

## **METERING PROTOCOL FOR CAPTIVE SOLAR POWER PLANTS**

The Government of Andhra Pradesh has announced **Andhra Pradesh Solar Power Policy-2012** to encourage large scale solar power generation in the State vide G.O.Ms.No.39, dated 26.09.2012 & G.O.Ms. No. 44, dated 16.11.2012.

As such, APTRANSCO/APDISCOMs have proposed to adopt the Metering Protocol for Captive plants who intend to setup Solar Power plants in the plant premises to utilize the generated power to its captive utilities or for sale of generated energy through Open Access under REC mechanism as detailed below:

- 1) The entire solar energy generated (excluding auxiliary consumption) from the solar plant is eligible for obtaining Renewable Energy Certificates (RECs) as per the prevailing regulations notified by CERC and APERC.
- 2) Energy Meters of 0.2s Class accuracy (including CTs of 0.2s and PTs of 0.2) shall be provided for recording gross energy generation, auxiliary consumption and captive consumption as per prevailing REC regulations as illustrated below:
  - a) *For measurement of gross generation by the solar plant, Tri-vector type 0.2s accuracy class main, check & Standby meters shall be provided on the HV side of the solar generator transformer in the project switchyard.*
  - b) *For measurement of auxiliary consumption and captive consumption, Tri-vector type 0.2s accuracy class meters shall be provided.*
- 3) The developer has to provide appropriate protection system (as per APTRANSCO norms) on the feeder of the APTRANSCO/DISCOM at power plant end.
- 4) Further, the testing & installation of energy meters (including CTs & PTs) shall be done as per the departmental procedures in vogue.

5) Installation of 0.2s class ABT compatible, TOD programmed interfacing meters (main, check & Standby) including connected CTs of 0.2s and PTs of 0.2, case by case, for solar power plants shall be installed as illustrated below:

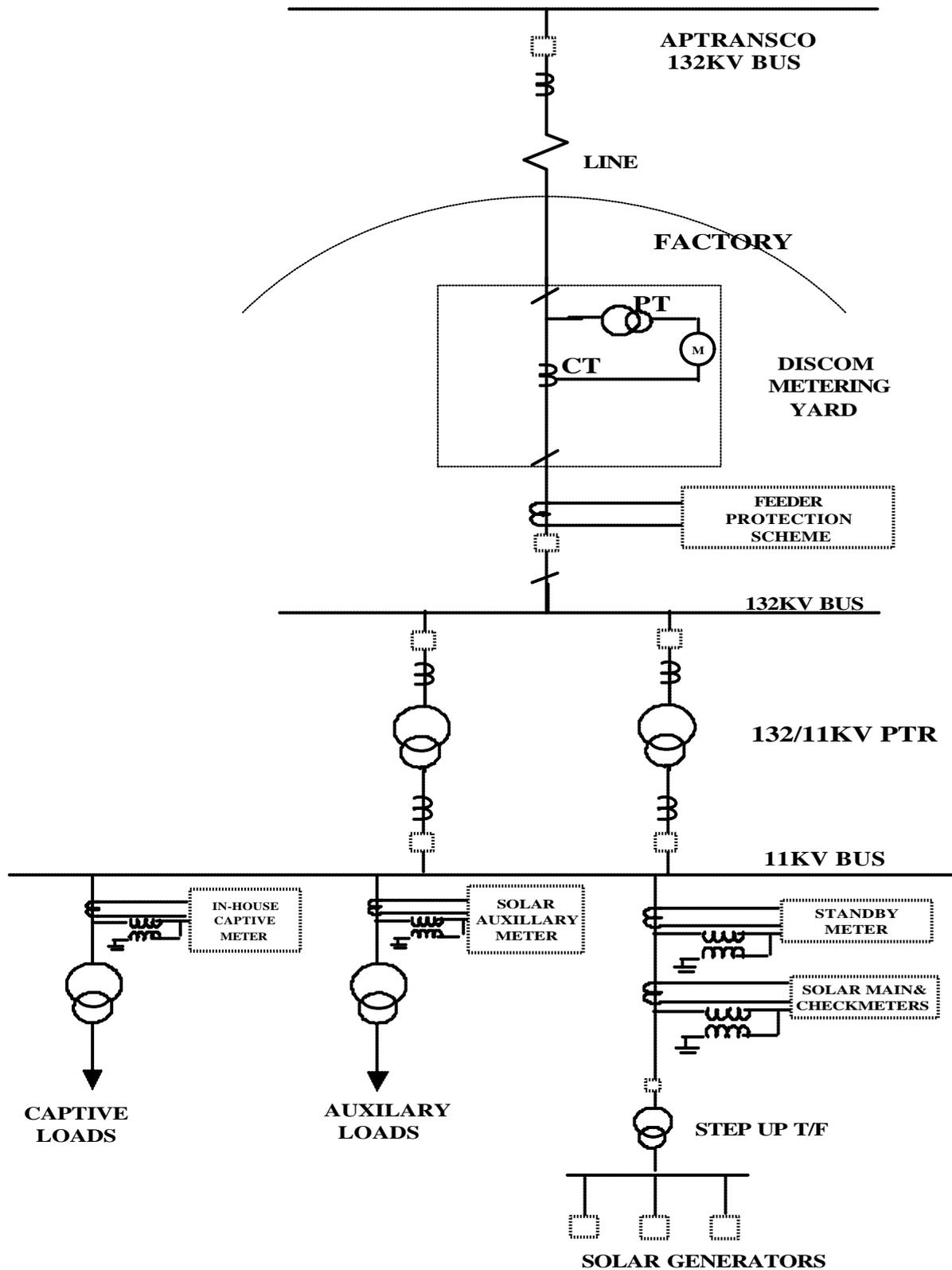
a) **If the Solar Captive Power producer desires to utilize the entire generation for captive use, the following are proposed:**

- i). Any power injected in to the grid by solar captive power plant shall be considered as inadvertent power and for such cases the existing tariff meter at consumer end may be continued.
- ii). The metering protocol for such type of solar plants is attached in **Annexure-I**, wherein location of meters is indicated.
- iii). In case, if APERC determines any tariff for the inadvertent energy supplied to grid, then the developer has to install ABT compatible, TOD programmed 0.2s accuracy class interface meters (Main, Check and Standby) at his end for which the metering protocol is attached in **Annexure-II**.

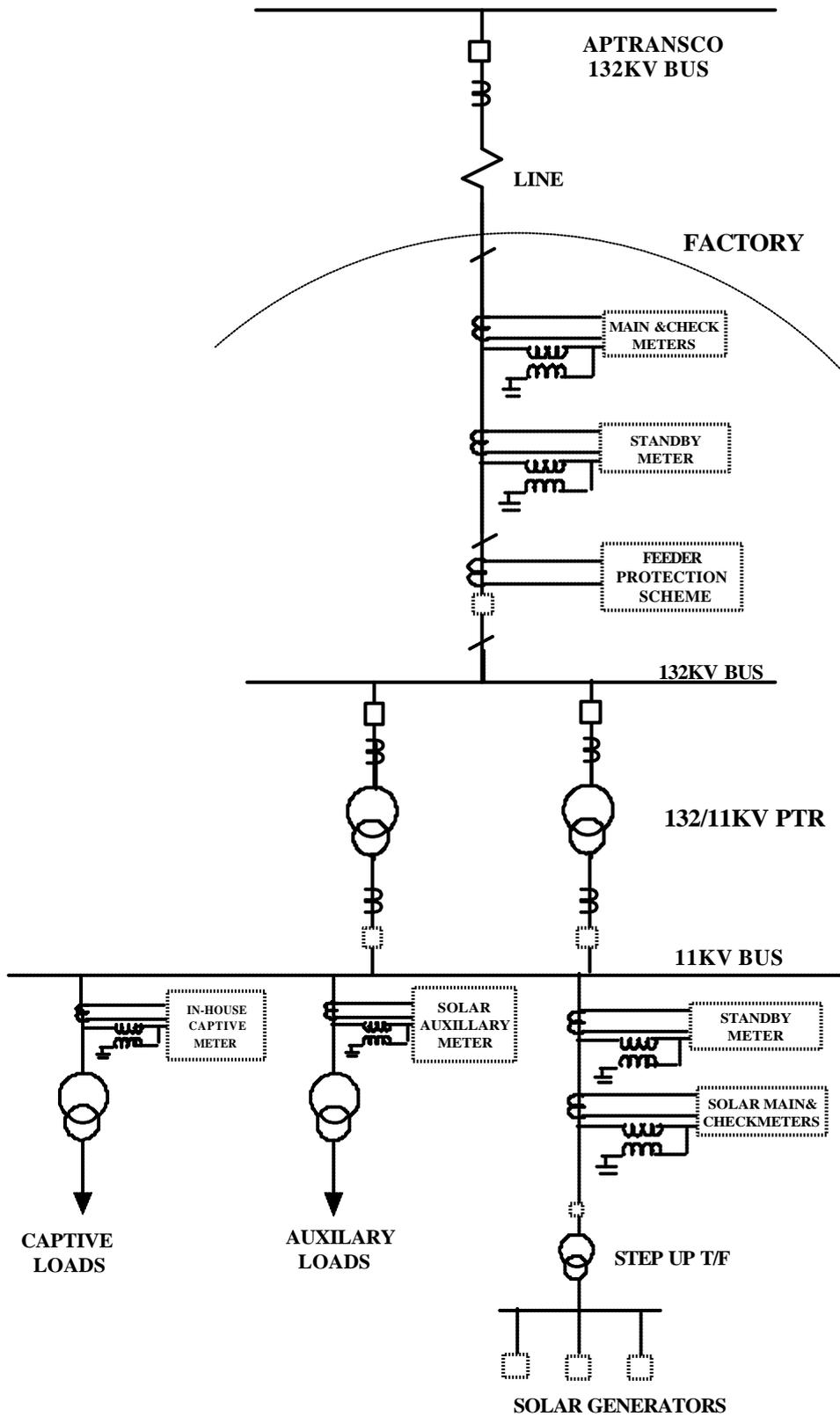
b) **If Solar Captive power producer desires to sell surplus power through Open Access:**

- i). Any unscheduled power injected to grid by solar captive power plant is considered as inadvertent power.
- ii). The settlement of scheduled power (sale in open access) injected into the grid will be done as per the prevailing Open Access regulations & settlement code.
- iii). In this case, the interfacing meters (main, check & standby) shall be installed at the interconnecting APTRANSCO / DISCOM grid substation as attached in the **Annexure-III**.
- iv). Further, if the CPP fails to consume 51% of the net aggregated generation, cross subsidy surcharge is applicable as per the prevailing rules and regulations.

# ANNEXURE-I



# ANNEXURE-II



# ANNEXURE-III

