



Residential Solar Electric Project Case Study

Site Information

Site Name: Eichler Residence

City: Texarkana, TX

Solar System Description

Renewable Energy Systems:
5.8 KW DC Solar Electric System

Installer: Alternative Power Solutions

Date Installed: April 2010

System Cost (at todays prices): \$37,500

Approximate Energy Provided: Solar Electric – 610 KWh per month

Approximate Cost Savings at 14 cents/kwh: The solar PV systems saves the home owner approximately \$85/month or 15% off this homes standard electric bill. This system qualified the homeowner for a \$12,000 tax credit, a \$14,500 rebate from AEP, increase the property value by \$20,500 and will produce over \$100,000 worth of solar energy during its lifetime.

Environmental Benefits:

This system will save an estimated 274,000 lbs of CO² over its 30 year lifetime

Description of Installation:

The grid-tie 5.8 KW Solar PV system consists of 33 Suntech 175 Watt panels which are southern facing. The panel racking system is attached to the rafters of this composition roof. This system uses 1 SMA 5000 grid tie inverter to make the power conversion from DC to AC electricity.

