



## Residential Solar Electric Project Case Study

### Site Information

**Site Name:** Rysavy, Ford Residence

**Site Address:** Houston TX

### Solar System Description

**Renewable Energy System:**

3.24 KW DC Solar Electric System with Battery Back-up

**Installer:** Alternative Power Solutions

**Date Installed:** April 2009

**System Cost (at todays prices):** \$34,000



**Approximate Energy Provided:** Solar Electric – 287 KWh per month

**Approximate Cost Savings at 15 cents/kwh:** Approximately \$43/month or 32% of homes energy consumption. This system qualifies the homeowner for a \$10,000 federal tax credit, increase the property value by \$19,500, and will produce over \$50,000 worth of solar energy during its lifetime.

### **Description of Installation:**

This grid-tie with battery back-up 3.24 KW Solar PV system consists of 18 Suntech 180 Watt panels which are west facing. The panels are attached to the composite shingle roof. This system uses a XW 4024 Xantrax Inverter and 8 MK AGM 12 Volt/106 AH batteries to make the power conversion from DC to AC.

This system enables the homeowner to generate and store energy for usage during a power outage. The majority of the home critical loads are powered using the battery back-up system.

