

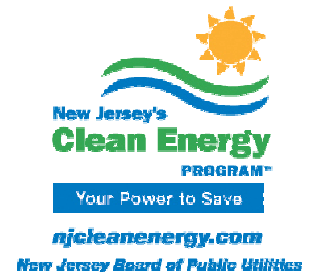
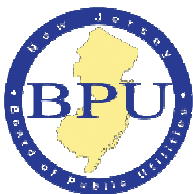


# New Jersey's Clean Energy Program

## SREC Meter Location

## GATS Meter Requirements Location In Circuit

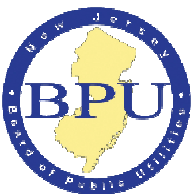
June 8, 2011  
Charlie Garrison



# Standby Losses in Systems



- NJCEP Metering Work Sheet includes the following:
- All meters shall also be:
  - Bi-directional and
  - Report net available/useable power for the purpose of SREC creation
    - i.e. generation net of **standby losses, transformer losses** and grid power utilized by the system for significant items such as tracking systems etc.
- Energy Policy Act and Department of Energy mandate > 96% Transformer Efficiency for Core and Coil Loss

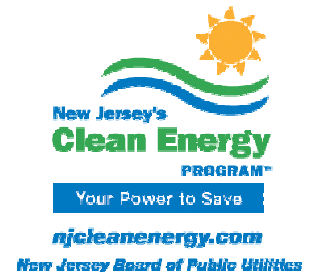
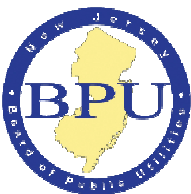


# SREC Meter Location



- Section 6.3.3 j of the GATS meter requirements (GATS Operating Rules 9/30/10) identify the meter location for both behind the meter and direct grid supply generators.
- 6.3.3 j - For each renewable Energy resource, total MWh of generation as defined in the previous paragraph shall be measured at the point of interconnection to the transmission or distribution company's facility, or adjusted to reflect the Energy delivered into either the transmission or distribution grid at the high side of the transformer.<sup>2</sup>

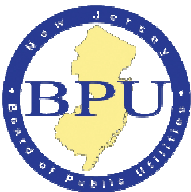
— <sup>2</sup> Losses occurring on the bulk transmission system after the metering point are not reflected in the number of Certificates created.



# SREC Meter Location Behind The Meter Systems



- The SREC generation meter must be installed on the side of the transformer that is directly serving the building load.
  - Example: If the solar array inverter output is 480 volts and the power generation is tied into the high voltage distribution system serving the building, then the meter must be on the high voltage side of the transformer to exclude the transformer losses from the SREC generation.
  - When the inverter output voltage matches the voltage of the building distribution system then the SREC generation meter may be located anywhere on the circuit between the inverter output and the tie-in to the building distribution system.





# SREC Meter Location Behind The Meter Systems



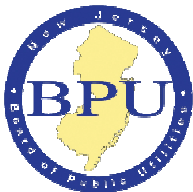
12.4 KV  
Switch Gear  
Backfeeds Customer  
Primary Service

Distribution  
Transformer  
• Efficiency  
• Losses

480 volts

Panel board/  
Inverter Loads

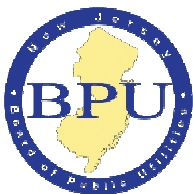
SREC Meter  
Location is  
INCORRECT



# SREC Meter Location Grid Supply Systems



- The SREC generation meter must be installed on the side of the transformer that matches the grid voltage at the point of interconnection.
  - Example: If the solar array inverter output is 480 volts and the power generation is tied into the grid via a step-up transformer, then the meter must be on the high voltage side of the transformer to exclude the transformer losses from the SREC generation.

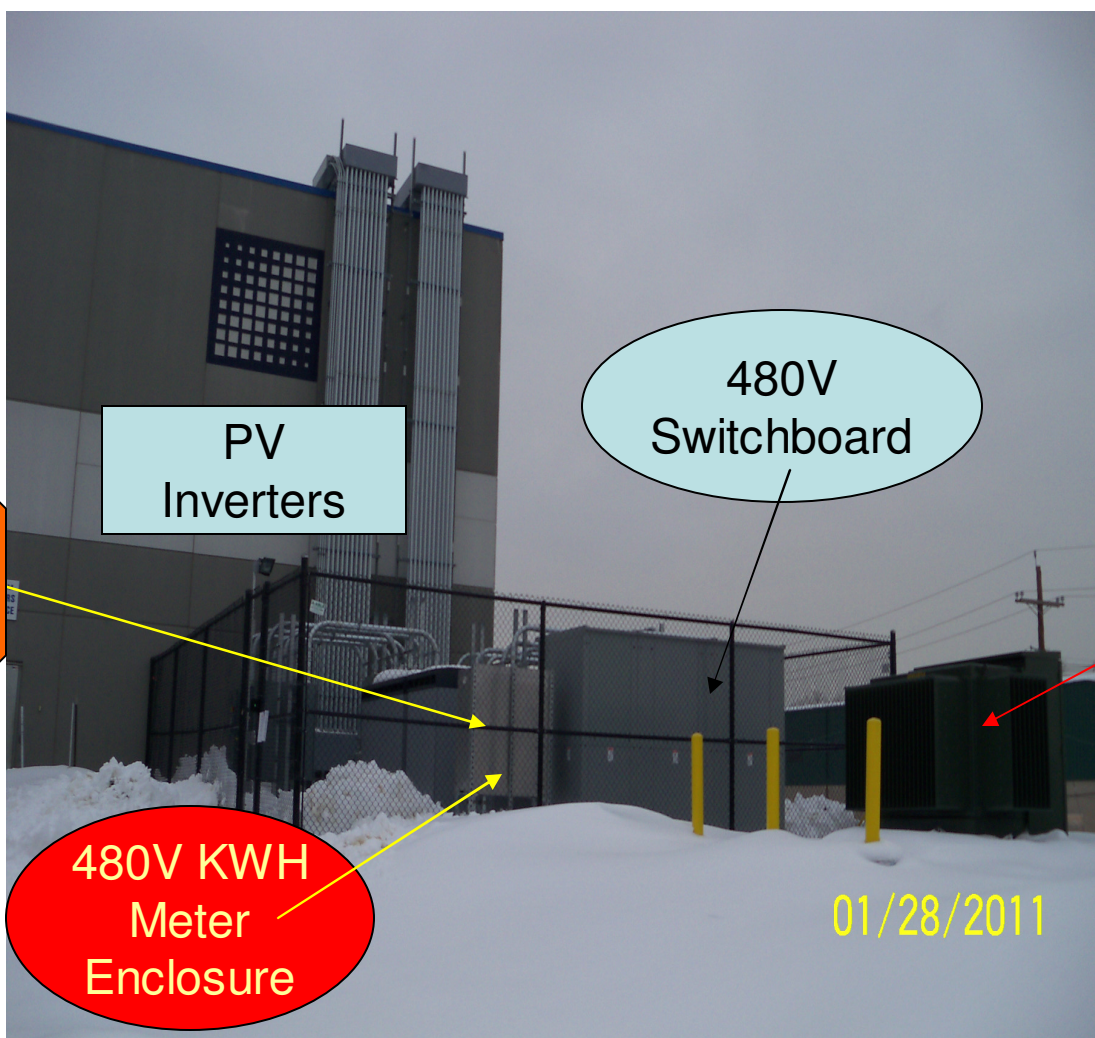




# SREC Meter Location Grid Supply Systems



SREC Meter  
Location is  
INCORRECT



13.2 KV  
Distribution  
Transformer  
• Efficiency  
• Loses