



Residential Solar Electric Project Case Study

Site Information

Site Name: French Residence

City: League City, TX

Solar System Description

Renewable Energy Systems:

7.82 KW DC Solar Electric System,

Installer: Alternative Power Solutions

Date Installed: May 2011

System Cost: \$46,800



Approximate Energy Provided: Solar Electric – 751 KWh per month

Approximate Cost Savings at 13 cents/kwh: The solar PV systems saves the home owner approximately \$100/month or 25% off this homes standard electric bill. This system qualified the homeowner for a \$9,300 tax credit, a \$15,640 rebate from TNMP, increased the property value by \$23,400, and will produce over \$80,000 worth of solar energy during its lifetime.

Environmental Benefits:

This system will also save the environment over 337,500 lbs of CO_2 emissions over 30 years.

Description of Installation:

The grid-tie 7.82 KW Solar PV system consists of 34 Canadian 230 Watt panels which are south. The panels are attached to the rafters of the asphalt shingled roof. This system uses 34 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.

