

Demand Table: Arizona Public Service (APS)

Electricity Savings - 8 kW Solar Array - (Saver Choice Rate Schedule)				
Results will vary based on actual home energy usage and solar array production patterns ¹				
	Away during the day ²		Home during the day ³	
	Average usage	High usage	Average usage	High usage
Yearly cost (before solar)	\$1,679	\$2,376	\$1,679	\$2,376
Yearly cost (after solar)	\$377	\$1,197	\$324	\$1,042
Year 1 savings	\$1,302	\$1,179	\$1,355	\$1,334
Simple payback	11.1 years	12.1 years	10.7 years	10.8 years

Away versus home all day: More solar energy exported to grid versus less exported to grid.

Average electricity user example: Typical house, 1-4 family members, gas heat.

High electricity user examples: Big house, 5+ family members, electric heat.

Notes:

1. Assumptions: ‘Premier Choice’ rate schedule before solar and ‘Saver Choice’ rate schedule after solar, 2% annual escalation rate for cost of electricity, \$0.1045/kWh energy export rate, NREL PVWatts model (180-degree azimuth array orientation, 20-degree array pitch, 20% system losses). Battery storage and demand controllers are not modeled.
2. Usage pattern based on DOE/OpenEI Residential energy profile for Arizona.
3. Usage pattern based on national sample (not specific to Arizona).

Usage recommendations (example):

- Check with your installer on the best way to face your solar to maximize solar savings. Producing more solar power later in the day (westward facing roofs) can have more value to the utility company.
- Shift some of your electricity usage (or “energy demand”) to between 9am and 4pm to use as much of your valuable solar energy as soon as you make it. In some cases, you may be compensated at a lower rate for selling excess electricity back to the grid.
- Avoid running lots of electric loads (especially big ones like a hair dryer, microwave, electric oven, etc.) at the same time during peak windows. Your utility charges you more for these spikes in electricity demand during those times.
- Consider installing an active demand controller to maximize your solar savings by helping you shift some of your energy demand outside of peak times (varies by season) and to avoid those big spikes in usage.

