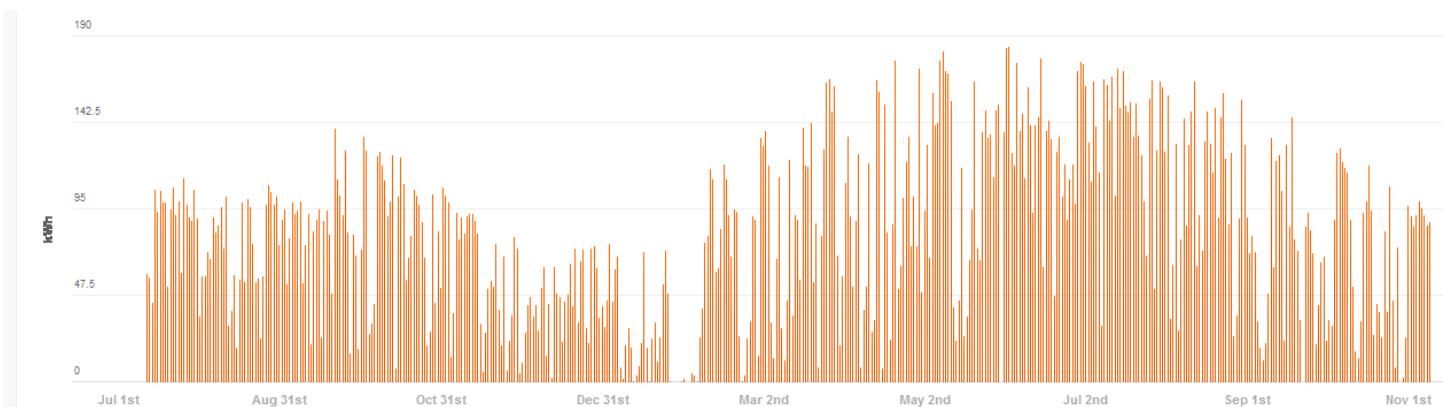
But the bottom line, after all these days of up and down sunshine can be clearly seen in the images below. The system is a 200 kW DC system comprised of 868 panels at 230 watts each. They lie on a low sloped roof of only 10° pitch, facing slightly west of true south. Using [NREL's PVWatts](#) tool to math-model the expectations of this system, you can see the first graph that photovoltaic system owners like to see. Their system (blue vertical bars) has some bumps and flat spots due to weather, but overall they are meeting or beating the expectation curve (red line curve) on their original contracted system.





The second graph shows the individual daily energy output during the last year and a half. You can clearly see how the two late [January snowstorms](#) totaling 15.4 inches altogether brought solar energy production down near zero for the mid-winter week. But crisp, clear sunny days that followed yielded great solar production, as panel output voltage is [enhanced](#) by colder temperatures.

It is interesting to compare this larger commercial system to a residential graph output, because without reading the daily numerical output values, the graphs look identical. Same daily up and down of electrical output varying with cloudy and clear days. Same timely accumulation of energy that meets or beats the consumer's PVWatts expectations.



Sure, your "mileage may vary" from your solar panels. And some Septembers are rainier than others. But as you patiently monitor your solar panel system, you will see your Solar investment pay itself off. With no other rebates other than the 30% Federal Tax rebate available to everyone in the U.S. for any size system, you will not only pay off this system within its lifetime, but accumulate enough free electricity during the second half of this 25 year cycle to complete purchase another brand new PV system for this same roof – FREE! Solar Renewable Energy Credits (SREC's) are an added bonus/rebate, but their price in PA has bottomed out for now. These graphs don't lie – you WILL achieve profit from your panels.

So don't let the weather stop you on your solar thoughts. While puddles and piles of snow may lie in your yard, your solar panels will rise above the storms and yield long-term upward graphs that we all like to see.