Replies to the objections raised by Sri. M. Venugopala Rao, Journalist & Convener, Centre for Power Studies on seeking consent for procurement of 200MW Solar power from NLCIL under CPSU(Central Power Sector Undertaking) Scheme Phase - II Tranche - III:

Objections	Replies
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 an 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	a. The CPSU Scheme modalities alongwith VGF permissible limit are as decided by the MNRE. b. To ensure financial viability of the Solar projects using domestically manufactured PV cells & modules vis-à-vis the imported Solar PV cells & modules, CPSU Scheme granted VGF. However, increase in GST rates on solar devices beyond the date of finalization under RfS, resulted in the tariff enhancement from Rs 2.45/Kwh to Rs 2.57/Kwh. It is pertinent to note that during the same period 40% BCD was imposed on Solar Cells & modules imported from outside the country. Hence, TGDISCOMs submit that procurement under this scheme may be considered by the Hon'ble Commission. c. Taking into account of the fact that the subject Solar project is owned by NLCIL and as there is no additional commitment of trading margin, the tariff for the subject procurement is cost-effective, since the DISCOMs are obligated to meet the prescribed the RPPO targets mandated by either TGERC or MoP with Solar/Non-Solar sources interchangeably. Further, TGDISCOMs submit that this tariff is lesser than the recently discovered solar tariffs. On Feb 25, Hon'ble CERC adopted a solar tariff of Rs.2.60/kWh and trading margin of Rs.0.07/kWh. d. The better CUF of 28.69% is resulting in lower tariff of Rs 2.57/unit. e. Under the RfS issued by IREDA for selection of SPDs for setting up of Grid connected Solar PV projects under CPSU Scheme Phase II Tranche III, the Solar projects can be established anywhere in India and the choice of location is left to the bidder based on the tariff at which they secured the allocation. Accordingly, NLCIL has finalised the location at Kutch to suit their requirements in line with the approved bid tariff. TGDISCOMs submit that the power from the subject project would be available from Feb 26 and TGDISCOMs are also taking steps to initiate the procurement process for adding the solar capacity within the state. f. MoP order dated 23rd November 2021 granted waiver of inter-state transmission

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 a 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 kv 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

charges on transmission of electricity from solar and wind sources of energy commissioned on or before 30.06.2025. For the projects commissioned thereafter 30.06.2025, ISTS charges are levied gradually in the following manner –

Period of Commissioning	Inter-State Transmission Charges
01.07.2025 to 30.06.2026	25% of applicable ISTS charges
01.07.2026 to 30.06.2027	50% of applicable ISTS charges
01.07.2027 to 30.06.2028	75% of applicable ISTS charges
From 01.07.2028	100% of applicable ISTS charges

Further, vide order dated 09.06.2023, MoP has granted benefit of waiver of ISTS charges to the Solar/Wind projects whose date of commissioning is extended by MNRE beyond 30th June 2025 on account of Force Majeure or delay in connectivity. TGDISCOMs submit that the above waiver would be applicable for the subject project.

g. In addition to reply for (f), ISTS losses are applicable for the power scheduled from the subject project.

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	Energy Conservation Act, 2001 has been amended by MoP, vide Energy Conservation (Amendment) Act, 2022, delegating powers to the Central Government to specify minimum share of consumption of non-fossil resources by designated consumers of energy including the State DISCOMs. Accordingly, in exercise of powers conferred under the said

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.	Amendment, Ministry of Power, GoI, vide Gazette notification dated 20th October 2023, specified the minimum share of consumption of different non-fossil sources (renewable energy) as energy or feedstock for different designated consumers (including DISCOMs) as a percentage of their total share of energy consumption from FY 2024-25 till FY 2029-30. Any shortfall in specified RE consumption targets shall be treated as non-compliance and penalty shall be imposed @ ten lakh rupee for such failure in addition to the additional penalty not exceeding twice the price of every metric ton of oil equivalent prescribed under the Act, which is estimated at Rs 3.72/unit by MNRE, MoP (MNRE D.O.No P&RA/2023-24/8, Dated 01.02.2024).
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.	The TGDISCOMs respectfully submit as follows – The actual power purchase by the state in FY24 was 86,823 MUs, surpassing the projected requirement for FY25 as per the resource plan. With regard to CEA projections, TGDISCOMs submit that for FY 25, a peak demand of 17,162 MW was successfully met by TGDISCOMs as against the projected CEA peak demand of 16,877 MW. TGDISCOMs submit that the projected load growth is reflective of the increasing demand in the State of Telangana.
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	The State DISCOMs are entrusted with the dual responsibility of not only to adhere to the various regulations/orders issued by TSERC/CERC/ MNRE/MoP but also the bigger mandate enlisted in the Electricity Act 2003, to maintain reliable power supply with least cost principle. As such to meet the growing demand of the state of Telangana and to ensure 24 Hrs uninterrupted power supply to all categories of consumers including agricultural services, the procurement plans are devised. As is the case with any storage technology, any surplus renewable power during the day can be stored in PSP/ BESS and this power can be gainfully utilized during periods of high demand. This approach enables in reducing/ avoiding high-cost power purchases during the periods of high demand.

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 requirements 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, the 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.	TGDISCOMs submit that depending on the cost-economics of using power from storage units, grid operating conditions, the system operator would take a decision of using stored power. Based on trends in prices discovered for battery storage and also considering the requirement of storage based on assessment of surplus RE power across the day, TGDISCOMs would be contracting for additional storage capacities in a phased manner.
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 materialized, 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.	Keeping in view the power requirements of the State for the coming years as well as the RPPO targets to be complied, the subject procurement is necessitated. Successful bidder for 250 MW, 2 hrs BESS has been identified. Phased addition of BESS/ PSP will enable TGDISCOMs in storing surplus power from RE sources during day-time and this would be used during evening peak periods.
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 a 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	The proposal of NLCIL offering 200 MW capacity Solar power for usage by the State DISCOMs was agreed during June 2023. Thereafter, post finalization of project location & EPC contract by NLCIL, during December 2023 draft PUA was communicated. The consensus on the terms of agreement was reached during August 2024 and the PUA was signed on 27.08.2024. Soon-after then, petition was filed before TGERC seeking consent

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.	Due to the robust economic growth, the requirement of power is on a steady growth trajectory. In FY 30, the projected energy requirement based on the resource adequacy plan of CEA is 122,727 MU. This energy requirement is projected to grow at a CAGR of ~ 4% and reach a level of 150,040 MU by FY 35. The proposed capacity addition is to meet the growth in demand. However, with the gradual addition of BESS/ PSP TGDISCOMs will have the option of storing any surplus due periods of low demand and use this power during high demand periods. Keeping in view the growing energy needs, TGDISCOMs have planned addition of capacities in an economical manner