



2833 N. Country Club  
Tucson, Arizona 85716  
Phone (520) 322-5180  
FAX (520) 322-9531  
Toll Free (877) 264-6374

Date: June 9, 2016

To: Bill Styczykowski

From: Katharine J Kent

Re: Off-Grid Photovoltaic System Inspection Report  
HC1, Box 724  
Elgin, AZ 85611-9716

The system was inspected on June 6, 2016. Currently an assortment of ground mounted photovoltaic modules is located on the south side of the property. Total wattage is estimated at 1,200 watts. An Outback FM-80 charge controller regulated the charge to the 24 VDC battery bank. The battery bank consists of 12 L-16 lead acid batteries. The batteries, charge controller and battery fuse are co-located in a shed just north of the photovoltaic array. The batteries are configured with a watering assist system that provides a single point connection to assure the battery water level is consistent.

The Trace SW 4024 inverter is located in an adjacent building west of the battery shed. There is a spare Trace inverter mounted directly over the operating inverter. A 7kW Kohler generator rounds out the system for propane powered back-up.

The system has been designed to operating automatically to produce up to 4,000 continuous watts of 120VAC power for the home. When the battery conditions dictate the need for additional power, the inverter will automatically start and stop the generator

The owner reported to us that the batteries and charge controller were new in 2014. The inverter and generator are original. The charge control has a 5 year manufacturer's warranty for the date of installation. It is can be assumed that no other equipment is currently under warranty.

Additionally, there is a small photovoltaic system with charge controller and battery for the booster pump system located in a shed on the east end of the property. The booster pump and pressure switch are new as of September 2015. The age of the battery and controller is unknown.

The Solar Store has been servicing (except for the generator) the off grid photovoltaic system at this property since July 2014. At the time of the inspection all components were operational. There is no anticipated maintenance other maintaining the required water level in the batteries and keeping the grasses directly south of the photovoltaic array from shadowing the solar panels and reducing power generation.