Questions and Answers from Batteries in SAM 2020.2.29 Focus on Technology Webinar, September 16, 2020

For a link to a recording of the webinar and other supporting materials, see https://sam.nrel.gov/battery-storage/battery-videos.html.

Is it possible to schedule charging the batteries from both AC and DC system?

Please see the "Battery Storage" page in SAM and the "Charge from system" and "Charge from grid" breakdown that can be specidied depending on your configuration.

Is the $16/kW-year O&M cost for both the solar and the battery?

The O&M costs apply to the entire system. There is a separate category for battery replacement costs that interact with the battery replacement parameters Darice mentioned earlier.

How do you use clipped DC power from solar to charge the battery?

The front-of-meter configurations (Battery storage with PPA financial model) can use clipped power to charge the battery. We will cover that in more detail in the webinar on front-of-meter battery modeling in September. When you set up a storage case with one of the PPA financial models you will see an option to allow charging from clipped power in the dispatch controller inputs.

I did run that and tried to compare inverter loss power from clipped power to battery charged from the system on the time series and somehow the two are not correlating.

Please follow up on the SAM forum. We can discuss your specific case in more detail there: https://sam.nrel.gov/forum.

Is the degradation a linear model?

Yes. SAM uses bilinear interpolation to determine degradation from the curves defined by the Cycle Degradation table.