



Residential Solar Electric Project Case Study

Site Information

Site Name: Beissel Residence

City: Sugar Land, TX



Solar System Description

Renewable Energy Systems: 3.60 KW DC Solar Electric System,

Installer: Alternative Power Solutions

Date Installed: June 2010

System Cost (at todays prices): \$21,600

Approximate Energy Provided: Solar Electric – 314 KWh per month

Approximate Cost Savings at 13 cents/kwh: The solar PV systems saves the home owner approximately \$40/month or 63% off this homes standard electric bill. This system qualified the homeowner for a \$6,815 tax credit, increase the property value by \$9,795, and will produce over \$33,400 worth of solar energy during its lifetime.

Environmental Benefits:

This system will also save the environment over 141,000 lbs of co² emissions over 30 years.

Description of Installation:

The grid-tie 3.6 KW Solar PV system consists of 16 SolarWorld 225 Watt panels which are west 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.

Customer Comment:

“my panels are cranking 50% more than average (780 vs 500)”