



Residential Solar Electric Project Case Study

Site Information

Site Name: Arabie Residence

City: Houston, TX

Solar System Description

Renewable Energy Systems:

3.68 KW DC Solar Electric System
Attic Breeze 25 Watt Attic Fan

Installer: Alternative Power Solutions

Date Installed: December 2010



System Cost (at todays prices): \$22,000

Approximate Energy Provided: Solar Electric – 368 KWh per month

Approximate Cost Savings at 13 cents/kwh: The solar PV systems saves the home owner approximately \$47/month or 40% off this homes standard electric bill. This system qualified the homeowner for a \$5,650 tax credit, increased the property value by \$11,500, and will produce over \$39,000 worth of solar energy during its lifetime.

The attic fan is projected to save the homeowners another \$30 per month by reducing the temperature in the homes attic during the summer months.

Description of Installation:

The grid-tie 3.68 KW Solar PV system consists of 16 Schuco 230 Watt panels which are south facing. The panels are attached to the rafters of the asphalt shingled roof. This system uses 16 Enphase Micro grid tie inverters to make the power conversion from DC to AC electricity at the panel itself. The micro-inverters reduce the standard current loss in the solar system.

