

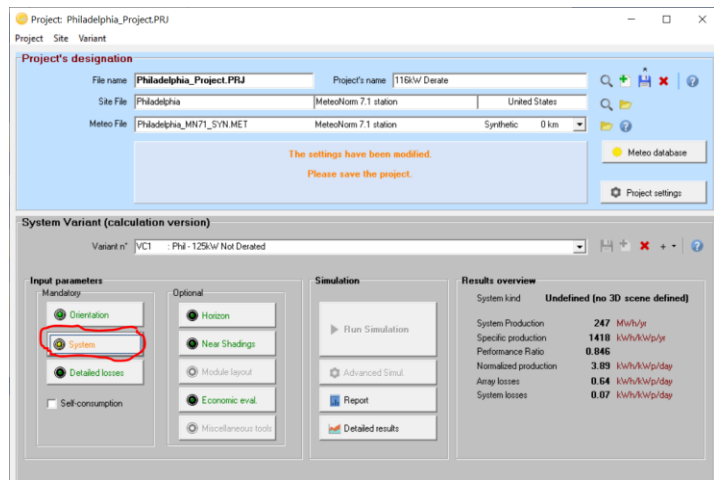
Chint Power Systems America
 6800 Koll Center Parkway Suite 235
 Pleasanton, CA 94566

Date: 31 March 2020

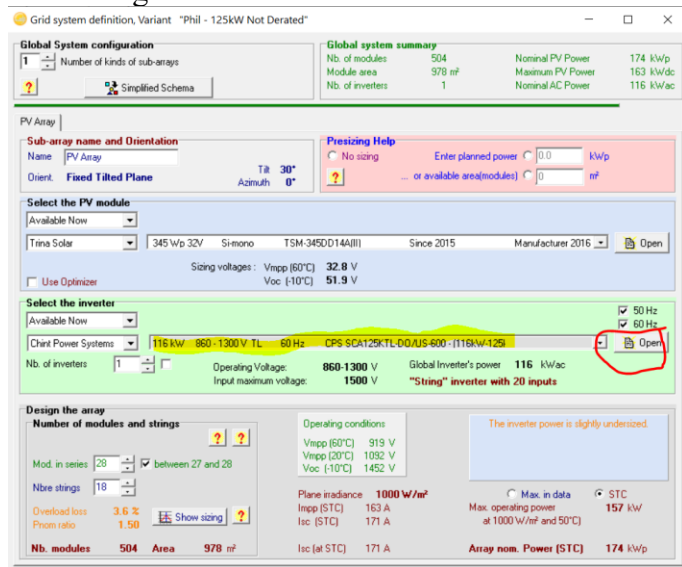
Subject: OND File modification for derated inverters – 125kW example

Background: The following are the steps needed to simulate active power derating.

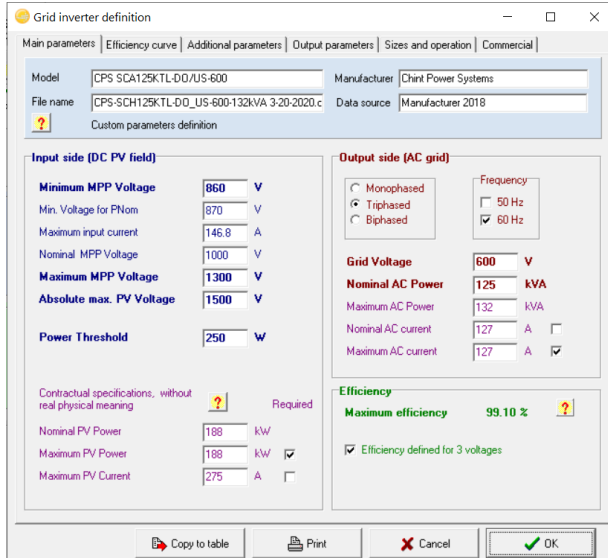
- Step 1: Download the latest OND file from the website.
- Step 2: Select the “SYSTEM” Tab to set-up the project.



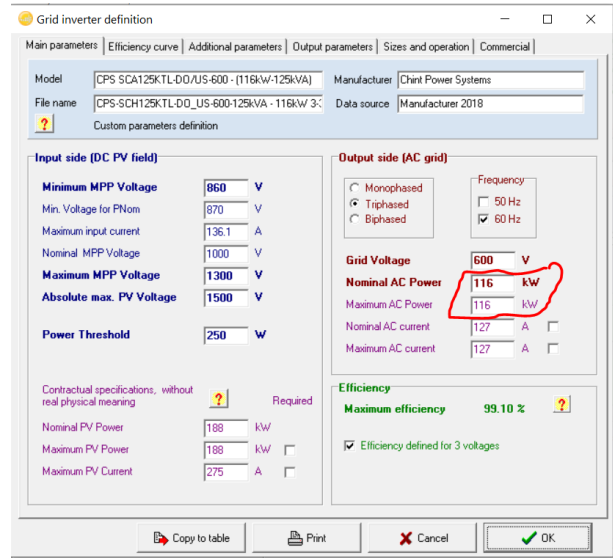
Step 3: Select the inverter from the OND file downloaded from the website and “OPEN” the file for editing.



Step 4: Change the Nominal and Maximum AC Power to the desired derated value. You may have to do Step 5 before Step 4.

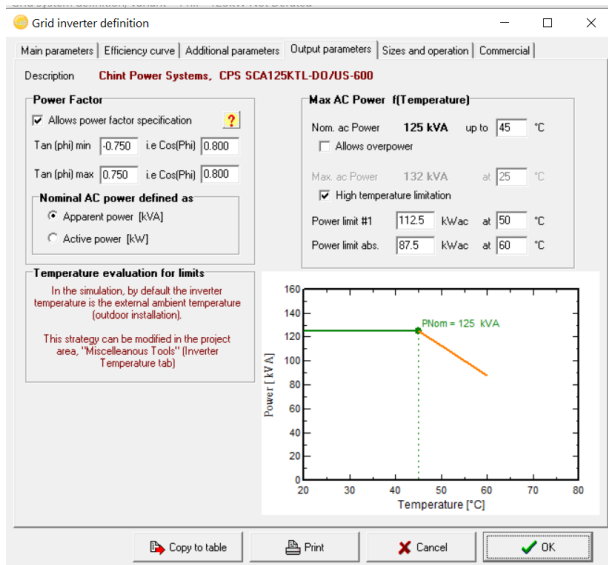


BEFORE

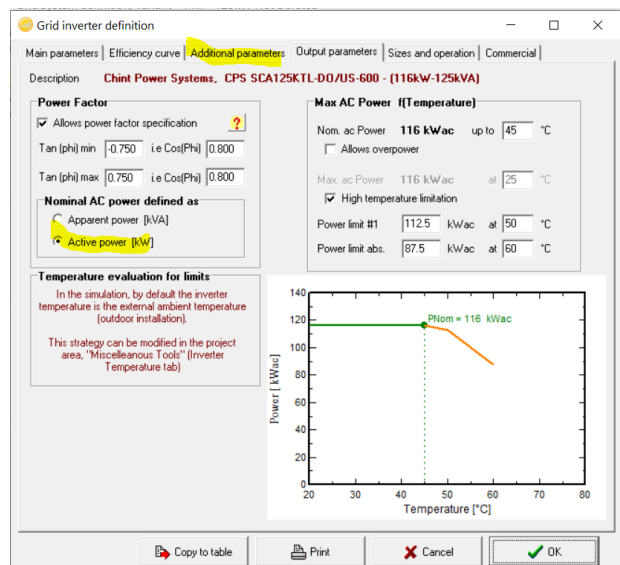


AFTER

Step 5: Change the Nominal AC power defined as to “Active power [kW]”.

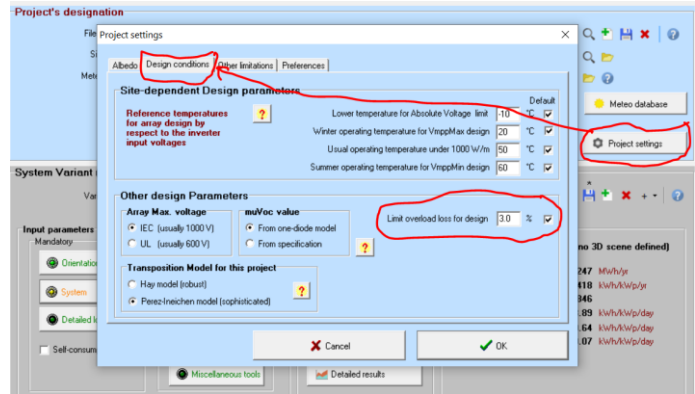
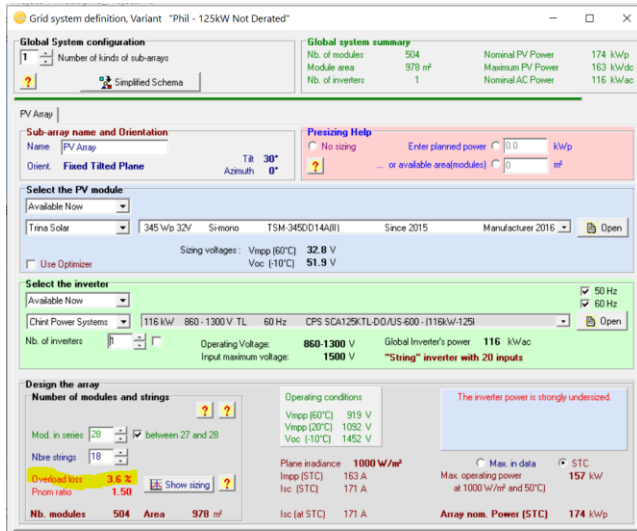


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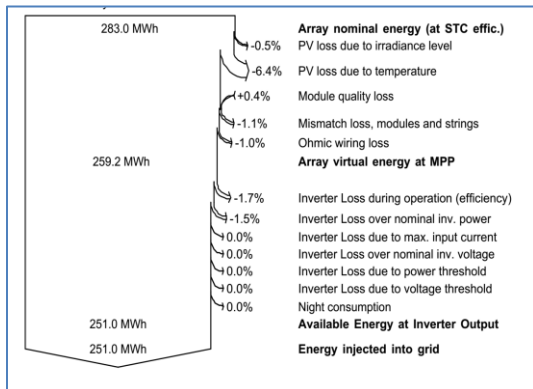


AFTER

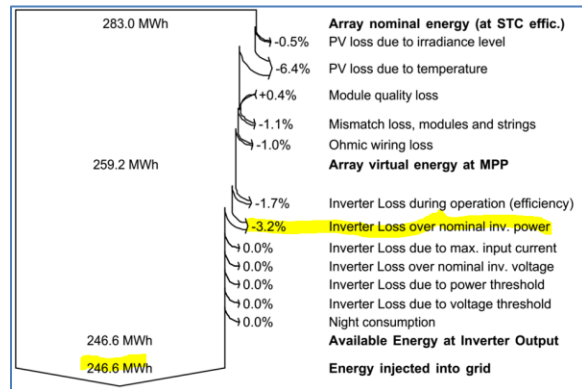
Step 6: The new derated power may cause exceeding the “Overload Loss” limit as indicated in the example below. This will prevent continuation of the simulation unless the “Project settings” are not modified accordingly. Change the limit from the default “3” to the appropriate level in the “Design Conditions” tab.



Results: If the array is sized to cause the inverter to operate in the power limit area. Operating in the power limit will cause an increase in the “Inverter Loss over nominal inv. Power”.



BEFORE



AFTER

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