

Meeting Questions and Answers:

Subject: NWX-NATIONAL RENEWABLE ENERGY

Start Time: Tue Feb 14 2012 10:30:00 GMT-0800 (Pacific Standard Time)Tue Feb 14 2012 10:30:00 GMT-0800 (Pacific Standard Time)

Messai Abdou Asked: will you send an attendance letter by email ? if no it will be a great idea to encourage attendees for the next Webinars

Paul Gilman **Answered:** If you need a letter of attendance, please contact us using the Contact Form on the SAM website requesting a letter.

John Barnes Asked: when will backtracking be fixed?

Aron Dobos **Answered:** It will be resolved in the next SAM release, which will occur at some point this spring. Note that it will be limited to 1 axis trackers.

John Barnes Asked: explain howto fastest copy PVsyst shading files into SAM for PV

Aron Dobos **Answered:** On the Shading input page, scroll down to below the Azimuth-Altitude input table, and you will see a button to import PVsyst Near Shading files. There is a step-by-step procedure in the SAM help system to export the data from PVsyst in the format that SAM can read.

Anthony Coker Asked: How can you easily add climate data for non USA locations?

Aron Dobos **Answered:** On the 'Climate' input page, there are web links at the bottom of the page for additional sources of weather data. The EPW data files include a wide range of international locations, and you can download those files from the website and use them in SAM.

Karlo Meave Asked: For the PV system performance analysis does the NREL SAM take inverter input information like the start/min voltages, MPPT voltage range, max input current, etc. to take into account instances where the inverter would not be operational and the times of the year in which it would happen?

Aron Dobos **Answered:** SAM has two inverter models: the single point efficiency model which does not take into account the effects you describe, and the detailed Sandia model for grid-connected PV inverters. The Sandia model does account for many of the typical limits on the inverter as well as incorporates coefficients for the nonlinear efficiency response as a function of voltage input.

Karlo Meave Asked: Is it possible to model a PV system that has equal number solar modules strings facing different directions on the same inverter?

Aron Dobos **Answered:** The situation you describe is a modeling capability that we are working on implementing and will available in a future SAM version. Currently we do have the Multiple Systems capability, but that will model separate inverters.

Phil Gruenhagen Asked: Is the SAM source code available and, if so, where?

Aron Dobos **Answered:** We do not provide source code for the entire SAM model. We do make available portions of the underlying model code in the SAM/exelib/trnsys/source folder.

Andrew Apostolik Asked: If you have a project that has several different land parcels with differnt cost can these be entered separately based on \$/acre to run LCOE calculations based on land area used?

Aron Dobos **Answered:** SAM does not have a breakout of costs for different land parcels. SAM treats land costs as a single value. You could run a parametric simulation with multiple land costs and look at the LCOE impact.

Tim Johnson Asked: have you looked at correcting the error in the multiple simulations - what happens today is the aggregate LCOE and kwh / kw values are not aggregating correctly. Are you aware of this issue and are you looking to address it?

Aron Dobos **Answered:** We are aware of the error in the latest version and we expect it to be resolved in future release. We apologies for the difficulty.

John Mc Cann Asked: Can correlated insolation and electricity prices time series be entered to calculate electricity cost savings under market price pass through tariffs.

Aron Dobos **Answered:** SAM does not accept hourly utility tariffs, but you can enter time-of-use pricing that is a function of the month and hour of the year.