

April 10, 2025

To
The Secretary
TGERC
Vidyut Niyantran Bhavan, G.T.S. Colony, Kalyan Nagar
Hyderabad – 500 045

Respected Sir

Sub: Comments from Prayas (Energy Group) on the petition by TG DISCOMs for consent for procuring 4000 MW distributed solar (including 1000 MW for SHGs)

We are making a short submission on the subject, with some observations and comments. We request the Hon'ble Commission to consider these while processing the DISCOM petition.

Thanking you,
Yours truly

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Comments by Prayas (Energy Group) on the petition by TG DISCOMs for consent for procuring 4000 MW distributed solar (including 1000 MW for SHGs)

At the outset, the plan to set up 4000 MW of distributed solar plants near substations is a welcome initiative. Potential benefits include relatively cheaper day-time power, reduction of T&D loss, local employment and benefits to SHGs/Local organisations. Our comments are aimed to improve the implementation of this idea and ensuring that it yields maximum benefits.

1. Strengthening substation infrastructure: Projects are to be connected at the 11 kV level at the substations. Solar power will be available for use, only if the voltage levels are within limits and there are no power interruptions. If there is excess generation, there is a possibility of reverse power flow. Substations need to be checked for these aspects and required corrective measures need to be taken up. If this is not done, the DISCOMs and developers will not benefit from the solar plant. We request the DISCOMs to check the readiness of substations to integrate these solar projects and take up required corrective measures, with government support, if needed.
2. Calculation of spare capacity at substations: The “[Additional information 2](#)” document provides substation-wise list of spare capacity. For ease of analysis, we request the DISCOMs to provide this data in spreadsheet format. Ideally the capacity of the solar plant should not exceed the average load on the substation (agriculture and rural loads), so that there is no reverse power flow. DISCOMs could please comment on this aspect.
3. Implementation time-line is ambitious: As per the pp 19 of the [petition](#), the projects have to be commissioned by 31/12/2025, which is less than 8 months away. Typically, such projects could take 15-18 months for commissioning, after PPA signing. KUSUM scheme has seen two extensions, and it would be better to follow up with MNRE for another extension so that TGERC approval, tendering, award, PPA signing, construction and commissioning are not hurried through at the cost of quality and efficiency. Further, stricter timelines could result in low participation for tenders, thus hampering the prospect of solarisation of agricultural feeder in the state.
4. Doubt about MNRE capacity approval for Telangana: Annexure 3 of the [petition](#) (available on pdf page 169) is Energy Department GO MS24 dated 13/11/2024. It mentions that MNRE has sanctioned 4000 MW under KUSUM A to Telangana on 20/6/2024. But as per the state wise approval details, available at the [KUSUM website](#) of MNRE (accessed on 09/04/2025, 1730 hours), the approved capacity for Telangana under KUSUM A is 1000 MW. No capacity is approved under KUSUM – B

(off grid pumps). Under KUSUM C pumpset solarisation, 28,000 pumpsets are sanctioned, and nothing is sanctioned under feeder solarisation. Please clarify the approved KUSUM capacity under A, B and C for Telangana. As per the same portal, the total sanctioned capacity for all states, under KUSUM -A is 10,000 MW and installed capacity is 563.48 MW. It is clear that the scheme is still in its initial stages of implementation. For better implementation in Telangana, it would be good if the DISCOMs studied experiences of implementation in other states.

5. Suggestion of phased implementation: There are many new challenges in the proposed scheme. New actors such as SHGs and farmer associations are involved. Land parcels have to be identified at multiple locations, each a few acres in area, and lease agreements formalised. 4000 MW would need around 20,000 acres total land. The petition does not mention the availability of land near substations. As mentioned in points 1 and 2 above, substation-wise feasibility assessments have to be carried out. After the commissioning, the O&M eco-system has to be set up and stabilised. Considering all these, we suggest a phased approach to implement this scheme. After a first phase (say 50 MW of SHG based and 100 MW of other), the lessons learned could be used in the next phase. Substations for the first phase could be prioritised using a variety of factors such as land availability, spare capacity, power supply reliability etc. Responsibility for land leasing is now with the developers. The state government could consider land pooling and making arrangements for land leasing. Such arrangements could be tried and stabilised during the first phase.
6. Tarif determination and selection of developer: Petition mentions that Rs 3.13/Unit was determined by TGERC in 2021. This could be used as a ceiling tariff while inviting bids. If the implementation is phased out with smaller capacity in the first phase, there could be multiple bidders for the same substation. In such a case, competitive bidding could be conducted to choose the developer. The suggested Performance Bank Guarantee (PBG) of Rs. 5 lakh/MW (as opposed to Rs 1 lakh/MW in the MNRE documents) is high for SHGs and farmer associations. We suggest to reduce it to Rs. 1 lakh/MW for SHGs and Farmer associations. As per the news reports, SHGs have to invest 10% of the cost, amounting to around Rs.35 Lakhs for a 1 MW plant, which is a significant amount. To encourage participation, DISCOMs/state government could assist SHGs and farmer association to avail low interest loans from financial institutions.
7. Revise the power purchase plan: [Additional information -1](#) has provided the DISCOM justification for the need of this capacity. Expected demand growth, higher renewable energy targets and resource adequacy guidelines have been cited for this. This distributed solar capacity addition has multiple benefits, as mentioned above.

Therefore, it could be given a higher priority over the many other proposed power purchase plans. Considering many new developments, we request TGERC to review the resource plan order and the power purchase plan of the DISCOMs.

8. KUSUM – C could be a better option: Agriculture is the main rural load and feeder solarisation option under KUSUM C has provision for 30% Central Financial Assistance (CFA). This option is being taken up by many states, and TG should also consider this. As per the [KUSUM portal](#), sanction has been given to cover over 35 lakh pumpsets and installation is complete for 3 lakh pumpsets, mainly in five states (for example, Maharashtra status can be accessed at the [MSKVY page](#) of Maharashtra Electricity Distribution Company). The CFA will ensure that the tariff impact on DISCOMs for power procurement is less, while not impacting any returns for the project developers. TG DISCOMs can be asked to provide detailed future plan for solarisation of agricultural feeder under KUSUM C. However, this would require determination of tariff for KUSUM-C component by TGERC.

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