

Reduction of Power Output from Undersized Inverters

ower clipping occurs when a PV array is oversized for the inverter with which it is paired. This is an especially important issue in New Mexico, with our high sunlight intensity (i.e. irradiance) due to high elevation and our cold, clear winter days. Due to current product availability, clipping frequently occurs when an individual PV module is paired with a microinverter of insufficient rated power output. We frequently see other companies make the poor

design choice of pairing a 255 watt PV module with a microinverter that has a maximum output of 225 watts. Although there is derating of a module's nameplate wattage, in the cooler months, on a sunny day we can actually see output that is equal to the nameplate rating. Not only is energy production lost due to the clipping, but it is also likely shortening the useful life of the inverter, which is being maxed out and shedding excess power via heat.

Example #1: System installed by competitor

Actual images from local competitor's online public monitoring site:



Example #2: System Installed by Positive Energy Solar



