

SOUTHERN POWER DISTRIBUTION COMPANY OF A.P. LIMITED :: TIRUPATI

From

The Chairman & Managing Director
APSPDCL
Tirupati

To

The Secretary/APERC,
Singareni Bhavan
Red Hills,
Hyderabad-500 004

Lr.No.APSPDCL/CGM/IPC/GM/IPC/DEE-3/F.SRT/D.No.52/'20, Dt.10.02.2020

Sir,

Sub:-APSPDCL (IPC) -TPT- Seeking amendments to the modalities /guide lines to the existing solar roof top policy-Reg.

Ref:-APERC order dt : 25.05.2019

It is submitted that the Govt. of Andhra Pradesh has issued Solar Power Policy-2018 vide G.O. Ms No. 01, Dt. 03.01.2019. M/s APEPDCL has submitted Solar Roof Top policy in line with the policy mentioned in G.O.Ms.No.1 Dt.03.01.2019 and the Hon'ble Commission has approved the Solar Roof Top Policy after conducting public hearing and passed the order on 25.05.2019. The said policy is now in force in A.P State.

The extract of the solar roof top projects mentioned in G.O.Ms.No.1 Dt.03.01.2019 is furnished as follows...

1) Solar Rooftop Projects – Gross/Net Metering

The Government will promote solar rooftop systems on public buildings, domestic, commercial and industrial establishments on Gross and/ or Net Meter basis. The consumer(s) are free to choose either net or gross meter option for sale of power to DISCOM under this policy. **The applicable tariff for either of the cases shall be equal to the average pooled power purchase cost** which will be determined by APERC for the year during which the project is synchronized with the grid and the applicable tariff at the time of CoD will be paid for 25 years, in case of projects executed under both net metering and gross metering basis.

The above tariffs shall be applicable for a period of 25 years for Eligible Developers who set up solar rooftop projects within the Operating Period of this policy.

2) Considering the above provisions mentioned in the A.P.Solar power policy 2018, M/s.APEPDCL has incorporated the Net Metering/Gross Metering policy as furnished below...

Energy Settlement and Billing/Invoicing:

"Energy settlement shall be done on a monthly basis. Group of persons/societies setting up SRP's will be treated as collective generation for supply of power to the households of each society /group member. In case of Apartments/Group Houses, common service meter may be used for netmetering.

Net Metering: The energy generated from SRP shall be adjusted against the consumption of energy from the DISCOM by the Eligible Developer/ consumer every month. In case of Groups/Societies, the energy generated shall be prorated as per the installed capacity share indicated in the Agreement between the group/society and DISCOM. This computed energy share shall be adjusted against the consumption of energy for each consumer every month.

In case of excess generation (after energy adjustment) in any month, payment shall be made by the Discomquarterly for the net energy computed at the average Pooled Power Purchase cost as determined by APERC for the year during which the project is synchronized with the grid and the applicable tariff at the time of COD will be paid for a period of 25years.

In case of excess consumption in any month, payment shall be made by the Eligible Developer /Group /Society for the net energy at the applicable tariff as determined by APERC every year.

Gross Metering: The payment for energy generated from SRP will be computed at the average Pooled Power Purchase cost as determined by APERC for the year during which the project is synchronized with the grid and the applicable tariff at the time of COD will be paid for a period of 25years.

This shall be adjusted against the total billing demand for the consumption of energy for the Eligible Developer/ consumer from the DISCOM every month. The balance amount after adjustment for the month shall be made by the Discom.

A limit shall be defined for all Eligible Developers in terms of energy, beyond which no payment shall be made by APDISCOM"

3) Consumers who are opting for Rooftop Policy are mostly Commercial Category Consumers, Industrial Category consumers and Domestic consumers. As per the SRP, the payment for the power injected into the grid shall be paid at the average Pooled Power Purchase Cost determined by the Commission. This provision of Net metering is causing heavy loss to the DISCOMs and is explained below.

4) If a commercial consumer installs SRP under net metering, the financial implication is explained hereunder:

Net Metering					
Month	Billed Demand/ Consumption from grid (Units) A	SRP Generation (Units) B	Net Energy (Rs.) B-A = C	Net Monthly Payment by DISCOM (Rs.) C*APPPC	Net monthly payment by SRP
Dec	800	800	0	0	0
Jan	1000	1200	200	800	0
Feb	1200	1000	-200	0	1800
Mar	1300	1050	-250	0	2250

Gross Metering						
Month	Billed/ Consumption from grid (Units) A	Billed Demand for the consumption from grid (Rs.) (A * Applicable Tariff as per APERC) = B @ Rs 9/- per unit	SRP Generation (Units) C	SRP Payment (Rs.) (C* APPPC)=D @ Rs4/- per unit	Net Monthly Payment by DISCOM (Rs.) C*APPPC	Net Monthly Payment by SRP (Rs.) (B-D)
Dec	800	7200	800	3200	0	4000
Jan	1000	9000	1200	4800	0	4200
Feb	1200	10800	1000	4000	0	6800
Mar	1300	11700	1050	4200	0	7500

* Average Pooled power Purchase cost say Rs. 4.00 / kWh

** Tariff as per the tariff order = Rs. 9/unit (Say)

As seen from the above said examples, Discoms will get benefitted with gross metering and will lose revenue with net metering.

5) The DISCOMs are supplying power whenever solar power is not there in the system and is acting as a standby power to the consumers having Solar Rooftop. The DISCOMs have to pay for infrastructure cost from interface point of Generator and APTRANSCO and upto the point of consumers and have to pay fixed costs to APTRANSCO and Generating companies and it has to meet its own distribution business fixed cost. The SRP consumer is generating power at the consumption point and supplying the excess power to the grid if available.

6) Making payment at exorbitantly high price to the SRP consumer may not be correct and this burden of making payment of higher tariff to SRP consumers would fall on the other Consumers. It is advisable to pay to SRP consumers at reasonable price supported by cost plus calculations and should not be unnecessarily enrich the SRP consumers at the cost of DISCOM consumers.

7) (a) **Net Metering:** In Net Metering, the DISCOM is paying to the SRP consumer for the units consumed effectively at the rate of relevant tariff of that category. For example, in case of commercial consumers the DISCOM is paying @ Rs. 9/unit and in case of industrial consumers and domestic consumers, the tariff paid would be around Rs. 5.50/unit. For surplus units fed into the grid, the DISCOM is paying at the rate of Average Pooled Power Purchase Cost, i.e., Rs. 4.50 per unit.

The power generated from Generating Companies is being transmitted through Transmission Network and Distribution Network and finally it is supplied to a consumer. In Net Metering policy, the power generated at the SRP plant is being given equal treatment compared to the power generated from far end places and supplied through grid. Though the power supplied through the grid and the power generated at the SRP plant has similar characteristics, cannot be compared and given equal treatment.

(b) **Gross Metering:** In Gross Metering, the DISCOM is paying to the SRP consumer at the rate of Average Pooled Power Purchase Cost i.e., Rs. 4.00/unit (say) for all units generated by the SRP. But now a days the solar power tariff rates have come down approximately to Rs 2.50/- in the country.

8) From the above para, it is evident that Net Metering policy is more dangerous compared to Gross Metering Policy.

While fixing the tariff for a Generating company or for Distribution Company, the return on equity allowed is around 15% to 16%. Here, in cases of SRP plants, the tariff is not fixed on scientific basis and not supported by any logic or reason.

9) In the initial days, the per MW infrastructure cost of Solar Photo Voltaic panels was around Rs. 13 to 14crs. To encourage and promote clean power, the concept of Net /Gross Metering was introduced and MNRE is also giving Capital Subsidy to the consumers/developers.

The generation cost of SRP is coming down year by year and the Retail Supply Tariffs (RST) of consumers are on northward direction. The present per MW installation cost of solar rooftop plant cost is around Rs 5 crores. This has become an incentive to Solar roof top developers and is affecting the DISCOM revenues. Some Solar developers are making offers to big consumers to establish SRP plants under CPP concept at Consumer premises at the cost of developer, Own it, Operate it and Transfer the plant after 10 years. The power will be supplied at fixed price which is much lesser than DISCOM tariff. This business model has become very attractive as already mentioned that the capital cost of SRP is coming down and the RST is going up.

10) The present installed capacity of Solar and Wind in the State is around 8500 MW. The RPP Obligation for 2020-21 is 15% a minimum quantity of electricity expressed as a percentage of energy sales handled by DISCOM. The present quantity of renewable energy availability is around 25% of system energy requirement and State has met the RPP Obligation beyond the threshold limit.

The Smooth integration of 8515 MW of RE (Solar and Wind Power) power which is variable in nature, with the State Grid demand of 9000 to 10000 MW is difficult task.

Under the falling price regime of Solar/Wind power generation coupled with incentives granted to these generator, there is no healthy Competition envisaged in the Electricity Act, 2003. In order to fulfill the aim of the Electricity Act, 2003, it is very much essential to withdraw the existing incentives.

In this scenario, presently promotion of RE power by granting incentives is not envisaged and not warranted.

(11) Considering the present scenario, the Govt of AP issued an amendment to Solar/Wind power Policy vide GO.Ms.No.35 Dt.18.11.2019 wherein it was mentioned that the applicable tariff for either net metering / Gross metering shall not exceed difference of pooled variable cost and balancing cost (or) the applicable tariff at the time of COD whichever is less.

Further, it is submitted that the financial burden which is resulting out of the Solar Rooftop power generation ultimately needs to be borne by end consumers of the State. Thus public interest is involved. Making payment at higher rates to Solar Rooftop developers compared to reasonable return amounts and leading to unnecessary enrichment of Solar Rooftop developers.

To address the above issues, it is requested to permit only Gross metering concept and a Generic tariff may be fixed based on the costs involved instead of making payment based on Average Pooled Power Purchase Cost. In the existing policy, provision is made for Long Term contract for 25 years and twenty five years is a too long period and this may be modified to 10 years.

(12) In view of the above facts, the Hon'ble Commission is requested to take necessary action to make appropriate amendments to the existing Solar Rooftop Policy duly incorporating the following aspects please.

1. To determine SRT tariff rates as per G.O. Ms No. 35, Dt 18.11.2019, i.e "The applicable tariff for solar rooftop projects for either net metering / gross metering shall not exceed difference of pooled variable cost and balancing cost (or) the applicable tariff at the time of Commercial Operation Date (CoD) whichever is less".
2. To limit the SRT Agreement period to 10 years instead of 25 years.
3. In line with G.O. Ms No. 35, Dt 18.11.2019, a decision may be taken in respect of Gross & Net metering.


CHAIRMAN & MANAGING DIRECTOR
APSPDCL::TIRUPATI

Copy submitted to Principal Secretary to Government, Energy, I&I Department, A.P. Secretariat, APTRANSCO, Vijayawada.

Copy submitted to Chairman & Managing Director/ APTRANSCO/Vidyut Soudha/ Vijayawada.

Copy to Chairman & Managing Director/ APEPDCL/Visakhapatnam.

Copy to Chairman & Managing Director/ APCPDCL/Vijayawada.

O/C


DESPATCHED
DATE 11/2/20