SOUTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED

From
Chief Engineer (IPC),
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6-1-50, Mint Compound,
Hyderabad – 500 063.

To
The Commission Secretary,
TGERC,
Vidyut Niyantran Bhavan,
GTS Colony
Hyderabad – 500 045.

Lr. No.CE(IPC)/DE(IPC)/ADE-K/F.No.KUSUM A/D.No. 113 /25-26, Dt:15-04-2025.

Sir,

Sub:- TGSPDCL- IPC – Replies to the objections/suggestions raised by the stakeholders on petition filed by TGDISCOMS seeking consent for procurement of 4000 MW (inclusive of 1000 MW capacity for Women SHGs under INDIRA MAHILA SHAKTI SCHEME) and Model Power Purchase Agreement (PPA) for decentralized Ground Mounted Grid-Connected solar power for a period of 25 years from the Commercial Operation Date (COD) by TGDISCOMs under Component-A of PM KUSUM Scheme vide OP.NO: 32/2025 - Submission - Reg.

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With reference to the subject cited above, the replies to the objections raised by the stakeholders on aforesaid subject are herewith enclosed with a request to kindly place the same before the Hon'ble Commission for approval.

Enclosures: As above

Yours faithfully,

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Replies to Comments from Mr. Venkata Naresh Kumar on the petition by TG DISCOMs for consent for procuring 4000 MW distributed solar (including 1000 MW for SHGs)

S. No.	Observation/ Comment	Rationale by TG DISCOMs
1.	Capacity Revision by MNRE to 1000MW: At the outset, it is pertinent to note that the KUSUM scheme allocation capacity for Telangana, as per the official PM-KUSUM website (https://pmkusum.mnre.gov.in /#/landing/ more-about-A), is indicated as 1000 MW. Accordingly, all comments and suggestions presented in this letter are made with the understanding that the Telangana DISCOMs' proposal pertains to the full allocated capacity of 1000 MW only.	It is true that MNRE had initially allocated 4000 MW capacity to Telangana under KUSUM Component-A in June 2024 However, this allocation was subsequently revised to 1000MW by the end of January, 2025. By that time the state had already invited Expressions of Interest (EoIs) from eligible applicants for the full 4000MW capacity, with detailed notification issued for identified substations across the state. The State Government is actively pursuing with MNRE for the restoration of the original allocated 4000MW under Component-A.
2.	Tariff Benchmarking based on outdated Determination Dated:02.01.2021: It is respectfully submitted before the Hon'ble Commission that the Telangana DISCOMs have invited Expressions of Interest (EOIs) based on a pre-fixed levelized tariff determined on 02-012021, as per the TGERC order dated 02-02-2021. However, since that determination, the market landscape has undergone considerable changes—both in terms of material costs and broader industry dynamics. A few of the notable changes include significant fluctuations in the prices of solar modules and balance of systems, supply chain disruptions, increased logistics costs, and global economic uncertainty, particularly due to the impact of US tariffs and evolving geopolitical conditions. Few of the	Competitive bidding is not mandatory under the KUSUM Component-A scheme However, in instances where the number of eligible applications received exceeds the notified capacity at a particular substation, a transparent selection process becomes unavoidable. In such cases, competitive bidding may be adopted to ensure fairness and adherence to scheme guidelines.

significate changes that impacted project costs since 02-02-2021 are noted below:- INR depreciation (from ₹73.2/USD in Jan 2021 to ₹86.8/USD currently), Given that a substantial portion of solar project components—such as PV modules, inverters, and trackers—are either fully imported or linked to global pricing benchmarks, this currency depreciation has had a direct and material impact on capital costs. Steep fluctuations in module prices and shipping costs post-COVID, Rising interest rates and financing challenges As of October 2021, the GST rate on solar modules and related components was increased from 5% to 12% Imposition of ALMM.

Sl. No.	Description	Period	Remarks
1	Initial ALMM Order Issued	02-01-2019	
	Effective Implementation Date (Initial)	01-04-2020	
2	Clarifications and Amendments		
	Amendment 1	Feb-21	Usage of ALMM restricted to Government Projects
	Amendment 2	Jan-22	The scope expanded to OA and Net metering
	Amendment 3	Mar-23	Suspension for One Financial Year
	Amendment 4	09-02-2024	reimposition of the ALMM, with 2 exemptions

			a) Projects under open access and captive
			b) Projects identified as “in advanced stages of construction
	Amendment 5	15-02-2024	abeyance pending further clarification on Feb 9th Order
	Amendment 6	29-03-2024	Final Reimposition of ALMM
		01-04-2024	all government-sponsored projects and government - assisted projects (including open access and net-metering projects) must source solar modules only from the ALMM-approved list.

Import Duty changes:-

	Safeguard Duty (SGD)	Basic Customs Duty (BCD)
Effective Date (Initial)	Jul-18	April 1, 2022
Announcement Date (Initial)	Ministry of Finance Notification: July 30, 2018	Finance Ministry Notification: March 2021
Duty Rates	Initially 25%, phased down over time (e.g., 15% in 2020-21)	Initially 25% on cells, 40% on modules

	Current Duty Rates	Expired (last extension until July 29, 2021)	20% on both solar cells and modules
	Social Welfare Surcharge (SWS)	Applicable on top of SGD	Applicable on top of BCD (initially 10% of BCD)
	Agriculture Infrastructure and Development Cess (AIDC)	NA	7.5% on cells, 20% on modules as of Feb 2025
	In view of the above, the tariff fixed in early 2021 is no longer reflective of the current market realities and is therefore not appropriate basis for inviting fresh EOIs. A revised and updated tariff determination exercise is essential to ensure that the scheme remains attractive and bankable for prospective farmers, self-help groups (SHGs), and developers. Moreover, considering the sunset clause for KUSUM Component-A ending in March 2026, the current approach imposes an impractical timeline. It poses a significant execution risk for stakeholders, especially when tariff certainty is lacking, and project planning must accommodate upcoming monsoon seasons and global procurement uncertainties. A timely revision of the tariff structure will not only improve project viability but also enhance the scheme's implementation success within the remaining timeframe.		
3.	Inefficiencies in TGDISCOMs methodology for sub-station-wise capacity allocation: It is respectfully submitted that the methodology adopted by the TG DISCOMs in identifying and notifying sub-station-wise (S-S wise) capacities under the KUSUM scheme is inefficient, sub-optimal, and technically flawed. Currently, TG DISCOMs have proposed to use: (a) the existing		The TGDISCOMs respectfully submit that, network strengthening works would be undertaken as per the resource plan approved by the Hon'ble Commission. This would allay any concerns on the adequacy of the network in meeting the demand as well as to absorb solar generation.

	transformer capacity, and (b) the connected solar capacity on the 11 kV side of 33/11 kV sub-stations, as the basis for capacity allocation. This simplistic approach, aimed at reducing network losses, fails to account for the dynamic nature of load profiles and solar generation. Why This Approach is Problematic?? For example, a 33/11 kV sub-station with a 10 MW transformer and a connected 10 MW solar plant at the 33 kV level is still being allocated an additional 6 MW of solar capacity under the scheme. In such a case, where the local load is already saturated, the new generation will be injected upstream into the grid, causing reverse power flow and a high risk of feeder tripping or transformer overload. This risks grid reliability and undermines the core objective of distributed solar: local generation for local consumption. Best Practices from Other States like Rajasthan, Gujarat and Andhra Pradesh have adopted a more holistic and technically sound approach. Instead of basing allocations solely on transformer ratings, they analyze the hourly load curves of each sub-station and match them with typical solar generation profiles to determine net local-absorbing capacity. This approach ensures: • Optimal absorption of generated power within the local distribution network • Minimal reverse power flow • Enhanced grid stability • Efficient transformer utilization.	While allocating capacity in a SS to a solar developer, the TGDISCOMs consider a safety margin on the available capacity. Hence, the entire available capacity is not allocated to the developers. In accordance with prevailing rules/ requirement, TG SLDC monitors the real-time injection of the solar power developers. This enables the grid operator in taking measures for ensuring local absorption of the solar generation.
4.	Omission of Ongoing Generation Projects in Energy Availability Projections: It is respectfully submitted that the energy availability projections provided by TG DISCOMs appear to overlook	The TGDISCOMs respectfully submit that the power procurement plan has been formulated considering the upcoming power projects based on the expected date of commissioning.

	several critical upcoming generation sources, thereby underestimating the state's medium-term energy supply position. Based on an assumed Plant Load Factor (PLF) of 85%, the following ongoing thermal projects are expected to contribute significantly to the state's energy availability: • Yadadri Thermal Power Station (YTPS): 5 units × 800 MW = 4,000 MW, Expected annual generation: ~29,784 MUs • Singarenis Thermal Power Project (STPP), Stage-II: 1 unit × 800 MW = 800 MW, Expected annual generation: ~7,446 MUs • Telangana STPP, Stage-II: 1 unit × 800 MW = 800 MW, Expected annual generation: ~7,446 MUs Together, these projects are estimated to contribute over 44,000 MUs annually. However, these figures do not appear to be factored into the DISCOMs' current projections of future energy availability. This omission could lead to skewed planning decisions, including unnecessary procurement and sub-optimal integration of renewable capacity. A comprehensive and realistic assessment of future energy availability—factoring in the scheduled commissioning timelines of these major generation assets—is essential for transparent and efficient power procurement planning. I respectfully urge the Hon'ble Commission to direct TG DISCOMs to revise their projections with the inclusion of these ongoing generation capacities to ensure a more accurate and balanced assessment of the state's energy landscape.	With regard to Yadadri Power plant, 1 unit x 800 MW is in operation and remaining capacity of 3,200 MW (4 X 800 MW) would be commissioned by June 25. Energy projections have been considered accordingly. The expected date of commissioning of Singareni Power Project Stage II (800 MW) and Telangana STPP (Stage II) is in FY 31.
5.	Contradiction Between Additional Surcharge Claims and Future Energy Requirement Projections: It is respectfully submitted that the Telangana DISCOMs have consistently claimed Additional Surcharge on the grounds that their existing assets—particularly long-term	The TGDISCOMs respectfully submit the following- As per Section 42(4) of Electricity Act 2003, the State Electricity Regulatory Commission (SERC) may specify the additional surcharge to

	contracted 6 capacity - are getting stranded due to declining demand from certain consumer categories as they are opting for open access. In this context, their current projection of significantly high future energy requirements appears inherently contradictory. On one hand, the DISCOMs argue that surplus capacity is leading to fixed cost burdens and under-utilized assets (justifying the imposition of Additional Surcharge), while on the other hand, they project a substantial rise in demand that seemingly negates the very basis of those earlier claims. This inconsistency calls into question the accuracy and objectivity of the demand forecasts being presented and warrants a more transparent and reconciled approach. I respectfully urge the Hon'ble Commission to seek clarification from the DISCOMs and direct that future energy projections be aligned with proper rationale to ensure consistency and regulatory integrity.	be levied on the open access consumers to enable the TGDISCOMs to recover its fixed costs arising out of its obligation to supply. As per Clause 8.5.4 of the National Tariff Policy, "The additional surcharge for obligation to supply as per section 42(4) of the Act should be applicable only if it is conclusively demonstrated that the obligation of a TGDISCOMs, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. The fixed costs related to network assets would be recovered through wheeling charges" In accordance with the aforementioned statutory provisions, the Hon'ble Commission passed an order dated 18.09.2020 in OP No 23 of 2020 specifying the mechanism for determination of stranded capacity along with approved methodology and terms & conditions for levy of Additional Surcharge on Open Access (OA) users. This methodology for computation of Additional Surcharge was finalized by Hon'ble TGERC after extensive stakeholder consultations and public hearing. The TGDISCOMs has been filing the petition for levy of additional surcharge in accordance with the above order of Hon'ble TGERC without any deviations. TGDISCOMs would like to humbly submit that additional surcharge is determined by

		Hon'bleTGERC on a half-yearly basis. Further, it may be appreciated that capacity additions planned by TGDISCOMs are for meeting the future load growth in a reliable and economical manner. Hence, levy of additional surcharge now and planning for capacity additions in the future for meeting the enhanced load growth cannot be seen as inconsistent, since there is a minimum gestation period for the planned projects to be grounded. Any mis-match/ delays in the planning capacity additions may lead to undesirable situation of constrained power supply.
6.	Misplaced and misrepresented facts in Support of TG Discoms' Current Proposals: It is respectfully submitted that certain claims made by TG DISCOMs to support their current proposals appear factually misplaced or overstated, thereby necessitating a closer examination by the Hon'ble Commission: (a) Misinterpretation of MoP Notification Dated 20.10.2023 TG DISCOMs have cited Renewable Purchase Obligation (RPO) targets from the Ministry of Power's (MoP) notification dated 20.10.2023. However, this notification is not applicable to distribution licensees. It specifically pertains to designated consumers under Sections 14(n) and 14(x) of the Energy Conservation Act, 2001, and hence, cannot be used as a binding basis to justify obligations on DISCOMs. (b) Exaggerated RPO Penalty Cost The projected RPO compliance cost of ₹3.72/unit claimed by TG DISCOMs is grossly exaggerated and not reflective of actual market	The TGDISCOMs respectfully submit the following points – The Hon'ble Commission may direct the obligated entity to pay the additional penalty for shortfall in specified renewable energy consumption targets as per Ministry of Power Notification No S.O. 4617(E) dated 20th October 2023. As per sub-section (3) of section 26 of The Energy Conservation Act – 1 TOE = 11,630 kWh Value of 1 TOE = INR 21,650 (as per MoP Gazette Notification dated 26th Dec 2023). Penalty for 1 unit of RPO = 2 x INR 21,650/ 11,630 kWh = INR 3.72/ unit. It may be noted that INR 3.72/ unit is the

	trends. As of March 2025, the closing inventory of REC 7 certificates stood at 4,04,90,242 certificates (equivalent to 40,490 MUs). The average trading price of RECs on the Indian Energy Exchange (IEX) has remained around ₹0.35/unit. Sources: "REC Registry of India – REC Inventory" & "IEX REC Market Data" These facts clearly indicate that RPO compliance, if needed through REC purchases, could be achieved at a fraction of the cost (Rs.0.35/Unit) being projected by the DISCOMs. (c) At best, the RPO targets referred to by TG DISCOMs may stem from the MoP's order dated 22nd July 2022, which outlines a trajectory for RPO obligations. However, it is crucial to note that the MoP has explicitly empowered State Electricity Regulatory Commissions (SERCs) to fix binding targets for their respective jurisdictions. The targets are indicative in nature and not directly enforceable unless formally adopted by the Hon'ble Commission through a notified regulation. In light of the above, I request the Hon'ble Commission to critically re-examine the factual basis of the TG DISCOMs' proposals and ensure that regulatory decisions are made based on accurate and contextually appropriate data. (d) A simplistic comparison between the average cost of electricity market purchases in FY2324 (₹5.56/unit) and current solar tariffs overlooks the complexities of power procurement. Market purchases are typically driven by real-time demand from DISCOMs, often during peak load conditions or supply shortfalls. This inherently leads to higher and more volatile pricing, often determined on an ad hoc or short-term basis. In contrast, solar power procurement is generally structured through long-term power purchase agreements (PPAs) with fixed tariffs, offering price stability and predictability. Thus,	penalty imposed for not complying with RPO this is not the cost of REC. Other pertinent point that needs to be considered is that the market for REC is not sufficiently mature. Since Jan 24 till the last trading session of RECs, the price of REC has varied between INR 110/REC to INR 350/REC. The clearance volume in the trading sessions vary significantly and the lowest REC volume cleared was 23,644 RECs. In view of these factors, depending completely on REC market for meeting RPO targets is prone to risks of higher cost/ non-clearance at the desired price point. The TGDISCOMs submits that REC market can be used as a supplemental measure for meeting RPO and cannot be the 100% dependent on RECs in view of the points mentioned above. As the market for RECs matures, all the stakeholders including the TGDISCOMs stand to benefit. Response to 6(d): The TGDISCOMs acknowledges that market purchases are dynamic in nature. The TGDISCOMs after undertaking holistic assessment of the demand and availability from contracted and upcoming projects including RE sources has formulated the power procurement plan. Power procurement plan addresses the requirement across the energy continuum from short term needs to long term requirement of power.

	while solar tariffs may appear lower on paper, the comparison does not account for the dispatchability, timing, and reliability aspects of market purchases versus scheduled renewable generation.	Procedures and principles outlined in the grid code are scrupulously followed by the TGDISCOMs to ensure stability of the grid and reliable supply of power to all consumers in the state. As an example, power from RE plants are on must-run basis and the system operator must ensure minimum technical limit (MTL) operations of thermal plants. Quantum of power to be procured from such RE sources must be planned in such a way so as ensure stable grid operations and at the same time ensure lowering of power purchase cost. TG SLDC closely monitors the demand and supply position in the state, prevailing market prices and takes steps for optimizing the power cost.