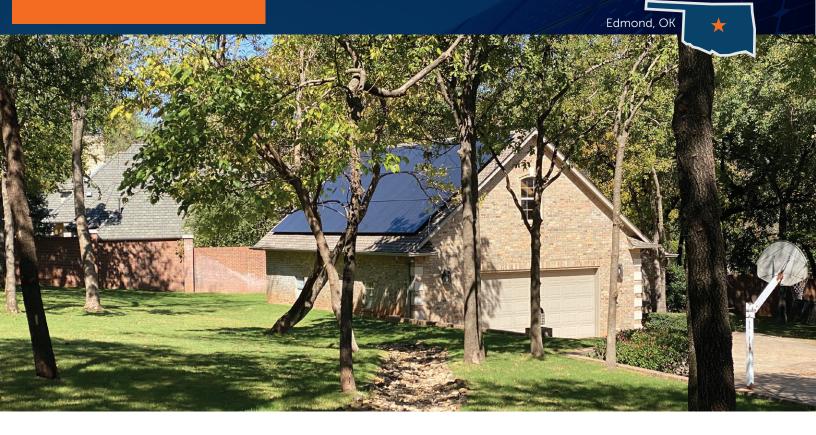
Spotlight

Edmond Solar Estates



To achieve the maximum benefit from the Time of Use (TOU) rate offered by their electric utility, the Ellis family installed a solar PV array sized to completely offset their electric consumption during high-cost, peak periods. In addition to monthly net metering of peak and off-peak periods, the TOU rate offers substantially lower electricity prices during off-peak hours. The solar and TOU combination complements their current all-electric geothermal heat pump system, which provides heating, cooling, and hot water for their home and workshop along with heating for their pool.

INSTALLATION DETAILS

This project features a whole home, retrofitted solution toward achieving energy independence. Prior to solar, Comfortworks installed a high-efficiency geothermal heat pump in the home and workshop, with spray foam insulation in the workshop. A large pool with a waterfall was added, with geothermal heating the pool water. Geothermal helped lower the home's energy consumption allowing the solar array to meet peak electricity demands. Microinverters help minimize occasional tree shading. For additional savings, a special heat exchanger provides free pool heating anytime the geothermal system is cooling the home.



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PROJECT DETAILS

Building Size: 4900 sq. ft, residence, 2,300 sq. ft. workshop roof size

Solar Equipment: Q-Cells 320 W Modules

> APSystems YC600 IronRidge Racking

Contractor / Installer: Comfortworks

OG&E **Utility Company:**

Utility bill before solar: \$3,600 **Savings:**

> Utility bill after solar: \$2,600 Total Savings: 33% savings

Estimated savings: \$120 per month

Energy Offset: 133% of peak kWh use and 25% of overall kWh use

Estimated Production: 15,400 kWh/year





SOLAR PANELS **36 Roof Mount**



INVERTERS **Micro and String Inverters**



ESTIMATED ANNUAL POWER PRODUCTION 15,400 kWh







