2009 WISCONSIN
Renewable Energy Summit
Renewables, Sustainability, Energy Efficiency, Social Responsibility, and Green Energy Practices

Solar Electric Energy

Session 14-5

DATE:

THURSDAY, MARCH 26, 2009

Breakout Session 14-5:

Time:

4:30pm - 6:15pm

Presenters:

Ultracapacitors For Off-Grid Solar EnergyApplications

Kevin Leonard, SolRayo LLC

Ultra capacitators have many benefits that would make them desirable for use in off-grid solar energy storage applications. Some disadvantages of batteries which are currently being used include, low-peak power, short cycle-life, and high maintenance cost. Advantages of ultra capacitors include: rapid response time, low maintenance, operating life times in excess of 1 million cycles, broad operating temperature range, and high cycle efficiency. In addition,ultra capacitors can be used in conjunction with batteries to increase peak-power which could reduce the size and cost of the energy storage system.This presentation will discuss the pros and cons of ultra capacitors, a new method of fabricating low-cost ultra capacitors, how ultra capacitors and batteries can be used together in increase peak-power in off-grid solar energy applications.

Solar Site Evaluation: Consultants and Technicians

Ross Reykdal, Full Spectrum Solar

The renewable energy industry employs a unique mix of consultants and technicians, and the initial site evaluation process is an important moment for both. This workshop introduces these roles in Wisconsin's solar energy industry, and walks participants through some example sites with the dual lenses of consultant and technician. Participants leave with a better understanding of client goals and technical options.

Presenter Biographies:

Kevin Leonard

Kevin Leonard is a Co-founder of SolRayo LLC, which he founded to commercialize SolRayo's electrode technology and currently serves as CTO. He is an inventor on SolRayo's electrode patent, and has been working on commercializing this technology since 2006. Mr.Leonard has also served as a Technology Director at Enable IPC Corporation. Mr. Leonard has a B.S. in Chemical Engineering and Mathematics from the University of Wisconsin-Madison and is expecting to graduate with a Ph.D. from the University of Wisconsin-Madison in 2009 with a degree in Materials Science.

Ross Reykdal

Ross works as a solar water heater installer and certified site assessor for Full Spectrum Solar. He has worked in the solar industry for three years, and has adapted to roles in installation, business administration, marketing, and site evaluation. Last year he gave a short presentation on green job opportunities at the Renewable Energy Summit, and he has appeared as a spokesperson for Full Spectrum on Madison radio station WORT and in an online video through podtech.net.