

Management Sciences, Inc. (MSI) collaborated with Sandia National Laboratories (SNL) and National Renewable Energy Laboratory (NREL) after winning the Set! contest to locate a team of scientists to assist MSI in advancing the Solar Guardian photovoltaic connector.

The Solar Guardian's team objectives moving forward are to:

- Perform life-cycle testing of the Solar Guardian connector prototype.
- Test and validate the Solar Guardian on an actual solar array (test bed).

Support by Sandia National Laboratories

The Solar Guardian team requests SNL scientists to:

- Consult and analyze high-fidelity packaging of the Solar Guardian connector.
- Work with NREL to perform Highly Accelerated Lifetime Testing (HALT) or Highly Accelerated Stress Screen (HASS) testing for corrosion by replicating environmental conditions normally endured by solar arrays.

Support by National Renewable Energy Laboratory

The Solar Guardian team requests NREL scientists to:

- Perform tomography on the tested prototypes to confirm results of test bed experimentation.
- Provide life-cycle testing expertise and an environmental test chamber to be used in cooperation with SNL. Specifically, HALT or HASS testing for corrosion in environments by replicating conditions normally endured by solar arrays (high salt concentrations near coasts, dry/arid climates in the southwest, continuous high moisture levels with rain in the Midwest, and freezing/rapid temperature changes in northern states).