



TELANGANA ELECTRICITY REGULATORY COMMISSION

‘Vidyut Niyantran Bhavan’, G.T.S. Colony, Kalyan Nagar, Hyderabad 500 045

O. P. No. 29 of 2025

Dated: 17.05.2025

Present

Dr. Justice Devaraju Nagarjun, Chairman

1. **Southern Power Distribution Company of Telangana Limited,**
2. **Northern Power Distribution Company of Telangana Limited**

.....Petitioners

ORDER

In the matter of according approval for TGDISCOMs proposals seeking in principal approval for procurement of 200 MW Solar power from NLCIL under CPSU(Central Power Sector Undertaking) Scheme Phase - II Tranche - III

1. **Background:**

- i. As part of Paris Climate Agreement, India has committed for Net Zero by 2070. Government of Telangana has envisaged to install 50% of its electricity capacity from non-fossil fuels by 2030. For achieving this goal, India has set an ambitious target of setting up 175 GW of renewable energy capacity, by 2022. The Union Cabinet, as per its decision dated 17th June, 2015 revised the solar capacity target from 20 GW to 100 GW by 2022. The Ministry of New and Renewable Energy (MNRE), Government of India (GoI) has issued order No. 302 / 4 / 2017 - Grid Solar, dated 05.03.2019 for implementation of Central Public Sector Undertaking (CPSU) Scheme Phase-II (Government Producer Scheme) for setting up 12,000 MW grid-connected Solar Photovoltaic (PV) Power Projects by the Government Producers with Viability Gap Funding (VGF) support for self-use or use by Government / Government entities, either directly or through Distribution Companies (DISCOMs).
- ii. The Scheme mandates use of both solar photovoltaic cells and modules manufactured domestically.

- iii. The Solar PV power project capacity under the Government Producer Scheme would be allocated to the Government Producers by way of bidding, who in turn, will secure an arrangement for usage of power for self-use or use by Government/ Government entities, either directly or through DISCOMs.
- iv. With the objective of covering difference between the domestically produced solar cells & modules and imported cells & modules, VGF will be provided under the scheme. While the maximum permissible VGF has been kept at Rs.0.55 Cr/MW as amended as per MNRE Order dated 10.05.2021, the actual VGF to be given to a Government Producer under the Scheme would be decided through bidding using the VGF amount as a bid parameter.
- v. Ministry of New and Renewable Energy (MNRE), Government of India, vide office Memorandum dated 13.04.2020 identified Indian Renewable Energy Development Agency Limited (IREDA) as the nodal agency for handling the CPSU Scheme on behalf of MNRE.
- vi. On 29.01.2021, IREDA has issued the RfS document being RIS No. 23016/1/2020-IREDA/RfS/5000 MW/012021 for selection of Solar Power Developers for setting up of 5000 MW Grid connected Solar PV Power Projects in India (Tranche-III) under Central Public Sector Undertaking Scheme Phase-II (Government Producer Scheme).
- vii. NLCIL has been declared as a successful bidder under the said RfS issued by IREDA for development of 510 MW Solar Photovoltaic Power projects and LOA issued.
- viii. MNRE vide letter dated 16.09.2022 by considering change in GST rates as 'Change in Law' for Tranche-III of CPSU Scheme Phase-II being implemented through IREDA, the maximum usage charge, which was Rs. 2.45/kWh is increased by 4.9% to $2.45 \times 1.049 = 2.57$ Rs./kWh.
- ix. NLCIL offered power from this allotment to TGDISCOMs under CPSU Scheme Ph-II Tranche-III @ Rs. 2.57 per kWh.

Present Proposal of TGDISCOMs

- 2. The present petition is filed by TGSPDCL on behalf of TGDISCOMs vide Lr. No. CE / IPC / DE(IPC) / ADE / F. / D.No.1374/24, Dt:06-12-2024 under section 63, 86(1)(b) of the Electricity Act, 2003 and u/s 21 (4) of Telangana Electricity Reforms Act, 1998 seeking approval for procurement of 200 MW Solar power from NLCIL under CPSU Scheme Phase-II Tranche-III by TGDISCOMs.

3. After scrutinizing the proposals, the Commission vide this office letter dated 23.12.2024 directed TGDISCOMs to submit additional information in respect of proposed solar power procurement. Accordingly, TGSPDCL on behalf of TGDISCOMs submitted the additional information vide letter dated 06.03.2025 for procurement of solar power and also load generation balance to justify the procurement. Considering the proposals, justification and additional information submitted, the Commission has decided to take up the issue through public consultation process.

Admission of Petition

4. The petition filed by TGDISCOMs was scrutinized and found to be generally in order as required under the Conduct of Business Regulations No. 2 of 2015. The Commission admitted the petition and the same was taken on record by assigning the Original Petition number as O. P. No. 29 of 2025.

Notification inviting Suggestions/Objections/Comments

5. The Commission with reference to the provisions of the Electricity Act, 2003, under applicable Regulations decided to take up the matter through public consultation process and accordingly, directed TGDISCOMs to issue public notice in two (2) Telugu, two (2) English and One (1) Urdu newspapers on 29.03.2025. In the Public Notice it was also indicated that the Commission intends to conduct a Public Hearing in this regard on 28.04.2025 from 11:00 hours onwards at TGERC Court Hall. The Public Notice, filings and supporting material were also hosted on the website of TGDISCOMs as well as the Commission. Copy of the Public Notice is enclosed as Annexure-I.

Public Hearing

6. In response to the above Public Notice, suggestions / comments / objections in writing were received from 2 stakeholders before the public hearing. The details of the stakeholders who have submitted suggestions / comments / objections are enclosed as Annexure-II. The Public hearing was conducted on 28.04.2025 from 11:00 hours onwards at TGERC Court Hall, Hyderabad. CMD/TGSPDCL has given brief presentation on the petition. One stakeholder by name Sri.M.Venugopala Rao has attended the public hearing and has submitted his suggestions / objections / comments and TGSPDCL responded to the issues raised during the public hearing.

Justification submitted by TGDISCOMs

7. TGDISCOMs have submitted the justification for procurement as follows:
- DISCOMs are entrusted with the dual responsibility of not only to adhere to the various regulations/orders issued by TGERC/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 as per the directions of Govt of Telangana State, the subject procurement is necessitated.
 - Further, to meet the RPPO targets mandated by TGERC earlier and presently enlisted by MoP, vide gazette dated 20.10.2023, TGDISCOMs proceeded for procurement of subject RE power .;
 - The present RE installed capacity tied up by TGDISCOMs under Power Purchase Agreements (PPAs) is as submitted below :

Category	PPA capacity	Capacity in operation	Remarks
		(MW)	
Biomass	6	6	
Bagasse	81.7	61.7	20 MW under shutdown
Mini Hydel	2.55	2.55	
Industrial Waste based	18.5	15	3.5 MW under shutdown
MSW/RDF	34.3	34.3	
Wind	128.1	128.1	
Solar (incl all Bids, Bundled Power)	3289.55	3289.55	
Solar Roof top	471.71	471.71	
Solar NTPC CPSU Ph-II Tranche I &II	1692	1673.68	Balance 18.32 MW expected by Dec 2024
Solar SECI ISTS Tranche VI	400	400	
Solar NTPC CPSU Ph-II Tranche III	1045	-	Expected from Dec 2024 till Feb 2025
Solar SECI ISTS Tranche IX	1000	294.32	

Category	PPA capacity	Capacity in operation	Remarks
		(MW)	
Solar NHPC CPSU Ph-II Tranche-III	500	-	Expected from March 2025 to June 2026
MHS Peddapally	4.6	-	Jan-25
Sub-Total	8674.01	6376.91	
Present proposal	200	-	Jun-26
Solar NLCIL CPSU Ph-II Tranche III			
Grand Total	8874.01	6376.91	

- e. TGERC, vide Regulation No. 7 of 2022, prescribed the following RPPO targets to be complied by the obligated entities (including TGDISCOMs) from FY 2022-23 till FY 2026-27 :

Year/RPPO	2022-23	2023-24	2024-25	2025-26	2026-27
Solar	7.5	8	9	10	11
Non-Solar	1	1.25	1.5	1.75	2

- f. The details of compliance of RPPO by TGDISCOMs are as below :

FY	Solar RPPO %		Non-Solar RPPO %		Total RPPO %	
	TG ERC	TG DISCOMs	TG ERC	TG DISCOMs	TG ERC	TG DISCOMs
2022-23	7.5	14.135	1	0.94	8.5	15.07
2023-24	8	15.22	1.25	0.67	9.25	15.89

- g. In the meantime, 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 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 as indicated below :

Year	Wind renewable energy	Hydro renewable energy	Distributed renewable energy	Other renewable energy	Total renewable energy
2024-25	0.67%	0.38%	1.50%	27.35%	29.91%
2025-26	1.45%	1.22%	2.10%	28.24%	33.01%
2026-27	1.97%	1.34%	2.70%	29.94%	35.95%
2027-28	2.45%	1.42%	3.30%	31.64%	38.81%
2028-29	2.95%	1.42%	3.90%	33.10%	41.36%
2029-30	3.48%	1.33%	4.50%	34.02%	43.33%

Note:

- h. Wind renewable energy component shall be met by energy produced from Wind power projects commissioned after 31st March 2024;
- i. Hydro renewable energy component shall be met only by energy produced from Hydro power projects (including pump storage projects and small Hydro projects) commissioned after 31st March 2024. Provided Hydro RE component may also be met out of free power being provided to the State/DISCOM from Hydro power projects commissioned after 31st March 2024;
- j. The distributed RE component shall be met only from energy generated from RE projects that are less than 10 MW in size and shall include solar installations under all configurations (net metering, gross metering, virtual net metering, group net metering, behind the meter installations and any other configuration) notified by the Central Government;
- k. The other RE component may be met by energy produced from any renewable energy power project other than specified above and shall comprise energy from all WPPs and Hydro Power Projects (including PSPs & SHPs) including free power commissioned before 1st April 2024;
- l. Any shortfall in achievement of Wind/Hydro/other RE component is allowed to be met from each other;
- m. The specified RE consumption targets shall be met either directly or through Certificate in accordance with CERC (Terms & conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022.
- n. As per the orders of MoP, GoI, 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.

- o. With the growing demand of the State which has already surpassed 83000 MU in FY 2023-24 and in light of the higher RPPO targets presently fixed by MoP, the subject procurement of Solar power is justified;
- p. The tariff for the subject procurement is much cost effective when compared to higher tariffs of various Non-Solar RE sources, such as power from RDF based projects, Biomass power projects, Industrial Waste based projects, whose tariff is higher than Rs 7.00 per unit. Further, this solar tariff is single part levelised tariff fixed for entire 25 year agreement period, unlike Thermal power tariff being two part with increasing Variable Cost component, as such, this solar power procurement would help TSDISCOMs in bringing down the average power purchase cost.
- q. TGDISCOMs submitted that by considering the enhancement of GST rate levied on renewable energy devices and parts from 5% to 12% as 'Change in Law', MNRE, vide letter dated 16.09.2022, increased the maximum usage charge from Rs 2.45/Kwh to Rs 2.57/Kwh for projects under Tranche-III of CPSU Scheme Phase-II being implemented through IREDA.
- r. Accordingly IREDA, vide mail dated 07.10.2022, amended the maximum usage charge mentioned in clause I of the LoA from INR Rs 2.45 to Rs 2.57.
- s. TGDISCOMs stated that NLCIL has informed that the tariff petition seeking adoption of tariff has been filed before CERC on 16.12.2024 and is under scrutiny by the Central Commission.
- t. Further to the order dated 27.12.2022, MNRE having examined the representations for extending the timelines for projects awarded under Tranche-III of CPSU Scheme Phase-II due to limited availability of DCR modules within the permissible time and due to delay in connectivity, through order dated 05.07.2024 decided the following for projects awarded under Tranche-III of CPSU Scheme Phase-II:
 - i. Scheduled Commissioning Date may be extended by six months ie., from 30.09.2024 to 31.03.2025 and timeline for signing of the EPC Agreement may be extended to six months prior to revised/extended SCOD;
 - ii. The projects where the likely start date of connectivity/ completion of requisite power evacuation system is beyond the

revised/extended SCOD mentioned at (i) above, the SCOD shall be extended till 30 days after the likely start date of connectivity/completion of requisite power evacuation system, subject to the concerned Project Developer (Govt Producer) submitting a letter from the CTU/concerned STU, endorsing the likely start date of connectivity for the concerned project.

- iii. Accordingly, IREDA, vide letter dated 13.09.2024 granted SCOD extension for the subject solar project from 30.09.2024 to 31.03.2025.
- iv. The actual start date of connectivity for the subject project being 01.07.2025 (as per CTUIL intimation dated 21.03.2024), IREDA was sought for extension of SCOD accordingly.
- v. The energy requirement approved by the State Commission for 5th & 6th control period vide order dated 29.12.2023 is as abstracted below :

Approved Energy requirement at State periphery in MU			
FY	TGSPDCL	TGNPDCL	TGDISCOMs
2024-25	59,398	23,659	83,058
2025-26	62,817	24,747	87,564
2026-27	66,462	25,902	92,365
2027-28	70,352	29,434	97,482
2028-29	74,505	28,436	1,02,942
2029-30	78,205	29,663	1,07,868
2030-31	82,132	30,963	1,13,095
2031-32	86,293	32,339	1,18,632
2032-33	90,697	33,791	1,24,488
2033-34	95,379	35,332	1,30,711

- vi. It is pertinent to submit here that the TGDISCOMs have already met load of 86823 MU in the FY 2023-24 itself. And for the FY 2024-25 upto 3rd quarter (until 31.12.2024) demand of 63148 MU was met. Further, the peak demand met by TGDISCOMs has been increasing viz., 15499 MW during 2023 (16th March 2023), 15623 MW during 2024 (on 8th March 2024) and 16412 MW in 2025 so far (on 21st February 2025). As such, the actual energy requirement of TGDISCOMs for the upcoming financial years is expected to cross the approved figures of the Resource plan.
- vii. Taking into consideration the approved energy requirement and the energy availability, the Resource Plan estimated the energy

surplus/deficit for the 5th & 6th control period as abstracted below

–

FY	Energy requirement at State level (MU)	Energy Availability at State level (MU)	Surplus/ Deficit (MU)
2024-25	83,058	95,753	12,696
2025-26	87,564	1,06,637	19,073
2026-27	92,365	1,06,157	13,793
2027-28	97,482	1,05,506	8,024
2028-29	1,02,942	1,02,784	-158
2029-30	1,07,868	97,429	-10,440
2030-31	1,13,095	96,344	-16,761
2031-32	1,18,632	96,570	-22,062
2032-33	1,24,488	96,334	-28,153
2033-34	1,30,711	96,334	-34,376

- viii. CEA in their latest report on Resource Adequacy plan estimated the following energy demand for the state of Telangana from FY 2024-25 to FY 2034-35 –

FY	Energy Projections (MU)	Growth %
2024-25	90,962	-
2025-26	96,596	7.51
2026-27	1,02,732	7.46
2027-28	1,08,932	7.31
2028-29	1,15,347	7.23
2029-30	1,22,627	8.05
2030-31	1,28,032	5.43
2031-32	1,33,211	5.38
2032-33	1,38,600	5.38
2033-34	1,44,203	5.38
2034-35	1,50,040	5.38

- ix. For better illustration the energy requirement approved by TGERC under Resource plan vis-à-vis CEA Resource Adequacy report is submitted as under –

Energy Requirement of TGDISCOMs at State periphery in MU			
FY	As per TGERC approved Resource Plan	As per CEA Resource Adequacy report	Difference
2024-25	83,058	90,962	7,904
2025-26	87,564	96,596	9,032
2026-27	92,365	1,02,732	10,367
2027-28	97,482	1,08,932	11,450
2028-29	1,02,942	1,15,347	12,405

Energy Requirement of TGDISCOMs at State periphery in MU			
2029-30	1,07,868	1,22,627	14,759
2030-31	1,13,095	1,28,032	14,937
2031-32	1,18,632	1,33,211	14,579
2032-33	1,24,488	1,38,600	14,112
2033-34	1,30,711	1,44,203	13,492
2034-35	-	1,50,040	-

- x. Taking into consideration the CEA Resource adequacy report, revised energy availability projections are as under –

FY	TGERC approved Surplus/ Deficit (MU)	Difference energy requirement as per CEA report (MU)	Revised Surplus/ Deficit (MU)
2024-25	12,696	7,904	4792
2025-26	19,073	9,032	10041
2026-27	13,793	10,367	3426
2027-28	8,024	11,450	-3426
2028-29	-158	12,405	-12563
2029-30	-10,440	14,759	-25199
2030-31	-16,761	14,937	-31,698
2031-32	-22,062	14,579	-36,641
2032-33	-28,153	14,112	-42,265
2033-34	-34,376	13,492	-47,868

- u. The estimated energy requirement is expected to enhance further with the advent of new proposals/developments in the State such as –
- EV policy which requires extending reliable green power supply to EV Charging Stations, thereby promoting adoption of e-mobility in the State;
 - Establishment of Data Centres;
 - Extension of Metro corridor;
- v. As such, these proposed developments would further alter the surplus energy estimations.
- w. It is further submitted that though the energy availability appears to be in surplus, it is so only in certain time blocks. An indepth analysis of block wise energy requirement vs availability reveals deficit time blocks as well. As such, to balance such surplus/deficit TGDISCOMs are in the process of establishment of 250 MW /500 MWh Battery Energy Storage System (BESS) through TGGENCO.
- x. Considering the above, the proposed procurement of 200 MW Solar power through NLCIL is justified.
- y. The estimated annual generation is 503 GWhr, which is equivalent to a CUF of 28.69%. The PUAs earlier signed with NTPC & NHPC mandate for supply

of minimum energy and also specifies the maximum “Annual CUF” limit; excess energy beyond which is priced at less than PUA charges. The details of maximum Annual CUF of other projects under CPSU Scheme are as detailed:

Name of the Project with location	Capacity (MW)	Maximum Annual CUF	
		%	MU
NTPC Solar PV Station at Devikot, Jaisalmer, Rajasthan	150	29	381.315
NTPC Solar PV Station at Kolayet, Bikaner, Rajasthan	250	29	635.525
NTPC Solar PV Station at Shambu-ki-Burj, Bikaner, Rajasthan	300	27.50	723.17
NTPC Solar PV Station at Nokhra, Bikaner, Rajasthan	300	28.05	737.64
NTPC Solar PV Station at Fatehgarh, Jaisalmer, Rajasthan	296	27.29	708.08
NTPC Solar PV Station at Devikot, Jaisalmer, Rajasthan	90	27.02	213.17
NTPC Solar PV Station at Gandhar, Bharuch, Gujarat	20	25.7	45.05
NTPC Solar PV Station at Kawas, Surat, Gujarat	56	27.35	134.26
NTPC Solar PV Station at Navalakapatti, Ettayapuram, Tuticorin, Tamil Nadu	230	26.72	538.72
NTPC Solar PV Station Nokh-I at Nokh Solar park, Pokran, Jaisalmer, Rajasthan	245	31.68	680.38
NTPC Solar PV Station Nokh-II at Nokh Solar park, Pokran, Jaisalmer, Rajasthan	245	32.97	708.08
NTPC Solar PV Station Nokh-III at Nokh Solar park, Pokran, Jaisalmer, Rajasthan	245	32.97	708.08
NTPC REL Khavda Solar PV station at Kutch, Gujarat	310	33.32	774.02
NHPC Solar PV station at Khavda, Bhuj, Kutch, Gujarat	500	33.59	1472.25

- z. TGDSCOMs submitted that they are entrusted with dual responsibility of not only ensuring reliable & uninterrupted power supply but also to optimise the cost. Apart from these, TGDSCOMs are also obliged to fulfil the RPPO obligations entrusted by TGERC/MoP.
- aa. Considering the projected demand as envisaged by CEA in the Report on Resource Adequacy Plan for the state of Telangana (2024-25 to 2034-35),

the following deficit is projected for complying with the said MoP RPPO targets -

FY	Projected load as per CEA		Total targeted RPPO % as per MoP	RE energy required to meet MoP RPPO MU	Existing PPAs (including 200 MW from NLC)		Deficit	
	MU	MW			MU	MW	MU	MW
2024-25	90962	16877	29.91	27207	17344	8754	9863	5118
2025-26	96596	18138	33.01	31886	21548	11202	10338	5364
2026-27	102732	19529	35.95	36932	22023	11292	14909	7736
2027-28	108932	20968	38.81	42277	22187	11400	20090	10424
2028-29	115347	22488	41.36	47708	22275	11499	25433	13197
2029-30	122627	24215	43.33	53134	22487	11640	30647	15902

Objections/Suggestions/Comments of Stakeholders, Replies of Petitioner's and Commission's Analysis and Findings

8. The following is the analysis of the objections/suggestions of the stakeholders and the Commission's view in the matter of proposals of TGDISCOMs (Petitioner) seeking consent u/s 63, 86(1)(b) of the Electricity Act, 2003 and u/s 21(4) of Telangana Electricity Reforms Act, 1998 for procurement of 200MW Solar power from NLCIL under CPSU (Central Power Sector Undertaking) Scheme Phase - II Tranche - III.

I. VGF SUPPORT AND TARIFF :

Stakeholder's Submissions

9. The Stakeholder commented that TGDISCOMs have sought consent of the Commission for procurement of 200 MW solar power from NLCIL from Kutch, Gujarat. And also commented that, 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.
10. Further submitted that, 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.

11. The stakeholder stated that, in the name of encouraging domestically manufactured solar photovoltaic cells and modules, and to reduce impact of 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.
12. Further stated that, 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.

Petitioner's Replies

13. The TGDISCOMs have stated that the CPSU Scheme modalities along with VGF permissible limit are as decided by the MNRE.
14. TGDISCOMs also submitted that, 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 Commission.

15. TGDISCOMs have mentioned that 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. 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, CERC adopted a solar tariff of Rs.2.60/kWh and trading margin of Rs.0.07/kWh.

Commission's Analysis and Findings

16. The Commission notes that the procurement of 200 MW solar power from NLCIL is proposed under the CPSU Scheme Phase-II, as per the guidelines of the Ministry of New and Renewable Energy (MNRE). The DISCOMs have submitted that this power is required to meet Renewable Purchase Obligation (RPO) targets and the project qualifies under the scheme due to the use of domestically manufactured solar photovoltaic cells and modules, with financial support in the form of Viability Gap Funding (VGF). While the original discovered usage charge was Rs. 2.45/kWh, it was later revised to Rs. 2.57/kWh primarily due to increase in GST rates on solar equipment and services.
17. One of the stakeholders by name Sri. M. Venugopala Rao, has submitted that on account of increase in the GST the price has gone up from Rs. 2.45/kWh to 2.57/kWh thereby purchasing of solar power from competitive bidding will be more economical than that of purchasing from NLCIL. However, the Discoms stated that the solar power procured from the imported solar PV cells / modules the price could be more as it attracts the 40 % BCD, thereby the total cost will be more. Considering the above, the submissions of stakeholder can not be accepted.
18. The Commission has observed that, CERC in its recent order for adoption of tariff in case of PPA between GUVNL (Gujarat Urja Vikas Nigam Limited) and SAEL Industries for 600 MW has approved tariff of Rs. 2.60 / kWh plus a trading margin of Rs. 0.07 / kWh. In October 2024, CERC adopted tariff of Rs. Rs. 2.56 / kWh to Rs. 2.57 / kWh including trading margin for Solar Energy

Corporation of India 1.5 GW solar projects. Levelized tariff of Rs. 3.13 / kWh was determined by this Commission for projects under PM KUSUM Component-A. In view of the above, the proposed tariff of Rs. 2.57 / kWh for procurement of 200 MW of solar power from NLCIL under CPSU scheme Phase-II, Tranche-III is competitive price.

19. Above all, it is for the CERC to adopt the tariff discovered through competitive bidding, thereby whenever occasion arises the stakeholders can raise all the objections before the CERC for fixation of the fair price.

II. CAPACITY UTILISATION FACTOR

Stakeholder's submissions

20. The stakeholder has submitted that 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.

Petitioner's Replies

21. TGDISCOMs have submitted that, the better CUF of 28.69% is resulting in lower tariff of Rs 2.57/unit.

Commission's Analysis and Findings

22. The Commission noted that in the PUA:
- i. The maximum CUF for the first year is 28.5% subject to revision after one year and energy above the maximum Annual CUF shall be transferred to Power User at 75% of the applicable Power Usage Charges.
 - ii. If NLCIL is unable to supply minimum 368.172 MU on Annual basis (ie., 21% Annual CUF), for the deficit amount, NLCIL shall pay 25% of the applicable Power Usage Charges as to make good the cost of RPO obligations to the Telangana State Discoms.

The Commission is of the view that the tariff applicable will be as per the tariff to be adopted by the CERC, which will ensure that the competitive bidding process is followed as per MNRE guidelines. The tariff adopted by the CERC will be applicable for the entire term of PUA.

III. INTRA STATE PROCUREMENT Vs INTER STATE PROCUREMENT

Stakeholder's submissions

23. The stakeholder submitted that, 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.” The stakeholder questioned as 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.
24. Further stated that NLC in the letter dated 14-11-2022 to the Special Chief Secretary, Energy Department, Govt. of Telangna proposed to set up the 200 MW solar PV plant in Telangana as follows, “Out of 510 MW CPSU Solar Power, 200 MW is available for usage of Telangana Govt. Establishing the 200 MW Solar Project under CPSU Scheme in Telangana, will further bolster not just the partnership between NLCIL and Govt. of Telangana, but also help to fulfill the RPO obligation of the State and contribute towards the National targets for RE capacity and Energy Transition goal. Developing the Project within the state with STU connectivity will also bring economic benefits to Govt. of Telangana.” If the plant was setup in Telangana instead of Kutch in Gujarat the state would not have to undertake burden of ISTS charges. It was not known why Telangana Government did not take up this offer. According to the present petition the Power Usage Agreement was signed on 27-08-2024 and CoD of the plant has to be achieved within 18 months from this date. In case NLCIL has not yet started setting up this plant in Kutch, Gujarat TGDISCOMs may explore the possibility of setting up this plant in Telangana. In that case

TGDISCOMs and consumers in the state will benefit from avoiding ISTS charges.

Petitioner's Replies

25. TGDISCOMs have submitted that 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.
26. Further TGDISCOMs have submitted that it is been informed that the required land to the tune of 528 Acres identified in the villages of Zura and Loriya of Bhuj District been acquired. Letter of Award is placed on M/s Kosol Energie Pvt. Ltd. on 16.10.2023 for development of 200 MW Solar Power Project. M/s CTUIL has granted the connectivity for the project at Bhuj-PS SubStation and Bay No. 222 is allotted for the project. Connectivity agreement is signed with CTUIL on 22-04-2024.

Commission's Analysis and Findings

27. In Telangana, maximum CUF of existing solar plants is up to 21%, whereas, in states like Gujarat, Madhya Pradesh and Rajasthan, a CUF up to 28.5% can be achieved due to high solar radiation. With increasing land cost in the Telangana State, which is one of the major factors in determining the tariff and lower CUF when compared to the states of Gujarat, Rajasthan and Madhya Pradesh, the tariff of Rs. 2.57/kWh appears to be reasonable.

IV. WAIVER OF ISTS CHARGES

Stakeholder's submissions

28. The stakeholder submitted that, 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 be 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. Stakeholder questioned about the position of implementation of the subject plant. And stated that moreover, benefits of the said waiver are being denied in the form of the GNA regulations and orders of the CERC.

29. Further submitted that, 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 Power 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.” The stakeholder stated that 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 is not clear in the PUA. 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.
30. The stakeholder submitted that the proposed solar power plant is located in Kutch district of Gujarat. Inter State Transmission System/National grid has to be used to transmit this power to Telangana. According to Clause 1.2 (xxii) of the Power Usage Agreement, “Interface point of Solar PV power station with the transmission system developed by CTU at 765/400/200 KV Bhuj PS substation in Village Palanpur (Badi), Taluka – Nkhatrana, 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 NLCIL. All the associated transmission charges and losses beyond the point of interconnection of Solar Project shall be borne by selected Power Users..." According to Clause 3.1 of the Power Usage Agreement, "Transfer of title of Energy shall be at the Interconnection Point/Metering Point/ Delivery Point. Power User shall make the required arrangement for evacuation of Energy beyond the Interconnection Point/Metering Point/ Delivery Point." But according to Letter of Award dated October 04, 2021 issued by IREDA to NLCIL, "... Waiver of ISTS charges and losses, for use of ISTS network, shall be available to Projects set up under the CPSU Phase – II Scheme." Further offer letters dated 18-02-2023 sent by NLCIL to DISCOMs all over the country included an assurance related to use of ISTS network as follows, "As per orders/guidelines issued by MoP, waiver of ISTS charge for use of ISTS network is available to projects setup under the CPSU Phase – II Scheme." NLCIL in its letter dated 20-04-2023 to D. Prabhkar Rao, C&MD of TGTRANSCO reiterated it as follows, "Waiver of ISTS charge for use of ISTS network shall be available to projects setup under the CPSU Phase-II Tranche-III Scheme, as per relevant orders/guidelines issued by government authority..." Given these contradictory provisions related to use of ISTS network it has to be clarified whether 200 MW solar power being contracted by TGDISCOMs from NLCIL under CPSU Phase – II, Tranche – III is eligible for waiver of ISTS usage charges.

31. And also submitted that ISTS charges will be about Rs. 1.20 per unit. If these ISTS charges are included total unit cost of this solar power to Telangana will be Rs. 3.77 (2.57+1.20). ISTS charges will account for more than 30% of the cost of accessing this solar power. If waiver of ISTS charge as promised is not forthcoming it is advisable to exit this Power Usage Agreement and set up the solar PV plant of similar capacity in Telangana itself.

Petitioner's Replies

32. TGDISCOMs have submitted that MoP order dated 23rd November 2021 granted waiver of inter-state transmission 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

33. Further, TGDISCOMS submitted that, 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 and ISTS losses are applicable for the power scheduled from the subject project.
34. TGDISCOMs further submitted that the standard bidding guidelines of MoP enable transfer of title of energy from interconnection/delivery/metering point. As such power evacuation responsibility from the Inter-connection point lies on the DISCOMs. As the Solar plant of NLCIL is proposed to be located at Kutch, Gujarat, ISTS charges are attracted.

Commission's Analysis and Findings

35. As per the PUA, SCOD of the project shall be 18 months from signing of this agreement (or) scheduled commissioning date approved by MNRE for projects under CPSU Scheme Phase-II whichever is earlier.
36. The date of signing of the present PUA is 27.08.2024. So, the SCOD shall be 26.02.2026 or SCOD approved by the MNRE, whichever is earlier. The Scheduled Commissioning Date is 31.03.2025, as per the MNRE letter dated 05.07.2024. And as per MoP order dated 23.11.2021, the ISTS charges are 25 % of applicable ISTS charges for the plants that are commissioned between 01.07.2025 to 30.06.2026 and the waiver shall be applicable, for a period of 25 years from the date of commissioning of the power plant.
37. The SCOD date as per PUA is 26.02.2026 which falls in between the period of 01.07.2025 to 30.06.2026, it means that the 25% charges of ISTS will be applicable for the proposed procurement of 200 MW by NLCIL. With a tariff

specified as Rs. 2.57/kWh seems competitive when compared with other recently commissioned solar power projects.

V. RPPO COMPLIANCE

Stakeholder's submissions

38. The stakeholder submitted that, in its order in OP No.32 of 2025 dated 22.4.2025, the 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 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 Gol under Energy Conservation Act only guide the TGDISCOMs to see that more and more renewable energy is integrated into the system which ultimately 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.

Petitioner's Replies

39. The TGDISCOMs have submitted that 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 Amendment, Ministry of Power, Gol, 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).

Commission's Analysis and Findings

40. As per the relevant provisions of the Tariff Policy, 2016 as notified by the Government of India and under the provisions of Section 86(1)(e) of the Electricity Act, 2003 the appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of a distribution licensee for purchase of energy from renewable energy sources, taking into account availability of such resources and its impact on retail tariffs. Cost of purchase of renewable energy shall be taken into account while determining tariff by SERCs. As per the above provisions, the Commission has fixed RPPO targets vide Regulation No. 7 of 2022.
41. 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.
42. 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. Whether there are targets or not, the TGDISCOMs shall make all the efforts to see that the renewable energy integration is increased year by year. Therefore, keeping in view of totality of the circumstances this Commission is of the view that the efforts being made by TGDISCOMs in integrating the renewable energy can be encouraged.

VI. CEA POWER DEMAND PROJECTIONS

Stakeholder's submissions

43. The Stakeholder requested to examine that 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 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.
44. The stakeholder mentioned that, once consents are given by the 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.

Petitioner's Replies

45. TGDISCOMs have submitted that, 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.

46. TGDISCOMs have submitted that 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

Commission's Analysis and Findings

47. The Commission observes that while differences exist between the energy and peak demand projections made by the Central Electricity Authority (CEA) and those approved by the Commission in the resource plan, the underlying concern is not merely the choice of one dataset over another. The broader issue is the evident and consistent upward trend in power demand in the State of Telangana, which is driven by expanding economic activity, increased electrification, and policy-driven development.
48. The Commission notes that the Power Purchase Agreements (PPAs) in question are long-term commitments, typically spanning 25 years. Therefore, planning must adopt a forward-looking perspective that accounts for potential demand growth over an extended horizon. In this context, the CEA's Resource Adequacy Reports, while potentially conservative, serve as important guiding documents for national and regional capacity planning, and cannot be disregarded.
49. The Commission is in agreement with the concerns of the stakeholders that a cautious approach has to be adopted while entering into the PPAs for addition of power. As discussed in the previous paragraphs this Commission has taken into consideration growth trajectory and also considered the fact that the power demand in the state of Telangana has surpassed all the projections of CEA and the directives of this Commission etc., thereby taking into the statistics of real time power utilisation of the state, the consent is being given by closely scrutinising the relevant documents submitted by the Discoms.

VII. NEED FOR POWER GENERATION CAPACITY ADDITIONS

Stakeholder's submissions

50. The Stakeholder submitted that the 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 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.

Petitioner's Replies

51. TGDISCOMs have submitted that the State DISCOMs are entrusted with the dual responsibility of not only to adhere to the various regulations/orders issued by TGERC/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.
52. 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.

Commission's Analysis and Findings

53. The Commission is in agreement with the concerns of the stakeholders that generation capacity additions should be gradual in tune with the growing demand for power by balancing load curve and power mix and the Commitment of the GOI to source 50% of capacity from RE by 2030. The procurement of power shall be only in the interest of the consumers and not otherwise with the need to balance commitment and aims with actual requirements.
54. The Commission notes that the TGDISCOMs are entrusted with the dual responsibility of not only to adhere to the various regulations/orders issued by TGERC/CERC/ MNRE/MoP but also the bigger mandate enlisted in the Electricity Act 2003, which is to maintain reliable power supply with least cost principle. With 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.

55. The Commission identified the fact that the tariff from solar plants is lower than the tariff of the other thermal plants which benefits the consumer for a period of 25 years and the variable cost of thermal power is increasing day by day. In contrary, the energy charges through solar is static and likely to decrease. Thereby considering from many angles though it appears that the State has got excess power, still keeping in view of future needs, this Commission is of the opinion that permitting the TGDISCOMs to go ahead with this 200 MW is not unjustified.

VIII. PM KUSUM SCHEME

Stakeholder's submissions

56. The stakeholder stated that 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.
57. Further, the stakeholder submitted that in its order on PM KUSUM scheme, the 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 Eols 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 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 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.

Petitioner's Replies

58. TGDISCOMs have submitted that 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.
59. Further submitted that 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.

Commission's Analysis and Findings

60. The Commission has taken note of both the stakeholder and petitioner. In the replies for the objections raised by the stakeholder, the petitioner replied that the PUA was signed on 27.08.2024, soon-after then, petition was filed before TGERC seeking consent. In this regard, the petition is taken into record of the

Commission for approval of the procurement for 200 MW along with the PUA entered between the TGDISCOMs and M/s. NLCIL.

61. Further, the Commission has considered the concerns of the stakeholders and noted with concern that the Discoms have not taken prior consent of the Commission for procurement of power and PUAs were signed. **Thereby TGDSICOMS are here by directed to take in principal approval of this Commission here after prior to giving consent for procurement of power from any sources.**

IX. GOVERNMENT USERS UNDER CPSU SCHEME PHASE-II, TRANCHE-III

62. Stakeholder's submissions

The stakeholder mentioned that, according to the design of the CPSU Scheme Phase-II and Tranche-III of the Gol, under which the proposed solar plant is being set up, power generated in this plant has to be used by the Government or Government entities. Under this scheme third party sales is also not allowed. Given this design of this scheme, it is important to identify the Government Departments that will use this power.

Petitioner's Replies

63. TGDISCOMs have submitted that the CPSU Scheme mandates for power usage for self-use or use by Government / Government entities, either directly or through DISCOMs. As such, it is proposed to meet the Lift Irrigation loads from the power under this scheme.

Commission's Analysis and Findings

64. The Commission has taken note of the objections of the stakeholder and the replies of the petitioner. The Commission has identified the fact that the petitioner has proposed the present procurement to meet the Lift Irrigation loads from the power under this scheme to meet the conditions of use of power by the Government entities.

Commission's Ruling

65. The Commission considered the submissions of the petitioner, objections / suggestions of stakeholders, replies furnished by the petitioner and perused the records available with the Commission. This Commission is empowered to pass these orders on the petitions filed by the TGDISCOMs on the basis of policies of the Central Government, State Government, relevant provisions of Electricity Act, 2003, and Electricity Reforms Act, 1998 and relevant regulations of this

Commission. The relevant provisions under Electricity Act, 2003 and regulations are extracted here under:

Provisions under the Electricity Act, 2003 and Regulations

66. Following are the Regulatory provisions in the matter of approval for consent of arrangement (PPA) for the purchase of electricity by a distribution licensee from any person or Generating Company and determination of tariff by the Commission.

“Section 21 (4) of the Telangana Electricity Reform Act, 1998 (Act 30 of 1998) r/w the Telangana Gazette No.130 dated 1st June, 2016 and G.O.Ms.No.45, Law (F), 1st June, 2016 [Restrictions on licensees and Generating Companies]

- (4) A holder of a supply or transmission licence may, unless expressly prohibited by the terms of its licence, enter into arrangements for the purchase of electricity from, -
- (a) the holder of a supply licence which permits the holder of such licence to supply energy to other licensees for distribution by them; and
 - (b) the any person or Generating Company with the consent of Commission

Section 86 (1) (b) of the Electricity Act, 2003 [Functions of State Commission]

- (b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall 4 of 28 be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State.....

Section 63 of the Electricity Act, 2003 [Determination of Tariff by Bidding Process]

Notwithstanding anything contained in Section 62, the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government.

Relevant provisions of TGERC Regulation No 02 of 2023

- 16.3 All future procurement of short-term or medium-term or long-term power shall be undertaken only through tariff based competitive

bidding in accordance with Guidelines notified by the Government of India under Section 63 of the Act'

67. The Commission has considered the following for approval of procurement of 200 MW Solar power from NLCIL under CPSU(Central Power Sector Undertaking) Scheme Phase - II Tranche – III vide OP. NO: 29/2025
- a) To meet the additional demand arising out of load growth, 24x7 reliable and quality power supply to all the categories of supply including agriculture and Lift Irrigation Schemes;
 - b) To optimize the power purchase cost.
 - c). To integrate more and more renewable energy into the system which ultimately will be helpful in reducing use of the thermal energy so that carbon emission will get reduced.
68. TGDIs are directed to ensure waiver of ISTS charges as assured under Ministry of Power Order dated 23.11.21 on waiver of Inter State Transmission charges.
69. In view of the above, and as discussed in the foregoing paragraphs on dealing with the issues based on the suggestion / objections / comments received from the stakeholders, the Commission hereby accords consent under Section 86 (1) (b) of the Electricity Act, 2003 for procurement of 200 MW of solar power from NLCIL Solar PV Station of 200 MW at Kutch District, Gujarat at a tariff of Rs. 2.57 / kWh under CPSU Scheme Phase-II Tranche III.
70. Further TGDIs are directed to approach this Commission for approval of the PUA after adoption of tariff by the CERC.

Accordingly, this petition is disposed of.

This Order is typed to dictation, corrected and signed on this 17th day of May, 2025.

Sd/-

(Dr. JUSTICE DEVARAJU NAGARJUN)
CHAIRMAN

//CERTIFIED COPY//

Annexure-I



TELANGANA ELECTRICITY REGULATORY COMMISSION
Vidyut Niyantran Bhavan, GTS Colony, Kalyan Nagar, Hyderabad, 500 045

BEFORE THE HON'BLE
TELANGANA ELECTRICITY REGULATORY COMMISSION
Vidyut Niyantran Bhavan, G.T.S. Colony, Kalyan Nagar, Hyderabad 500 045

Southern Power Distribution Company of Telangana Ltd (TGSPDCL)

Northern Power Distribution Company of Telangana Ltd (TGNPDCL)

PUBLIC NOTICE

TGDISCOMS viz., Southern Power Distribution Company of Telangana Limited (TGSPDCL) and Northern Power Distribution Company of Telangana Limited (TGNPDCL) submitted before the Telangana Electricity Regulatory Commission (TGERC) following petitions.

- 1) Seeking consent u/s 63, 86(1)(b) of the Electricity Act, 2003 and u/s 21(4) of Telangana Electricity Reforms Act, 1998 for procurement of 200MW Solar power from NLCIL under CPSU(Central Power Sector Undertaking) Scheme Phase – II Tranche – III vide OP. NO: 29/2025
- 2) Seeking consent u/s 86(1)(b) of the Electricity Act, 2003 for procurement of power from 1X 800 MW stage -II, Singareni Thermal Power Project for a period of 25 years vide OP. NO: 30/2025
- 3) Seeking consent u/s 86(1)(b) of the Electricity Act, 2003 for procurement of power from 1 unit (1X800MW) of Telangana Super Thermal Power Station Stage-II as against power sale offered from 3 units (3X800MW) for a period of 25 years vide OP. NO: 31/2025

Copies of these filings along with the related documents are uploaded on the Commission's website www.tgerc.telangana.gov.in and also in TGDISCOMS websites <https://tgsouthernpower.org> , <https://tgnpdcl.com/>. Suggestions / Objections / Comments if any, in the subject matter are invited from all stakeholders and public in large, so as to reach the following address on or before 19-04-2025 by 5.00 PM.

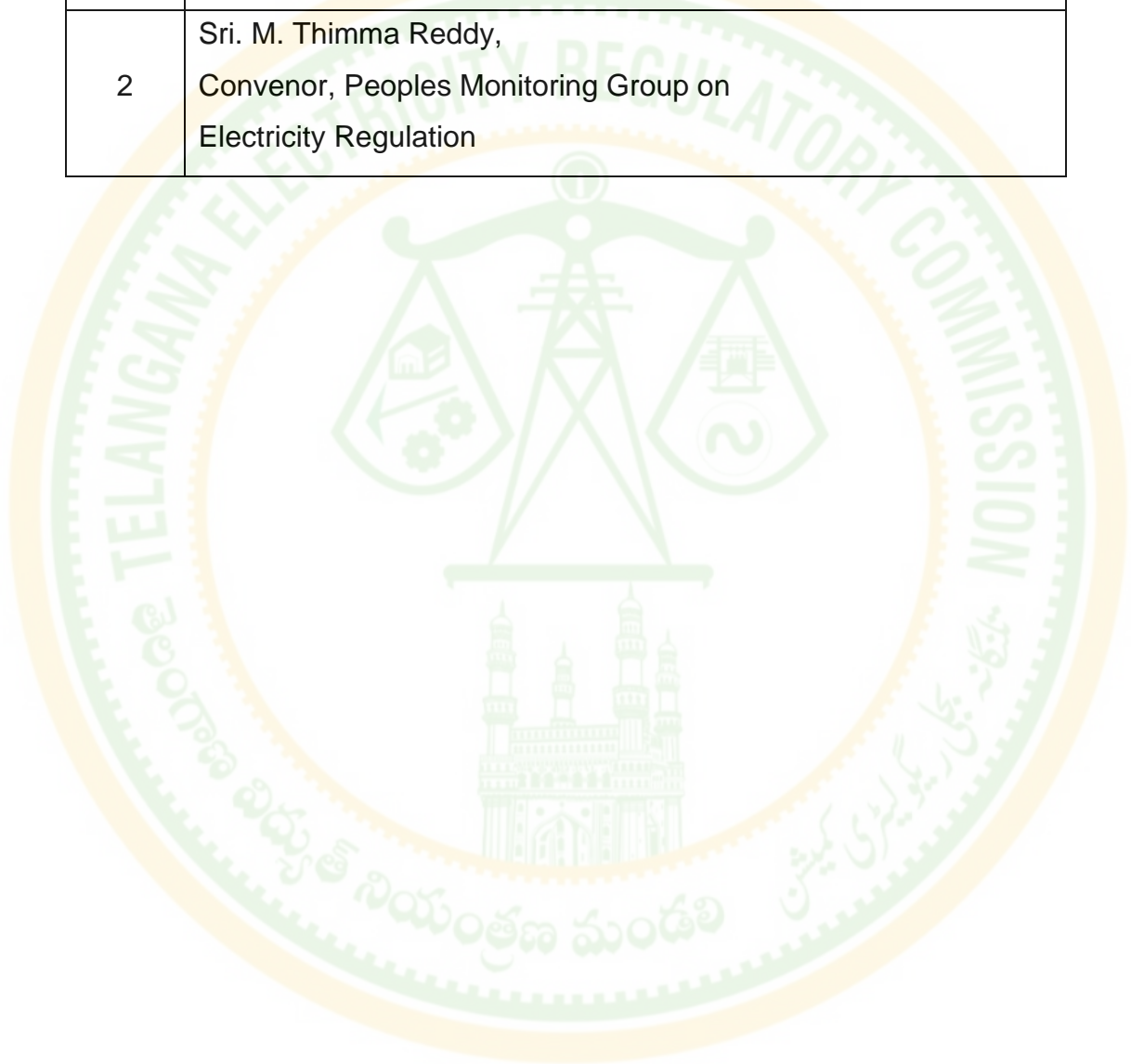
Commission Secretary,
Telangana Electricity Regulatory Commission,
Vidyut Niyantran Bhavan, G.T.S. Colony, Kalyan Nagar,
Hyderabad, 500 045.
Email ID: secy@tserc.gov.in

The Public Hearing in the subject matter will be held on 28-04-2025 from 11:00 hrs onwards at TGERC Court Hall.

COMMISSION SECRETARY

Date: 29.03.2025

<u>Annexure-II</u>	
List of Stakeholders who submitted written suggestions and comments before public hearing	
Sl.No.	Name of the Stakeholder
1	Sri. M. Venugopala Rao Senior Journalist & Convener, Centre for Power Studies
2	Sri. M. Thimma Reddy, Convenor, Peoples Monitoring Group on Electricity Regulation



<u>Annexure-III</u>	
List of Stakeholders who submitted suggestions and comments in Public Hearing	
Sl.No.	Name of the Stakeholder
1	Sri. M. Venugopala Rao Senior Journalist & Convener, Centre for Power Studies

