

I.A.No. 4 in O.P. No. 24 of 2020

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BEFORE THE TELANGANA ELECTRICITY REGULATORY COMMISSION

Vidyut Niyantran Bhavan, G.T.S. Colony, Kalyan Nagar, Hyderabad – 500 045

(In the matter of O.P. No. 24 of 2020 dated 02.01.2021 and the Petition filed by TGSPDCL & TGNPDCL vide Lr. No. CE(IPC)/DE(IPC)/ADE-K/F.PM KUSUM/D.No. 25 dated 10.12.2025)

IN THE MATTER OF:

Petition under Sections 61, 62(1)(a), 86(1)(b) and 86(1)(e) of the Electricity Act, 2003 read with Regulation 35(2) of the Telangana Electricity Regulatory Commission, Regulations, 2015, seeking to oppose the proposed downward revision of the pre-fixed levelized tariff of ₹3.13/kWh determined under O.P. No. 24 of 2020 dated 02.01.2021 for Solar Power Generators (SPGs) under Component-A of the PM-KUSUM Scheme, consequent to change in GST rates.

AND IN THE MATTER OF:

Southern Power Distribution Company of Telangana Limited, represented by its Chairman & Managing Director, TGSPDCL, Corporate Office, Mint Compound, Hyderabad.

PETITIONERS:

The Solar Power Generators (SPGs) under PM-KUSUM Component-A, Telangana,

Pemmasani Narasimha Rao(Application No. TG/PM KUSUM-A/24-25/00104, Cap. 2 MW,
PPA No. 414 dated 19.07.2025)

Pemmasani Narasimha Rao(Application No. TG/PM KUSUM-A/24-25/00350, Cap. 1.5 MW,
PPA No. 413 dated 19.07.2025)

)

OBJECTIONS TO THE PETITION FILED BY THE RESPONDENTS

MOST RESPECTFULLY SHOWETH:

1. The Petitioners are bona fide Solar Power Generators who have invested in decentralized solar projects under Component-A of the PM-KUSUM Scheme based on the pre-fixed levelized tariff of ₹3.13/kWh determined by this Hon'ble Commission vide Order dated 02.01.2021 in O.P. No. 24 of 2020. Power Purchase Agreements (PPAs) were executed in good faith, incorporating the said tariff and a Change in Law provision intended to address material variations in a balanced manner.
2. The Respondents seek a downward revision of the tariff citing the reduction in GST rate from 12% to 5% on Solar PV Modules, Solar Cells, and associated components effective 22.09.2025 pursuant to the 56th GST Council Meeting. While the GST reduction is a statutory change, any revision of the pre-fixed tariff must equitably account for all material cost variations since the original determination in 2020-2021, including significant escalations in key input materials. A selective downward adjustment would render projects unviable, undermine investor confidence, and contravene the principles of just and reasonable tariff under Sections 61 and 62 of the Electricity Act, 2003.
3. **Significant Escalation in Material Costs (2020–2026):**
The capital cost considered in the 2021 Order was based on prevailing prices around 2020. Since then, there has been substantial inflation and price volatility in critical components such as steel (used in mounting structures), aluminum (frames and racking), and copper (cabling and electrical systems). These increases largely offset or exceed the savings from the GST reduction (estimated at approximately 3–5% on overall capital cost).
Key data on escalations include:

Steel: Prices have risen by over 200% since March 2020 in relevant indices, with structural steel for solar projects experiencing sustained upward pressure through 2025–2026 due to global demand, supply constraints, and post-pandemic recovery. Even after partial moderation from 2021 peaks, current levels remain significantly higher than 2020 baselines.

Aluminum: Critical for panel frames and mounting/racking systems (accounting for 9–10% of structural costs in solar projects). Prices have surged in 2026 due to supply disruptions, with racking costs rising approximately 20% and aluminum framing costs increasing from ~US\$0.02/Wp to ~US\$0.03/Wp, adding substantial project expenses.

Copper: Prices have reached record highs, exceeding US\$14,500/MT in early 2026 (from much lower levels in 2020), driven by energy transition demand and supply imbalances. Copper is essential for inverters, cabling, and balance of system components.

These escalations, combined with broader inflation in construction materials, logistics, and labor, have materially increased the normative capital cost per MW since the 2021 determination. A comprehensive review is essential for equity.

4. Legal and Regulatory Grounds:

The pre-fixed tariff was determined considering the fiscal and economic conditions then prevailing. Any modification under Change in Law or Regulation 35(2) must be holistic and not unilateral. The Petitioners have relied on the Commission's Order and executed PPAs accordingly. Selective revision favoring the Respondents would violate legitimate expectations, principles of fairness, and the objective of promoting renewable energy under Section 86(1)(e) of the Electricity Act, 2003. The PPAs executed post the 22.04.2025 Order in O.P. No. 32 of 2025 must be honored to maintain sanctity of contracts.

5. Impact on Project Viability and Debt Servicing

A reduction of **Rs. 0.15/kWh** (approx. 4.8%) will materially affect the viability of existing and under-construction projects. Many SPGs have structured their project finances based on the Commission-approved tariff of Rs. 3.13/kWh. Any reduction will lead to:

- Cash flow shortfalls.
- Increased risk of default on debt obligations.
- Potential stranding of assets.

PRAYERS:

- Reject the petition filed by the Respondents seeking downward revision of the tariff of ₹3.13/kWh.
- In the alternative, if any revision is contemplated, direct a comprehensive true-up exercise considering the net impact of all material changes, including GST reduction and escalations in steel, aluminum, copper, and other input costs from 2020 to 2026, to ensure the tariff remains just, reasonable, and reflective of current normative costs.
- Direct maintenance of status quo on the pre-fixed levelized tariff and strict adherence to the executed PPAs.
- Grant an opportunity of hearing to the Petitioners and pass such other orders as this Hon'ble Commission may deem fit in the interest of justice.

Date: 23.06.2026

Place: Hyderabad

Petitioners

Authorized Representative

Pemmasani Narasimha Rao

9340756008.

SPG , PPA No 413/2025-26 and 414/2025-26

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Enclosures:

1. Annexure -1 : Note on impact of GST on cost of construction of plants
2. Copies of market reports on material price escalations .
4. other supporting documents.

Annexure -1**Impact of Increase in Input Costs on PM-KUSUM Solar Power Projects and the Unjustified Proposal to Reduce the Tariff of ₹3.13 per Unit****1. Background**

The petitioner entered into a Power Purchase Agreement (PPA) with TGSPDCL in **July 2025** for supply of solar power at the tariff of **₹3.13 per kWh**.

The tariff of ₹3.13 per unit was determined by the State Electricity Regulatory Commission in **2021** based on the capital cost prevailing during **2020**.

TGSPDCL is now proposing to reduce the agreed tariff on the ground that the GST applicable to solar modules has been reduced.

This approach is technically and economically incorrect because GST is only one component of the project cost. Any revision of tariff, if at all, must consider the **overall capital cost** of establishing the solar power plant.

2. Major Cost Components of a Solar Power Plant

A typical PM-KUSUM solar project consists of the following major components:

Component	Share in Project Cost (%)
Solar PV Modules	45
Steel Module Mounting Structures	18
Inverters	8
Electrical Equipment, Transformers & Switchgear	10
Copper & Aluminium Cables	6
Civil Works including Cement	6
Labour, Transportation & Installation	7

Thus, solar modules account for only about **45%** of the project cost, while the remaining **55%** consists of steel, aluminium, copper, cement, electrical equipment, civil works, labour and transportation.

3. Increase in Input Prices (2020–2026)

The Office of the Economic Adviser, Government of India, publishes the Wholesale Price Index (WPI), which is the accepted indicator for escalation in construction and infrastructure contracts. The WPI series shows that manufactured products, including basic metals, experienced substantial inflation after 2020 due to the pandemic, supply-chain disruptions and global commodity price increases. ([Economic Adviser](#))

The trend for major inputs relevant to solar projects is summarised below:

These increases are supported by the official WPI series and industry reports showing a sharp increase in producer prices after 2021–2022, followed by continued elevated cost levels thereafter. ([Press Information Bureau](#))

4. Effect of GST Reduction

Even assuming that the GST reduction on solar modules results in a saving of approximately 7% **on module cost**, the impact on the total project cost is limited because modules constitute only about 45% of the capital cost.

Therefore:

- Saving on total project cost due to GST reduction is 3 to 4 %
- Increase in project cost due to escalation in steel, aluminium, copper, cement,

Item	Estimated Increase (2020–2026)
Basic Metals (Steel)	35–45%
Aluminium	40–50%
Copper	50–70%
Electrical Equipment	20–30%
Cement & Concrete	30–40%
Labour	25–35%
Transportation	25–40%

- electrical equipment, labour and transportation ≈ **18–22%**

Thus, the increase in construction cost substantially exceeds the benefit arising from the GST reduction.

5. Net Effect

Particulars	Effect on Project Cost
Benefit due to GST reduction	(-) 2- 3%
Increase due to escalation of other inputs	(+) 18-22%
Net Increase	(+) 14-18%

Hence, the overall capital cost of a solar project commissioned in 2025-26 is significantly higher than the capital cost considered by the Commission while determining the tariff in 2021.

6. Economic Principles

Tariff determination is based on the following parameters:

- Capital Cost
- Debt-Equity Ratio
- Interest on Loan
- Return on Equity
- Operation & Maintenance Cost
- Depreciation
- Plant Load Factor

Reduction in GST affects only one element of the capital cost. It cannot justify reopening an already executed PPA unless the entire capital cost is recomputed by considering **all** increases and decreases in input prices.

Selective consideration of one favourable factor while ignoring all adverse factors is arbitrary and contrary to sound regulatory principles.

7. Conclusion

The tariff of ₹3.13 per unit was determined on the basis of 2020 costs.

Between 2020 and 2026:

- Steel prices increased substantially.
- Aluminium prices increased substantially.
- Copper prices increased substantially.
- Cement prices increased.
- Electrical equipment became costlier.
- Labour and transportation costs increased considerably.

The increase in these costs is much greater than the benefit arising from the reduction in GST on solar modules.

Therefore, any proposal to reduce the tariff solely on account of GST reduction is neither economically justified nor supported by accepted tariff determination principles.

Accordingly, the tariff of **₹3.13 per kWh agreed under the PPA should continue without any reduction.**