Kaua'i Island Utility Cooperative
Your Touchstone Energy® Cooperative

Options for Sizing Rooftop Solar

1. Right-sized

The criteria are based on the average monthly kilowatt-hour usage of the household. The average household uses about 25 percent of its electricity between 9 a.m. and 3 p.m., so any system that produces more than is needed to offset the household's daytime demand could be considered oversized. With the understanding that all customers have different needs, KIUC developed this chart that defines as right-sized a system that produces more than 25 percent of a household's energy but is not designed primarily to export energy to the grid. Right-sized systems do not require a curtailment meter.

Right-Sizing Criteria

Average monthly usage in kWh	Maximum PV Size
0-500	2.5 kW
500-800	2.75
800-900	3.00
900-1000	3.5
1000-1100	3.75
1100-1200	4.25
>1200	5.25

2. Oversized

An oversized system is designed to serve the household or business and to export energy to the grid. As of Nov. 17, 2015, KIUC will require a second meter on the system that enables the utility to limit the amount of energy being exported during times of peak solar generation. Curtailment of solar will occur when there is more electricity being produced on the grid than there is demand for it. In that event, KIUC sends a signal to the meter and shuts off the rooftop system, then turns it back on when the curtailment period ends. When the system is curtailed, it will not export energy to the grid and solar power also won't be available for household use. Power to the home will come from KIUC during the curtailment period. Oversized systems are required to use KIUC's standard wireless meter. KIUC will supply this second meter but the cost of installation is the customer's responsibility.

3. Oversized split

A customer can separate the rooftop system so that only the oversized portion is turned off during a curtailment event; the household can still draw solar power from the portion of the system that is right-sized. For example, a house that needs a 3.5 kW system but installs a 7.5 kW system can split it so that only the oversized portion (4kw) is shut off during a curtailment event.