

# Net Metering Graph *Office Building Example*

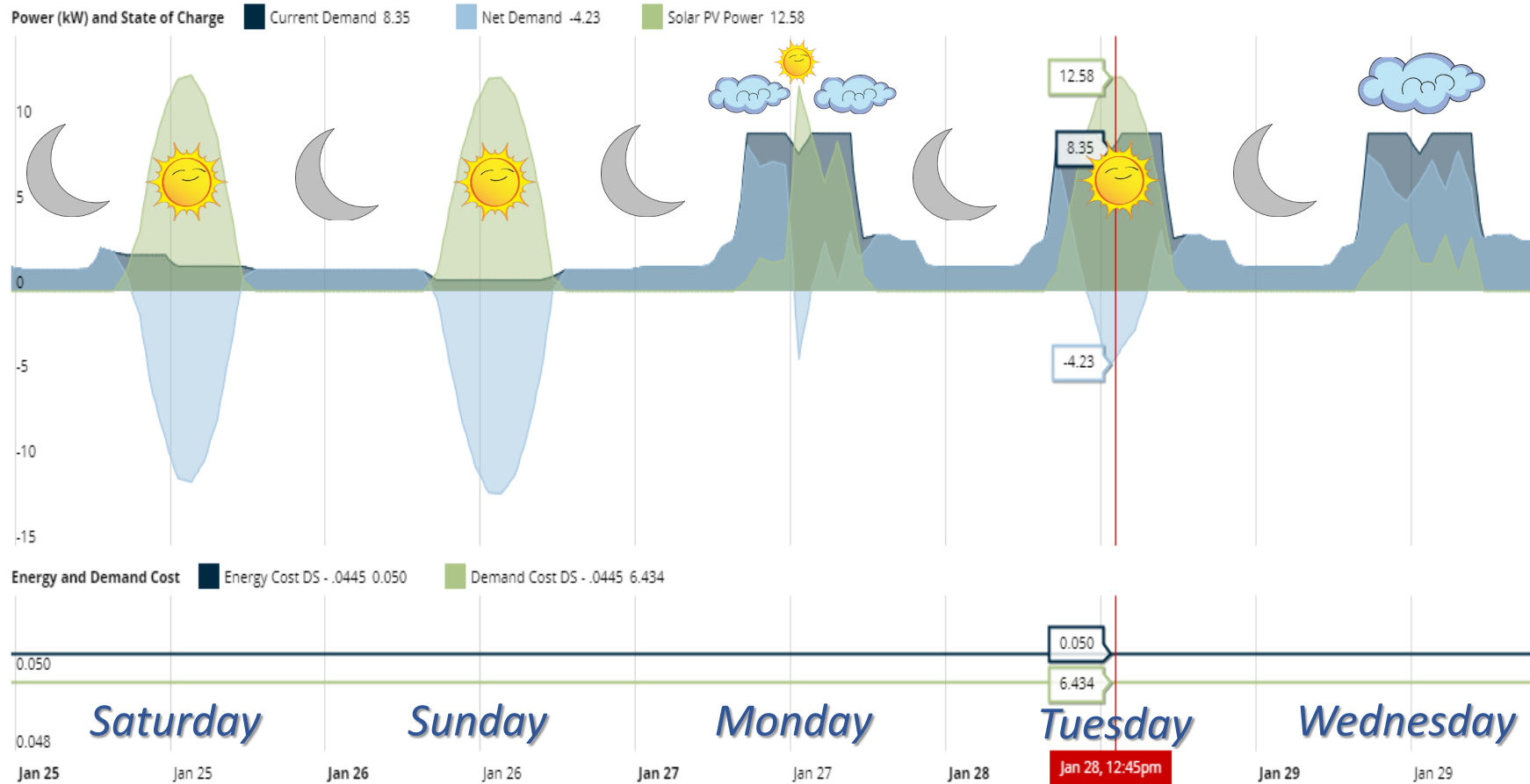


The following chart shows a live example of how net metering works and when savings occur with solar PV generation. These daily variations in current demand (debits), layered against solar PV power (credits), results in the building's net demand.

The solar energy system at this site overproduces during the first two days since there is ample sunlight and little demand. The utility is crediting the owner's account for that overproduction, which is then used to offset the bill when the system is under-producing.

Net metering occurs in the areas that display overproduction from solar. Excess electricity causes the meter to spin backwards. In these cases, solar generates more power than the actual usage. That excess power is sent back to the grid, while "credits" accumulate on the account.

Savings occur in every green area where solar produces power. For example, although the system is not overproducing during the last day, solar is still helping to offset part of the demand costs, or "debits."



- **WEEKEND:** On Saturday and Sunday, the building load is very low. Solar power is generated throughout the day with plenty of sun, which causes a lot of energy to be exported to the grid (accumulating credits). Credits are being used up at night while there is still some electricity load.
- **MONDAY:** The building energy load spikes, causing debits on the account. Solar generation doesn't show a consistent curve since it's cloudy outside. For the most part, the building is pulling power from the grid (at a reduced rate), and energy is exported for a small amount of time in the middle of the day.
- **TUESDAY:** A nice, sunny day. In the morning, the building starts pulling power from the grid as the energy load shoots up when workers arrive. Then, the load from the grid starts to slowly reduce as some of the electricity is produced by the solar array. Then, eventually, the building exports power back to the grid (accumulating credits), before the cycle reverses again.
- **WEDNESDAY:** No net-metering occurs because of the lack of sun. However, the load from the grid is reduced and savings still occur. The net of the debits and credits appears in the middle.