



Residential Solar Electric Project Case Study

Site Information

Site Name: Clark Residence

City: Sugar Land, TX

Solar System Description

Renewable Energy Systems: 4.2 KW DC Solar Electric System

Installer: Alternative Power Solutions

Date Installed: October 2009

System Cost (at todays prices): \$25,200

Approximate Energy Provided: Solar Electric – 420 KWh per month

Approximate Cost Savings at 14 cents/kwh: The solar PV systems saves the home owner approximately \$62/month or 46% off this homes standard electric bill. This system qualified the homeowner for a \$7,560 tax credit, increase the property value by \$14,500 and will produce over \$82,000 worth of solar energy during its lifetime.

Environmental Benefits:

This system will reduce CO² emissions by over 211,000 lbs over its 30 year lifespan.

Description of Installation:

The grid-tie 4.2 KW Solar PV system consists of 24 Suntech 175 Watt panels which are southern facing. The panels racking system is attached to the rafters of the roof. This system uses 1 PV Power 4600 central grid tie inverter to make the power conversion from DC to AC electricity.

