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From

Mohan Reddy Pinninti,
Plot No. 174, Ravi Society, Mahindra Hills, East Marredpally,
Secunderabad - 500026

To

The Secretary,
Telangana Electricity Regulatory Commission,
Vidyut Niyantran Bhavan, GTS Colony,
Kalyan Nagar, Hyderabad – 500045.

Subject: Submission of comments and suggestions regarding the Draft Telangana Electricity Regulatory Commission (Rooftop Solar PV Grid-Connected Systems) Regulations, 2025.

Respected Sir,

I am writing this letter to submit my constructive feedback and recommendations on the **Draft Rooftop Solar PV Grid-Connected Systems Regulations, 2025**, which was recently published by the Telangana State Electricity Regulatory Commission (TSERC). This proposed framework is indeed a commendable and progressive step toward strengthening renewable energy adoption throughout Telangana.

However, following a detailed and thorough examination of the draft, I respectfully wish to submit the following suggestions. These recommendations are intended to ensure that the final regulations effectively balance incentives for consumer adoption with the long-term financial sustainability of DISCOMs.

1. Capacity Limits

- **Draft Provision:** The current draft specifies a restrictive 100 kW cap for Group Net Metering (GNM) and Virtual Net Metering (VNM).
- **Suggestion:** It is my recommendation that the capacity limit for GNM and VNM be enhanced to **500 kW** per project. This proposed increase aligns with the Net Metering limit and will serve to greatly encourage broader adoption within housing societies, academic institutions, industrial campuses, and government complexes.

2. Net Metering Reforms

- **Time-Varying Export Compensation:** I propose the introduction of a two-tiered compensation mechanism that is based on the time of day (ToD). This would ensure that exports during evening peak hours receive a premium rate, while midday exports are compensated at more appropriate avoided-cost rates.
- **Differentiated Metering Mechanisms:** I suggest that net metering be retained for smaller residential systems (up to 5 kW). However, larger systems (those above 5 kW) should be transitioned to a net billing system with export compensation set at avoided-cost rates.
- **Continuity of Shared Projects:** The regulations should provide a clear and efficient mechanism to identify and onboard a replacement consumer in cases where a participant withdraws from GNM/VNM arrangements. This is crucial for ensuring project continuity.

3. Tariff Structure Redesign

- **Flattening Telescopic Tariffs:** I recommend a gradual reduction of the existing slab differentiation. This should be accompanied by the introduction of explicit cross-subsidy surcharges that are decoupled from consumption volume.
- **Fixed Charges & Grid Maintenance Fees:** To more accurately reflect the cost of maintaining grid infrastructure for prosumers, I propose introducing a capacity-based fixed charge that is linked to the sanctioned load or inverter capacity.

4. DISCOM Cost Recovery Mechanisms To address the financial challenge faced by DISCOMs due to declining revenues and fixed infrastructure costs as a result of rooftop solar adoption, the following mechanisms should be considered:

- **Revenue Decoupling:** Implement a system to ensure that DISCOMs can recover their approved fixed costs irrespective of sales volumes.
- **Grid Services Compensation:** A framework should be developed to fairly compensate DISCOMs for the critical services they provide, including backup supply, voltage regulation, and frequency support.

5. Storage Integration

- **Mandatory Storage for Large Systems:** I recommend that rooftop systems above 10 kW be required to integrate energy storage to improve grid reliability and stability.
- **Incentives for Solar + Storage:** It is suggested that capital subsidies or higher feed-in tariffs be offered for stored solar energy that is discharged during peak hours.

6. Phased Implementation & Pilot Programs

- **Pilot Programs:** Before a statewide rollout, new regulatory mechanisms, such as ToD tariffs and net billing, should be introduced and tested in pilot areas.
- **Consumer Segmentation:** The regulations should create targeted policies for residential, commercial, institutional, and low-income segments to ensure fair and equitable participation across all consumer groups.

7. DISCOM Business Model Evolution

- **DISCOM as Service Provider:** DISCOMs should be permitted to install and maintain rooftop solar systems through flexible models such as leasing or Power Purchase Agreements (PPAs).
- **Smart Grid Investments:** The commission should provide recovery mechanisms for investments in advanced metering and distribution automation, which are essential for managing a high penetration of rooftop solar.

8. Dispute Resolution

- **Draft Provision:** The draft currently refers billing disputes to the Consumer Grievance Redressal Forum (CGRF).
- **Suggestion:** I propose the establishment of a dedicated technical sub-committee (comprised of members from DISCOM, CEIG, and TSREDCO) to expeditiously resolve rooftop-related disputes within a 30-day period.

9. Duration of Arrangement

- **Draft Provision:** The draft sets the duration of the arrangement at 25 years from the date of interconnection.
- **Suggestion:** To ensure the framework remains current with evolving technologies and tariff structures, I propose the introduction of a mid-term regulatory review every five years to revise the settlement methodology as needed.

In conclusion, the draft regulations serve as a robust and promising foundation for the growth of rooftop solar in Telangana. I am confident that the incorporation of these recommendations will help to ensure a sustainable, equitable, and financially balanced transition to a greener energy future.

I respectfully request that the Honorable Commission give due consideration to these suggestions during the finalization of the regulations and provide me with an opportunity to make further submissions during the scheduled public hearing, after receiving the responses from the DISCOMs.

Thank you for your time and consideration.

Yours sincerely,

(MOHAN REDDY PINNINTI)

Chief Engineer (Retd), TGSPDCL,
Hyderabad
Mobile No. 9989693556
Email: mmsr1008@gmail.com