Replies of TSTRANSCO to the Objections & Suggestions of Sri M. Venugopala Rao, Senior Journalist, Hyderabad on Resource Plan Petition filed TSTRANSCO for 5th & 6th Control Period (O.P. No. 09 of 2023 of TSERC)

SI. No	Objections/Suggestions	Reply of TSTRANSCO
1	We thank the Hon'ble Commission for deciding to hold public hearing on the subject issue. There is no response from the Hon'ble Commission to extent time for filing submissions on the subject issues. We have concentrated on the load forecasts, etc., of TS DISCOMs for filing submissions, with second extension of time up to 15.7.2023 which information is uploaded in the website of the Commission belatedly. As such, time is found to be inadequate to study and analyse the subject issues in detail.	Submission to the Commission.
2	For the state of Telangana TSTRANSCO has presented the following forecasts for the 5 th control period: 2024-25 2025-26 2026-27 2027-28 2028-29 Energy requirement At grid level MU 85357.52 90216.22 95332.94 100951.93 106858.16 Peak load at Grid level MW 17639 18644 19706 20868 22092 Annual load factor 55.24% 55.24% 55.23% 55.22% 55.22% Transmission loss% 2.48% 2.46% 2.46% 2.44% 2.42% Energy availability	Submission to the Commission.

121683.69 12683	128247.74 39.54	127966.87	127544.21
Energy surplus Deficit MU 36326.17	38031.52	32633.94	26592.28

3

TSTRANSCO has submitted that the purpose of Resource Plan is to present a comprehensive summary of the process, assumptions, methodology, Transmission network expansion plan and investment required to ensure necessary Transmission system suitably to meet the demand growth anticipated during FY 2028-29. The proposed Transmission system required for the FY 2028-29 ending in the 5th Control Period is accessed for the estimated peak load of 20486 MW and additional Generation evacuation, it has explained. Under transmission resource plan, it has proposed an investment of Rs.3001.85 Crore during the 5th control period, based on the estimated peak load and additional generation evacuation, which is not explained with details. While energy requirement projected to be increasing by about 5000 MU per annum during the 5th control period, availability of energy is projected to be stagnating during the last four years of the same control period, with availability of abnormal quantum of surplus power every year.

- TSTRANSCO has planned the transmission system for the 5th Control Period (FY 2024-25 to FY 2028-29) for an investment of Rs.3001.85 Crore to meet the year wise load growth, system strengthening, and to meet the upcoming bulk loads such as Integrated Steel Plant, Kollur and Dandu Malkapur.
- The transmission system was planned considering the various assumptions and standards of CEA Transmission Planning criteria, 2023 such as Loading Limits of Transmission Lines, Maximum Capacity reached on Substations, Voltage Limits, Contingency Criteria, Maximum Short Circuit Level. The copy of the relevant extract of CEA Transmission Planning criteria, 2023 is herewith enclosed.
- The quantum of surplus energy during FY 2024-25 is due to the addition of new generating plants of Yadadri Thermal Power Station with installed capacity of 4000 MW (5x800 MW) with estimated CODs of Unit#1 Dec'2023, Unit#2 Mar'2024, Unit#3 May'2024, Unit#4 July'2024 ,Unit#5 Sept'2024 and Telangana STPP with installed capacity of 1600 MW (2x800 MW) Unit-I is ready for sychronisation and Unit-II is being made ready. The above said generating stations are planned to meet the estimated Peak demand as well as future energy requirement.
- The quantum of surplus energy in the FY 2024-25is 36326.17 MU will be gradually reduced to 19981.38 MU during FY 2028-29.

4	Guidelines for load forecasts, resource plans and power procurement issued in December 2006 by APERC and adopted by TSERC rightly underline the imperative of ensuring "an adequate, safe, and economical supply of electricity" to the consumers. It is also emphasized that "the power procurement plan shall be an optimal least-cost portfolio of long-term and short-term (least financial cost," "with the ultimate objective being to make available secure and reliable power supply at economically viable rates to all consumers," "to optimise trade-off between price risk and demand variation," "fuel diversity in power procurement," "supplier diversity and viability," "the plan for additional power procurement indicating portfolio mix of unit sizes, technology and fuel type, capacity contracted to meet peak/off-peak and seasonal load," etc. In other words, the following points, among others, should be the objectives of	As per "Guidelines for load forecasts, resource plans and power procurement issued in December 2006 by APERC and adopted by TSERC "
5	load forecast, and resource and investment plans of the licensees: Availability of abnormal quantum of surplus power during the 5 th control period will have the following consequences detrimental to larger consumer interest:	➤ The Peak power availability (MW) must be ensured to meet the Peak demand, which would occur during a specific period of time (Morning Peak and Evening Peak), whereas the Energy Availability (MU) should be ensured to meet the energy demand over a day's period.
	a) If surplus power cannot be sold in the market profitably or at least without any loss, it will have to be backed down and hefty fixed charges have to be paid there for, with	➤ The Demand would be projected considering major increase in Loads and certain percentage increase in Category-wise Loads, which may incident or not in actual scenario. But TSDISCOMs would need to ensure projected Peak power Availability. Hence, during any Financial Year, the surplus power may be available for some of the days mostly on Non – RTC Period.

associated technical and financial problems, as has been the experience during the 4h control period.	 The surplus power would be dealt in following two ways Bidding the surplus power in Power Exchanges at profitable price duly analyzing the day to day market trends. TSDISCOMs enter into Banking PSAs with other utilities under Banking arrangement, for off-taking the power in deficit period and returning the availed power during surplus power period, so as to utilize the surplus power in a most economical way.
b) If transmission and distribution capacities are added based on total availability of energy/installed capacity, it will lead to over-investment and under-utilisation of capacities added.	• TSTRANSCO has planned the transmission system based on the estimated Peak Demand, but not on the energy availability. The surplus power during light load conditions will be exported through Inter-State transmission system (ISTS) as the load is dynamic in nature. Further, the optimal
c) Depending on the kind of approvals given/to be given by the Hon'ble Commission, avoidable additional burdens will be imposed on consumers at large for availability of abnormal quantum of surplus power and under-utilization of transmission and distribution capacities created so far and proposed to be added during the 5 th control period exceeding requirements	transmission system was planned duly considering the various assumptions and standards of CEA Transmission Planning criteria, 2023 which will not certainly lead to over-investment. Further, under utilization is also very rare except in case of sudden climate changes and cyclone storm situations. Therefore, it is not desirable to consider under-utilization situation in the planning.

The projections show utter inefficiency in planning to maintain prudent balance between requirement for power to meet fluctuating and growing demand and ideal power mix. In the face of projected requirement for energy for the five financial years of the 5th control period, energy availability is projected to be almost stagnant, with abnormal quantum of surplus availability during the entire control period, confirms anarchy in the policy approaches and decisions of the powers-that-be and the regulatory approaches in giving consents to PPAs entered into indiscriminately with power projects by the TS DISCOMs, obviously, at the behest of the Government of Telangana and the GoI. With CMD of TSTRANSCO, as chairman of the Telangana State Power Coordination Committee, which has been planning requirements of power sector in the state, TRANSCO, too, has its share of responsibility for this kind of anarchy. All our valid objections and prudent suggestions submitted during public hearings conducted by the Hon'ble Commission on various issues over the years cautioning about the impending problems of DISCOMs being, and will be, saddled with unwarranted surplus power with resultant disastrous consequences and imposition of avoidable burdens on consumers of power at large fell on the deaf ears of the powers-that-be. But the disastrous reality continues to be staring in the face. The projections of the DISCOMs also confirm that the irretrievable and irreparable damage that has been caused so far will continue during the 5th control period as well.

• The comparison statement of Energy Requirement and Peak Load projections of TSDISCOMs with Central Electricity Authority (CEA) 20th Electric Power Survey (EPS) for the 5th control period is furnished in the following table for your kind perusal, which is a self-explanatory.

FYs	2024-25	2025-26	2026-27	2027-28	2028-29	CAGR
Comparison of C	Comparison of Consolidated Energy Requirement (MU)					
TSDISCOMS (MU)	85358	90216	95333	100952	106858	5.78 %
20th EPS of CEA (MU)	81328	86365	91852	97395	103130	6.12 %
Comparison of Peak Load (MW)						
TSDISCOMS (MU)	17639	18644	19706	20868	22092	5.79 %
20th EPS of CEA (MU)	16877	18138	19529	20968	22488	7.44 %

• TS DISCOMS projected the Energy Requirement and Peak Load with CAGR of 5.78% and 5.79% respectively which are less compared to 20th EPS projections of 6.12% and 7.44%.

The past, present and the projected future situation confirms that the GoTS and its power utilities failed miserably and continue to fail to follow the elementary principles of entering into long-term PPAs in a prudent manner to ensure balance between requirement of power and its procurement, to ensure the kind of ideal power mix that can lead to optimum load factor to the extent practicable, addition of generation capacity in a phased manner in tune with fluctuating and growing demand. In other words, they failed and continue to fail in following the above-mentioned guidelines for load forecasts, resource plans and power procurement. Bureaucratic subservience to the diktats of the government of the day, whether they are prudent or questionable and detrimental to larger public interest, is inherent in the system, with honourable exceptions. As independent quasi judicial bodies with powers of a civil court, ERCs are expected to exhibit professional integrity, intellectual honesty and moral courage to exercise their authority timely and fully, within the limitations of law, to recognise and tell the truth, what is right or wrong, to protect larger consumer interest. That is the very reason and purpose for the creation and continued existence of ERCs. Executive diktats of the governments, both at the centre and in the states, encroaching upon the powers and responsibilities of the ERCs, without legal sanctity, need not be followed mechanically. ERCs are expected to act assertively, within the limitations of, and in accordance with, law, to protect larger consumer interest to the extent possible.

Submission to the Commission

The regulatory process of the Commission should not facilitate concealing of all the relevant information from public gaze and consumers of power at large are entitled to know the reality, as they are, and will be, bearing all the burdens relating to the expenditures being and proposed to be incurred by the power utilities of GoTS and approved by the Commission. The prudence check by the Hon'ble Commission should cover how the process of tendering, their terms and conditions, for selection of bidders for purchases being made by the power utilities of the state government and prices and charges being finalised by them for purchase of materials and maintenance charges with required comparative study based on results and experience in other states and market trends relating to the issues concerned and the details be made public. Experience confirms that successive Commissions have been avoiding making such information public.

Submission to the Commission

- TSTRANSCO has to explain whether it is going to add transmission capacity based on the projected availability of total power or in accordance with the projected requirement. It has to explain how it added transmission capacity during the 4th control period and to what extent it has been really required to meet demand, in the face of availability of abnormal quantum of surplus power. Going by the projections of availability of power during the 5th control period, with almost no addition of generating capacity, TSTRANSCO must have already added transmission capacity as per availability during the 4th control period and some of the works must be under execution. Under such a
- The transmission system is planned suitably time to time to meet the estimated Peak demand arrived from projected energy requirement. Telangana state Peak demand during the state formation was 5661 MW on 06.06.2014 is now has been increased to 15497 MW on 30.03.2023. Telangana state energy per capita consumption was increased from 1196 units (2014) to 2140 units (2023), which is almost doubled.
- To meet the abnormal load growth during 3rd control period (FY 2014-15 to FY 2018-19) and 4th control period (FY 2019-20 to FY 2023-24), to overcome the huge power deficit and to maintain quality and reliable power supply to the consumers, generating stations such as BTPS (4x270 MW), KTPS- VII stage (1x800 MW), Yadadri Thermal Power

	situation, TSTRANSCO has to provide justification for its proposed investment plan in terms of evacuating the projected requirement for power.	Station (5x800 MW), Telangana STPP (2x800 MW) for which transmission network was planned on war footing basis to avoid the power evacuation problems from the above generating stations scheduled for commissioning.
10	I request the Hon'ble Commission to provide me an opportunity to make further submissions during the public hearing on the subject issues, after receiving responses of TSTRANSCO to my submissions.	Submission to the Commission