To The Secretary Telangana Electricity Regulatory Commission Sy.No.145-P, Vidyut Niyantran Bhavan Kalyan Nagar, GTS Colony, Hyderabad

April 25, 2025

Respected sir,

Sub: Submission of objections, suggestions and views in OP No.29 of 2025 filed by TGDISCOMs, seeking Commission's consent for procurement of 200 MW solar power from NLCIL under CPSU scheme phase II transche III for 25 years

With reference to the public notice dated 29.3.2025, we are submitting the following points for the consideration of the Hon'ble Commission in the subject petition:

- 1. I thank the Hon'ble Commission for permitting me to file my objections before the scheduled date of public hearing, in response to my requests made in my letter dated 7.4,2025.
- 2. TGDISCOMs have sought consent of the Hon'ble Commission for procurement of 200 MW solar power from NLCIL from Kutch, Gujarat. As usual, the DISCOMs have relied on the resource plans approved by the Commission for the 5th and 6th control periods, the revised resource adequacy report of the Central Electricity Authority, RPO guidelines issued by the MoP, GoI, under Energy Conservation Act, etc., to justify the subject proposal. We request the Hon'ble Commission to examine the following points, among others:
 - a) Under the subject scheme, viability gap funding support for self-use or use by government/government entities directly or through DISCOMs is provided. The scheme mandates use of both solar photovoltaic cells and modules manufactured domestically. While the maximum permissible VGF is Rs.0.70 crore per MW, actual VGF will be decided through bidding using the VGF amount as a bid parameter. NLCIL emerged as the successful bidder with a tariff of Rs.2.57 per unit, the DISCOMs have submitted. IREDA, the nodal agency, in its corrigendum to RfS, revised usage charges to Rs.2.45 per unit. Maximum permissible limit for VGF is reduced from 0.70 crore to Rs.0.55 crore per unit on 4.10.2021. In view of change of GST rates, usage charge is increased to Rs.2.57 from Rs.2.45 per unit. Tariff petition of NLCIL is pending before CERC.
 - b) In the name of encouraging domestically manufactured solar photovoltaic cells and modules, and to reduce impact higher tariffs, VGF is proposed. The original tariff of Rs.2.45 per unit itself is higher compared to the tariffs for solar power discovered through competitive biddings in the country. True to its manipulative legerdemain, the GoI is taking back the benefit of VGF substantially in the form of increased GST. MNRE, in its letter dated 16.9.2022 to IREDA, informed that GST was increased from 8.9% to 13.8% of total solar project under the subject

scheme and for solar equipment from 5% to 12%. As a result, the proposed tariff is increased to Rs.2.57 per unit. In the subject petition, it is shown that with a CUF of 28.5%, 499.662 MU can be generated per annum from the plant of 200 MW. For increase in tariff by 12 paise per unit, the additional burden per annum works out to Rs.59.95 crore and for the period of 25 years of PPA it works out to Rs.1498.77 crore. While the VGF is a one-time benefit, the additional burden on account of increase in tariff is recurring every year. There does not seem to be any justification in choosing to procure solar power under the subject scheme, instead of going in for real competitive bidding for selecting a developer who quotes the lowest tariff for setting up 200 MW plant, if required, in the state itself.

- c) The argument of the DISCOMs that the tariff for the subject procurement is much cost effective when compared to higher tariffs of various non-solar RE sources is preposterous. The proposed tariff for the subject procurement should be compared with tariffs for solar power discovered through competitive biddings in the country.
- d) The DISCOMs have submitted that the estimated annual generation from the subject plant is 503 Gwh equivalent to a capacity utilisation factor of 28.69%. Compared to 21% to 23% of CUF for the existing and planned solar plants considered by the DISCOMs, the estimated CUF is higher. However, that benefit is not getting reflected in the proposed higher tariff.
- e) The DISCOMs have explained that adding solar capacities at 11 KV level closer to load centres results in absorption of power locally, thereby minimizing grid enhancements at higher voltages and resulting in saving in the capital expenditure, reduction of technical losses, improvement in voltage profile of the distribution network, and acting as a catalyst for rural empowerment, apart from being environment friendly, to justify procurement of solar power under component A of PM KUSUM scheme. The DISCOMs have asserted that by setting up solar power plants nearer to sub-stations, they "can avoid the CTU, STU, 33 ky losses alongside the CTU, STU charges." By getting power from Kutch in Gujarat, the benefits of setting up solar power plants in the state of Telangana are being lost. In its letter dated 14.11.2022 to special chief secretary, energy department, government of Telangana, NLCIL pointed out, inter alia, that "developing the project within the state with STU connectivity will also bring economic benefits to Govt. of Telangana." How and why did the government of Telangana and its power utilities ignore all these factors is surprising, while deciding to procure power from the subject unit.
- f) In the PUA dated 27.8.2024 signed by TGDISCOMs and NLCIL, there is no mention of waiver of ISTS charges and transmission losses up to the point of connection at the border of Telangana for supply of power, leave aside who should take the responsibility for getting such a waiver. In its letter dated 20.4.2023 addressed to the then CMD of TGTRANSCO, NLCIL informed that "Waiver of ISTS charges for use of ISTS network shall be available to projects set up under the

- CPSU Phase II Tranche III scheme, as per relevant orders/guidelines issued by Govt. Authorities." It is incorporated in the PUA that SCOD of the subject plant is 18 months from the date of PUA, i.e., COD is likely to e declared on 20.2.2026. PUA is silent about applicability of waiver of ISTS charges and transmission losses to the subject plant to be implemented within 18 months from the date of signing PUA and nearly 8 months have run out. What is the position of implementation of the subject plant? Moreover, benefits of the said waiver are being denied in the form of the GNA regulations and orders of the CERC.
- g) In the power usage agreement, under Interconnection point/metering point/delivery point, it is explained that "Interface point of Solar PV Station with the transmission system developed by CTU at 765/400/220 KV Bhuj PS substation in village Palanpur (Badi) Taluka Nakhatrana Dist Kutch at 220 kv voltage level, where usage energy meter(s) are installed. Any cost of building transmission line from Solar PV plant to interconnection point/Delivery Metering point shall be borne by NLC. All the associated transmission charges and losses beyond the point of interconnection of Solar Project shall be borne by the selected Power Users. The Powers Users shall abide by the relevant CERC/SERC Regulations, Grid Code and Central Electricity Authority (Installation and Operation Meters) Regulations, 2005 as applicable, amended and revised from time to time." What is the cost to be borne by TGDISCOMs towards ISTS charges and transmission losses up to the point of connection at the border of Telangana from the subject plant? This will be the additional and avoidable burden, when compared to the benefits that accrue from a solar power plant set up in the state of Telangana itself.
- 3. In its order in OP No.32 of 2025 dated 22.4.2025, the Hon'ble Commission has observed that "The Commission has recorded the concerns of the stakeholders that MoP targets for purchase of renewable energy is much more than the RPPO targets fixed by the Commission under Regulation No. 7 of 2022. The stakeholders as well as the petitioners have submitted that the TGDiscoms are bound by the regulations of this Commission and the obligations of MNRE under Energy Conservation Act are only guidelines." The Hon'ble Commission has further observed that "The question whether the RPPO targets fixed by MNRE under Energy Conservation Act are binding on the TGDiscoms and whether MNRE can impose penalty on TGDiscoms for not following the directions is a debatable aspect. However, this Commission is not in agreement with one of the stakeholders who have submitted that even as per the Energy Conservation Act, TGDiscoms are not obligated entities. In any case the targets fixed by the Commission under Regulation No. 7 of 2022 or targets fixed by GoI under Energy Conservation Act only guide the TGDiscoms to see that more and more renewable energy is integrated into the system which ultimately will be helpful in reducing use of the thermal energy so that carbon emission will get reduced." In view of the same, we reiterate that reliance of the TGDISCOMs on the guidelines of RPO targets fixed by MNRE and the penalties related thereto for justifying purchase of solar power, "being a debatable aspect," is unwarranted. However, it is to be asserted that the RPO targets fixed by MNRE are guidelines only, and the minimum targets under RPPO by the Commission are mandatory, in terms of law.

- 4. Experience has been confirming that the estimates being made by the CEA under electricity requirement surveys and in resource adequacy reports tend to be inflated. As per the resource adequacy report of the CEA, availability of surplus power during the 5th control period is very much lesser than what is determined by the Commission for the same period. But the factual position for the FY 2024-25 confirms that the projections of the CEA have turned out to be unrealistic. It confirms the need for reviewing and revising the projections periodically based on changing factual position. Therefore, it is not a question of comparing the resource plans approved by the Hon'ble Commission for the 5th and 6th control periods with revised resource adequacy report or EAS survey of the CEA; it is a question of comparing the projections with actual trends.
- 5. That generation capacity additions should be gradual in tune with the growing demand for power is obvious. The moot point that deserves examination is how much generation capacity, both thermal and RE, needs to be added and when. With the proposed addition of 22127 MW solar power capacity over the years, 44,581.5 MU can be generated per annum with a CUF of 23%. Similarly, with the addition of 1600 MW thermal capacity of the units of SCCL and NTPC (800 MW each), with a plant load factor of 85%, 11,913.6 MU can be generated per annum. Generation from the proposed pumped storage capacities will be additional. With the expected generation of 56,495 MU of thermal and solar power, in addition to the potential for availability of surplus power to the tune of 28,504 MU projected by the DISCOMs for the FY 2025-26, i.e., a total of 84,999 MU, how to balance load curve and power mix, even with the proposed 250/500 MW BESS, needs to be explained and examined. References to the Commitment of the GOI to the Paris Agreement, its aim to source 50% of energy requirement with RE by 2030, on the one hand, and noting of the comment that irrespective of commitments of GoI in international forums, the procurement of power shall be only in the interest of the consumers and not otherwise, on the other, underline the need to balance commitment and aims with actual requirements and interests of the consumers. This brings to the fore the relevant question that, in view of the potential for abnormal quantum of surplus power projected by the DISCOMs and in the resource plan, and capacity additions projected by the DISCOMs, how much generation capacity, both RE and thermal, needs to be added and when. This has to be decided based on actual trends, not on the basis of commitments, aims, plans, etc. It has been generally considered that a reserve margin of 5% is sufficient to meet fluctuations in generation that may arise due to several factors which cannot be foreseen. Even after meeting requirement for power exceeding what is determined in the resource plan, the surplus available is abnormal. The DISCOMs have not given the actual surplus available during the FY 2024-25 and the Hon'ble Commission, too, has not examined the same. In other words, requirement of capacity addition is not considered on the basis of the actual trends of availability of abnormal quantum of surplus power, but on presumed fluctuations in demand and supply of power for the coming years.

- 6. Power from the subject plant is expected from 20.2.2026. In view of availability of abnormal quantum of surplus power and addition of solar power from the 4000 MW under PM KUSUM scheme to which the Commission has given its consent, the need for 200 MW solar power from the subject project has to be justified by the DISCOMs even from the point of view of fluctuations in demand and supply within 15-minute time block. 500 MW BESS, if materialises, can be used to store the RE already available from plants under PPAs in force to the extent must-run RE has to be purchased by backing down thermal power, apart from the 4000 MW solar power under PM KUSUM scheme.
- 7. In its order on PM KUSUM scheme, the Hon'ble Commission has observed that, "The Commission has determined prefixed levelized tariff at Rs. 3.13/kWh in order dated 02.01.2021 in O.P. No. 24 of 2020. The implementing agency has invited EoIs on the basis of the prefixed levelized tariff at Rs. 3.13/kWh. The applicants must have given their Expression of Interest to install solar plant as they will get Rs 3.13/kWh. If at this stage this Commission alters the tariff it may upset either of the parties. Therefore, the Commission deems it fit not to revise the tariff at this stage and as of now the prefixed levelized tariff of Rs.3.13 /kWh stands continued." In other words, the DISCOMs have presented the Hon'ble Commission with a fait accompli. Since the Commission deems it fit not to revise the tariff at this stage, it brings to the fore the need for submitting and considering for regulatory consent of the Hon'ble Commission justification for procurement of power, PPA, capital cost and determination of tariff simultaneously and in time, if necessary, by bringing about new regulations or amending the applicable regulations, a point which we have been agitating before successive Commissions over the years but to no avail. On the other hand, if the implied contention that, since a fait accompli is presented, the Commission has to give its consent, is adopted, it will make the regulatory process a formality and larger consumer interest cannot be protected. Relating to the subject petition, correspondence between the parties concerned has been going on over the years, tariff petition was already filed before CERC by NLCIL, implementation of the subject plant also must have been started, and PUA, too, is signed. Therefore, at this stage, TGERC cannot but give consent to procurement of 200 MW power from the subject project by TGDISCOMs - if such an approach is adopted, regulation will cease to have any relevance; it will simply turn out to be putting the stamp of approval on the proposals of the petitioners. Consents become a reality and references to consumer interest a simple lip-sympathy. It will encourage the government and the DISCOMs to adopt the same tactics. It is perplexing that the DISCOMs have not sought consent of the Commission to the PUA, though a copy of it is submitted along with the subject petition.
- 8. Once consents are given by the Hon'ble Commission to procurement of power from the subject project, and later to the PUA, neither the government, nor the DISCOMs, nor the Commission can do anything to correct the adverse consequences that may arise as a result of addition of unwarranted generation capacities, with the kind of legally binding obligations in terms of the PPAs that would come into force. Therefore, a cautious and gradual approach is imperative to determine the periodical

requirements of addition of generation capacities, both thermal and RE, to meet the fluctuating and growing demand for power in the state.

- 9. I request the Hon'ble Commission to examine the above-stated points, among others, and take appropriate decisions to protect interests of the state and its power consumers.
- 10. I also request the Hon'ble Commission to provide me an opportunity to make further submissions during the public hearings, after receiving and studying responses of the DISCOMs.

Thanking you,

Yours sincerely,

M. Venugopala Rao Senior Journalist & Convener, Centre for Power Studies H.No.1-100/MP/101, Monarch Prestige, Journalists' Colony, Serilingampally Mandal, Hyderabad - 500 032

Copy to : CMD, TGSPDCL CMD, TGNPDCL