

November 2001

**Safety Alert For Immediate Release****Photovoltaic Inverters May Pose Hazard**

November 2001 – Underwriters Laboratories Inc. (UL) is notifying electric utility companies, installers and authorities having jurisdiction (AHJs) that Xantrex Technology or Trace Engineering photovoltaic inverter models SW3512, SW4024, SW4048 and SW5548 may: 1) support an unintentional island in the presence of a balanced load, when utility power is interrupted; and, 2) exceed the output current total harmonic distortion limit.

Results of operational tests recently conducted by UL during field investigations revealed that SW series inverters may not cease to export power to the utility grid when power from the grid is interrupted in the presence of a balanced load. The SW series inverters may continuously sustain an unintentional island condition under multiple balanced test load conditions while exporting power at the tested 25%, 50% and 100% power levels.

Unintentional islanding occurs when a utility interactive inverter energized a portion of the utility grid system when power from the grid is interrupted. Unintentional islanding may create a risk of electric shock for utility line personnel by causing a utility line to remain energized when it is assumed to be disconnected from all energy sources. This islanding condition may also cause damage to utility equipment, interfering with the operation and or restoration of normal utility service.

In addition, the SW series inverters' output current total harmonic distortion may exceed the 5 % limit required by UL 1741, the Standard for Inverters, Converters and Controllers for Use in Independent Power Systems and IEEE929, the Recommended Practice for Utility Interface of Photovoltaic (PV) Systems when the inverter is exporting power onto the utility grid. This problem is most apparent when the SW inverters are connected to low impedance utility lines.

Installed in both the U.S. and Canada, these devices are not authorized to bear the UL Mark.

For additional information from UL, contact Tim Zgonena at 847-664-3051 or via e-mail at Timothy.P.Zgonena@us.ul.com. Additional information may also be obtained from Xantrex at www.traceengineering.com.

Underwriters Laboratories Inc. (UL) is an independent, not-for-profit organization that has evaluated products, materials and systems in the interest of public safety for 107 years. More than 17 billion UL Marks appear on products each year, and more than 18,000 types of products are tested at UL's five U.S. laboratories located in Northbrook, Ill.; Melville, N.Y.; Santa Clara, Calif.; Research Triangle Park, N.C.; and Camas, Wash.