Project Overview:
This past summer in 2008, Solar Energy International (SEI) called us at SunEnergy Power International (SEPI) to let us know that they had a group of new solar panels from a donation by AEE Solar. These panels were available for a humanitarian project, if we had the need. Of course, we had the need.

The call was timely, as we had been trying to figure out how best to address the request from World Aid for a solution to their power needs on the Thai/Burma border.

Everyone quickly mobilized, and friends of World Aid in Colorado were able to pick up the new solar panels from the Paonia, Colorado office of SEI and arrange the slow but steady trek from the western United States to the jungles on the Thai/Burma border.

World Aid is a humanitarian organization dedicated to supporting and improving the lives of the Karen people. This ethnic group has been struggling for decades to survive in the Karen State of eastern Burma where the military junta continues its relentless march towards ethnic cleansing. A key element in this support is World Aid’s ability to communicate with the people throughout the Karen State in order to provide food and medical aid, critical information services, and other forms of assistance. World Aid has been working on improving their communication system over the past several years, but continues to run up against the huge hurdle of the lack of electricity. They have tried using small solar panels, but this was never enough power to run the equipment (which needs to be connected 24 hours/day). Small diesel generators sometimes work, but bring with them the continuing need to purchase and transport fuel to the remote site. The real need was for a solar power system capable of satisfying the needs of a communication facility and its equipment.

Fortunately, the donation by SEI and AEE Solar turned out to be just the right size. Sixteen panels at 125 W per panel results in a 2,000 Watt peak solar panel system - a perfect fit for the needs of the equipment!
Project Execution:

Fortunately, in October and November of 2008, World Aid and SunEnergy Power International were both in the area at the same time. (SEPI had just completed a similar project for Free Burma Rangers in the area.) World Aid had managed, by that time, to have all of the solar panels transported across the ocean, and across Thailand, and then brought by foot and boat to the communication facility.

Steve Dun, Director of World Aid, Chuck Mancebo, communications specialist, and Walt Ratterman of SEPI were able to meet for a day in Thailand to work out the design details for the installation of the equipment. World Aid then proceeded to purchase all of the other supplies they needed to complete the work. This included the charge controllers, batteries, distribution equipment, and cabling.

The support system for the panels was all built from local materials (bamboo), and was completed by technicians who had worked previously with SEPI on earlier clinic projects, before Steve and Chuck went to the site to complete the wiring and connections.

Now, there is a core power system, which has some room for a planned expansion of communication and computer equipment. This enables World Aid to stay in continuous communication with various outposts throughout the area to be able to respond immediately to requests for support in many life-threatening situations. This installation will most definitely contribute to the saving of many lives.

Moving Forward:

Everyone involved wants to thank our generous donors from Solar Energy International and AEE Solar for the contribution of these solar panels. The needs in this area are huge, and as a group, we will do our best to solve the problems and work for the benefit of the people here, whenever and wherever we can.

To learn more about SunEnergy Power International, or to make a donation, please visit our website: www.sunepi.org