TRANSMISSION CORPORATION OF TELANGANA LIMITED

Replies of TSTRANSCO to the Objections of Sri M. Venugopala Rao Senior Journalist, Convener Centre for Power Studies

1. TSTRANSCO has shown a surplus of Rs.374.92 crore exceeding the ARR approved by the Hon'ble Commission for the years 2014-15 and 2015-16 out of which a sum of Rs.141.35 crore is from tariff. Similarly, it has shown a surplus of Rs.1001.75 crore exceeding the ARR approved by the Commission for the two years 2017-18 and 2018-19 (provisional) out of which Rs.691.14 crore is from tariff. It confirms that the projections being made by Transco and determined by the Commission continue to be inflated, leading to collection of excess amount from the consumers in advance and underlines the need for near realistic projections for expenditure and determination of ARR and tariffs based thereon. Claiming that a sum of Rs.634.60 crore was already passed on to consumers in the tariff order dated 01.05.2017, TRANSCO has proposed true-down of the balance Rs.367.15 crore during the current financial year. Transco has explained that the main reason for increase in revenue is due to increase of revenue from open access consumers. However, the data submitted by Transco needs to be examined in the light of the order dated 01.05.2017 given by the Commission and permissible expenditure and surplus be determined.

TSTransco reply:-

The referred amount of Rs.374.92 crores and Rs.141.35 crores respectively are relating to FY 2016-17 and not for FY 2014-15 and FY 2015-16. The licensee has proposed an amount of Rs.1001.75 crores of benefit to be passed on to customers pertaining to FY 2014-15 to FY 2018-19 (Provl.). Out of Rs.1001.75 crores, the Hon'ble Commission has already adjusted an amount of Rs.634.60 crores by way reduction in tariff while fixing the tariff for FY 2017-18 and FY 2018-19 as "Mid Term Review for FY 2014-15 and FY 2015-16". Hence, the licensee has proposed balance amount of Rs.367.15 crores in FY 2019-20.

2. While TSTRANSCO has claimed that actual transmission losses were reduced to 2.85% during 2018-19, it has projected the same at 3.25% (+/- 0.2%) for the year 2019-20 and a reduction of 0.01 per annum thereafter to reach 3.21% during 2023-24 (+/- 0.2%). TRANSCO has not explained as to why transmission losses have increased from 2.85% during 2018-19 to 3.25% during 2019-20, despite making claimed capital investments of Rs.3226.15 crore and Rs.3031.52 crore for the two years, respectively, and substantial expenditures for operation and maintenance. Even while proposing huge capital investments and operation & maintenance costs for the last four years of the 4th control period, TRANSCO has projected a target transmission loss of 3.21% vis a vis 2.85% achieved during the last year of the third control period. The reduction of transmission losses during 2018-19 shows scope for reducing transmission losses to levels lower than what is projected by it for the 4th control period. We request the Hon'ble Commission to determine realistic targets for reduction of transmission losses during the last four years of the fourth control period.

TSTransco reply:-

TSDISCOMs projected Transmission loss considering the base year (FY 2016-17) transmission loss of 3.37% and projected the transmission losses for the FYs from FY 2017-18 to FY 2028-29. The same was included in the Resource Plan.

Based on the Resource Plan the Transmission losses projected for the FY 2019-20 to FY 2023-24 are included in the ARR filings of TSTRANSCO for the 4th MYT control period.

The projections given in Resource Plan are as per the practices prevailing i.e., data given by estimated values of DISCOMs.

In practice the losses are less than the Projected Losses.

The losses are reduced inspite of network being expanded to cater the loads of 24 Hrs Agriculture supply and Industrial Loads.

This could be possible due to the following measures taken by TSTRANSCO.

- The new Sub-stations are constructed in such away that the long idle transmission lines were effectively loaded thereby increasing the load factor of transmission lines.
- 2) Many EHT transmission lines made LILO to the nearest available substations for effecting the transmission of power at higher voltages.
- 3) The scheduling of power was effectively managed by SLDC thereby reducing the length for which the power is transmitted.
- 4) SLDC of TSTRANSCO has been awarded for the best Grid Management by CEA.

With all the above practices adopted by TSTRANSCO the transmission losses were maintained below the projected values.

Continuing good practices as mentioned above and also with adoption of new technology the losses will be maintained below the projected values of losses.

The revised Resource Plan is also being prepared by TSTRANSCO as per the TSERC instructions.

3. While the Commission estimated generation capacity of 16,196.59 MW against 16160.57 MW projected by TRANSCO for the year 2018-19, TSTRANSCO has now shown a capacity of 16,047 MW. TRANSCO has projected contracted capacity of 15,235 MW only for the year 2019-20, with no addition of capacity and without explaining the reasons for reduction of capacity to the tune of 812 MW compared to the capacity shown for 2018-19. However, it has projected a capital investment of Rs.3521.67 crore during 2019-20. Though we have been requesting the Hon'ble Commission to direct the power utilities of the State Government to submit long-term load forecast and resource and procurement plans, no such plans are submitted by the utilities. In the absence of such forecast and plans for the 4th control period, the basis for TRANSCO to project availability of capacities seems to be the generation capacities to be added during the fourth control period - 1360 MW in 2020-21, 2699.01 MW in 2022-23 and 1600 MW in 2023-24. TRANSCO has claimed that is has already submitted the resource plan comprising transmission load forecast and capital investment plan for the 4th and 5th control periods. Whether the DISCOMs have submitted long-term load forecast and resource and procurement plans is not known. Unless these are submitted

and orders thereon given by the Hon'ble Commission after holding public hearings, the projections of TSTRANSCO may go haywire for the following reasons, among others:

- c) Generation capacities being backed down, especially for purchasing non-conventional energy, would lead to under-utilization of transmission and distribution capacities. Factual position relating to backing down during the last and current financial years needs to be submitted and examined.
- g) Creation of transmission capacity to evacuate power from projects whose timely completion is doubtful would naturally lead to stranded assets and unwarranted financial burdens. Needless to say, addition of transmission capacity for projects concerned should be undertaken and completed in time in such a way that it can be put to use from performance acceptance tests of those projects. Preponing or postponing will have its adverse consequences.
- h) If implementation of projects and schemes for which the proposed additions of generation capacity and transmission capacity are intended is delayed and if transmission capacity required to evacuate power to them is created, it would lead to imposition of heavy and avoidable burdens on consumers of power with a considerable part of capacities created remaining stranded.
- i) We request the Hon'ble Commission not to give its consent for addition of transmission capacity and capital expenditure related thereto as proposed by TSTRANSCO for the generation capacities or anticipated coincident peak demand in MW, without the DISCOMs establishing the need for procuring power from the proposed projects, without entering into PPAs with them and submitting the same for consideration of the Commission well in time. All these proposals should be subjected to test on the anvil of realistic long-term load forecast and resource plan to be determined by the Commission after holding public hearings on the same.

TSTransco reply:-

TRANSCO projected the contracted capacity for the FY 2018-19 of 15021.59 MW, whereas the Hon'ble Commission in the Tariff Order 2017, approved the contracted capacity for the FY of 16047.59 MW.

TSTRANSCO now projected the contracted capacity of 15235 MW for the FY 2019-20.

The decrease in contracted capacity of 812 MW is due to the following aspects. Tariff Order 2017 for FY 2017-18 & 2018-19.

- i. The Power Generation from Thermal Power Plants of VTPS (I to IV) units i.e., 870 MW & RTPP (I to III) units 515 MW totally 1385 MW which was approved for the FY 2018-19, as per Tariff order of 3rd control period 2017, is not considered for the filings of 4th MYT due to cancellation of scheduling of the power (53.89% & 46.11%) between Telangana & Andhra Pradesh w.e.f. 11.06.2017. The Power generated from the power plants located in a state is being scheduled 100% to the respective state only.
- ii. Since there is no power generated from the Independent Power Plants (IPPS) of Konaseema, GVK, Vemagiri & Gouthami Power Plants due to non availability of natural gas, the power generation capacity (783 MW) is not considered in the projected contracted for the 4th MYT.

Hence, the total power generation not considered is 2168 MW.

For 4th MYT

The additional power generation from the Thermal Power Plants of KTPS (V & VI), KTPP-I & RTSB is due to 100% scheduling of power to the respective states only.

= 656 MW.

Power availability of 550 MW from staggered medium term PSA with PTC is considered.

Additions or reductions to power generation sources of CGS, Open Access, Hydel & NCS from previous Tariff Order to the filings of 4th MYT are to be considered.

Long term load forecasts for the 4th MYT & 5th MYT were submitted by DISCOMs. This is the basis for the Resource Plan submitted by TSTRANSCO to the Hon'ble TSERC.

reply:- (c)

The Planning criteria Generation and transmission capacity is planned to meet the Peak Demand. The demand pattern in the state is not uniform throughout the day or throughout the year. Generation is being back down to maintain load generation balance particularly during off peak hours and solar generation period.

The Demand particulars for the year 2018-19 & 2019-20 upto (December 2019).

Year	Max Demand (MW)	Min Demand (MW)	Max Energy	Min (MU)
2018-19	10818	2950	233.44	122.80
2019-20	11703	4685	241.67	136.84

The Demand varied from Minimum 2950 MW to Maximum 10818 MW in the year 2018-19 and 4685 MW to 11703 MW in the year 2019-20. Also energy varied from minimum 122.80 MU to Maximum 233.44 MU in the year 2018-19 and 136.84 MU to 241.67 MU in the year 2019-20. The Demand pattern of Telangana state varies from Off Peak to Peak in a day from 1500 – 3000 MW depending on Seasonal Loads particularly Agriculture. In the State there are two farming crop seasons i.e., Kharif and Rabi. Further, during Rabi Season, Summer demand also gets added to Agricultural demand.

After the formation of Telangana State, as per the RE policy, Solar Generation is integrated aggressively into the system to meet RPPO obligation. The total solar generation installed capacity during the year was 3489 MW in year 2018-19 and 3650 MW in year 2019-20. This Generation is available in the day time in a ramp up/ramp down pattern with variation on hour to hour and the day to day basis, which is mostly uncertain.

So far, there is no forecast and scheduling mechanism is established in the State. The generation from Solar whatever it comes has to be absorbed and it has to be treated as must run. The balancing has to be carried out only by varying conventional Thermal Generation by way of backing down/recall and hydel if available.

Under these circumstances, to handle off Peak to Peak demand variations of 1500 - 3000 MW and 3000 MW availability variation due to Solar in the day time backing down of conventional generators is inevitable during Off Peak and Maximum Solar generation period.

In addition to this the Lift Irrigational loads are seasonal and vary depending up on various parameters. From the above it can be concluded that, utilization power system network vary depending up on demand pattern of various consumers. It can't be construed that it is underutilized. Therefore, the YTC and SLDC charges are to be recovered on yearly basis for the total system built.

reply:- (g) & (h)

Transmission lines are constructed to evacuate the power from Generating Stations and are completed to match the commissioning schedule of Generating Stations. Further, it is to inform that some of the lines are required for providing startup power for Generating Units and hence they are to be constructed before commissioning of Generating Units. These lines are used for providing startup power for Generating Units initially and will be used for evacuation of power after commissioning of Generating Units.

reply:- (i)

Based on the long term power forecast with the upcoming lift irrigation projects, the following steps were taken by the power utilities.

(i) TSGENCO initiated steps for setting up of Thermal Stations as below:

1. KTPS-VII (1x800 MW) - 800 MW 2. BTPS - (4x270 MW) - 1080 MW 3. YTPS - (8x500 MW) - 4000 MW

Total - 5880 MW

(ii) PPAs were entered by TSDISCOMs with TSGENCO in respect of KTPS-VII stage & BTPS on 19th March 2018 & 17th September 2019 respectively and submitted to the Hon'ble Commission for consent.

- (iii) Further, TSDISCOMs have also decided to enter into PPA with TSGENCO in respect of Yadadri Thermal Power Station (YTPS) and the same is under process.
- (iv) Long term PPA for supply of 1000 MW was entered by TSDISCOMs with Chhattisgarh State DISCOM (CSPDCL) and submitted to Hon'ble Commission for consent of the PPA. The Hon'ble Commission also issued approval to the provisional tariff of Rs.3.90/kWh, till the final tariff order is passed by Chhattisgarh State Commission.
- (v) A long term PPA was also signed by TSDISCOMs with NTPC in respect of (2x800 MW) Telangana Super Thermal Power Project, Phase-I and the PPA was submitted to the Hon'ble Commission for in-principle consent, which is under the consideration of the Commission.
- 4. TSTRANSCO has not explained whether transmission capacities were added during the last three years, as approved by the Commission. If not, the reasons for the same need to be explained. Since TRANSCO has not given actual rates of interest on term loans, the same needs to be examined to ascertain whether such rates are prudent or not going by the rates of interest prevailing during the last three years, especially in view of the trend of rates of interest coming down. Cost of debt is projected by TSTRANSCO at 11%. This is inflated and needs to be pruned in tune with market trends. TRANSCO also may explore the possibility of swapping loans to get benefit of relatively lower interest rates.

The licensee has projected cost of debt (interest rates) at 11% p.a., The rate of interest 11% was proposed based on the prevailing lending rates in the financial debt market. As suggested by the objector, every effort is being made to minimize the interest rates and negotiating with Financial Institutions from time to time to reduce the interest rates according to the debt market conditions. Further, the high cost term loans (if any) are being liquidated from time to time based on the internal cash flows of the company, to reduce the interest cost burden. The copies of sanction letter for the term loans sanctioned by M/s.Rural Electrification Corporation (REC) Limited and M/s.Power Finance Corporation (PFC) Limited

from FY 2014-15 to FY 2018-19 are enclosed herewith for reference. Further, it is assured that every effort will be taken to negotiate the interest rates with the Financial Institutions to avail the term loans at lower rate of interest.

Generally projects will be delayed due to the RoW problems land/acquisition & court cases.

400kV Sub-stations and Lines which were approved by Hon'ble Commission for FY 2016-2019 are commissioned during the last three years.

The 400kV Jangaon SS and connected 400kV lines were planned to commission during FY 2018-19, but they are delayed due to frequent hampering of works at Jangaon SS by encroachers & local public and severe RoW issues in erection of Towers and Stringing of lines.

However, after resolving the land issue at Jangaon SS and RoW issues in erection of Towers and Stringing of lines, 400/220kV Jangaon SS and 400kV Jangaon-Tippapur QMDC line were commissioned on 14.05.2019, 400kV Jangaon-Julurupadu QMDC line was commissioned on 26.06.2019.

Further, it is to inform that the Lines and Sub-stations of Palamuru-Rangareddy Lift Irrigation Scheme were planned to commission during FY2018-19, but could not be taken up by TSTRANSCO due to delay in payments from I&CAD and these works will be taken up in co-ordination with I&CAD.

The Transmission capacities were added as approved by the Hon'ble commission for last three years of 3rd control period (FY 2016-17, 2017-18 & 2018-19).

5. The contention of TSTRANSCO that the main reason for increase in revenue accrued from transmission charges during the said period is increase of revenue from open access customers is untenable. Since, the ERC had determined transmission charges in the tariff order based on all approved expenditures, capitalization of assets and growth in generation capacity, demand and contracted capacity, including that of open access customers, it can be reasonably asserted that the transmission charges turned out to be inflated, with no periodical review of actual performance and revision of the transmission charges by the Commission. In other words, the surplus revenue accrued to TSTRANSCO during the said

period is not on account of efficiency improvement, but due to collection of inflated transmission charges. TRANSCO has to make it clear whether it has charged and collected transmission charges from the DISCOMs for non-utilization of contracted capacity, on the one hand, and from others for utilization of such capacity not utilized by the DISCOMs. Any interest during construction for delays in respect of completion of projects/schemes should not be allowed, unless the Commission's approval for extension in the completion schedule is obtained in advance. There is every need to monitor the way orders or contracts are being given for execution of works and projects and purchases of materials by TSTRANSCO to ensure that real and transparent competitive bidding is scrupulously followed, expenditure incurred is prudent and time schedules are adhered to. The particulars of such delays, if any, project/scheme-wise and cost escalation, including interest during construction, during periods of such delays should be furnished and examined in order to determine permissible expenditure during the last three years. I request the Hon'ble Commission to direct TRANSCO to provide the same information to us.

TSTransco reply:-

The licensee has proposed an amount of Rs.1001.75 crores of benefit to be passed on to customers pertaining to FY 2014-15 to FY 2018-19 (Provl.). Out of Rs.1001.75 crores, the Hon'ble Commission has already adjusted an amount of Rs.634.60 crores by way reduction in tariff while fixing the tariff for FY 2017-18 and FY 2018-19 as "Mid Term Review for FY 2014-15 and FY 2015-16". Hence, the licensee has proposed balance amount of Rs.367.15 crores in FY 2019-20.

As submitted, there is an increase in revenue of Rs.505.98 crores for FY 2014-15 to FY 2018-19. The increase in revenue is mainly due to increase in revenue from Open Access Customers.

The licensee collects the transmission tariff as fixed/approved by the Hon'ble Commission for the Contracted capacity of respective user. Since the tariff is fixed/constant, any increase in revenue than the approved revenue is due to increase in usage of capacity, but not collection of higher tariff.

The following is the position of Open Access Capacity & Revenue approved by the Hon'ble Commission and Actuals for FY 2014-15 to FY 2018-19 (Provl.).

	Approved		Actuals		Variance	
Year	Capacity (MW/per Month)	Revenue (Rs. in Crs)	Capacity (MW/per Month) (*)	Revenue (Rs. in Crs)	Capacity (MW/per Month)	Revenue (Rs. in Crs)
1	2	3	4	5	6 (4-2)	7 (5-3)
2014-15	226.34	14.78	1159.40	75.70	933.06	60.92
2015-16	253.28	23.30	1988.18	182.90	1734.90	159.60
2016-17	283.46	31.08	1582.92	173.54	1299.46	142.46
2017-18	1.00	0.07	969.71	65.53	968.71	65.46
2018-19	1.00	0.09	337.62	29.63	336.62	29.54
Total	765.08	69.32	6037.83	527.30	5272.75	457.98

(*) 12 months average

It could be seen from the above that, there is an increase in revenue from open access customers due to increase in the usage of 5273 MW for last 5 years than the approved Tariff Order quantity.

The details of delayed projects for the 3rd control period is enclosed in the annexure. In this regard, it is to inform that there is no cost escalation for the completed projects/schemes as all the works executed as per the Purchase Order rates. No revision of rates will be issued for executing the works as per the terms and conditions of purchase orders

6. TSTRANSCO has to make is clear whether availability of 807.31 MW as the share of TSDISCOMs (53.89%) from the four new gas-based projects (GVK extension, GMR Vemagiri, Konaseema and Gauthami with a total installed capacity of 1499 MW) is considered or not. As and when supply of natural gas is recommenced to these projects, TSDISCOMs will get additional 5657.62 MU as their share from these projects with a PLF of 80%. Is the Transmission capacity created for evacuating this power being utilized for evacuating power drawn from other sources or lying idle? The projected generation capacity is and will be available – 15,235 MW in 2019-20, 17,564 MW in 2020-21, 17,569 MW in 2021-22, 19,588 MW in 2022-23 and 21,114 MW in 2023-24. What are the estimated quantums of power available from all these sources and required for meeting demand during the next four years of the 4th control period? What is the estimated availability of surplus power during the same period?.

- (i) It is to submit that the PPAs in respect of aforesaid gas based power projects are defunct projects and there has been no gas supply (input fuel) for the same since March 2013 and hence no power generation.
- (ii) Further several litigations are pending before various legal forums. Therefore, there would be no possibility of availing power from these gas power projects in the near future.
- (iii) The transmission capacity created to the extent of the gas projects capacity share is being utilized in the pool for availing capacities of other projects such as Solar, Wind, Short term power procurement etc.

In light of the above, TSTRANSCO has taken into consideration of the upcoming Thermal Generation Capacities and also other anticipated peak loads, such as Lift Irrigation Loads as per the demand projections given by Irrigation Department, GoTS and further extension of 24x7 Power Supply to Agricultural Sector, while taking up steps for additional transmission capacity and accordingly sought the approval of the Commission for the Capital expenditure incurred.

7. TSTRANSCO has submitted that the income tax component on the return on equity @14% on 25% of regulated rate base has been computed with the current rate of corporate tax. For generation tariff, income tax is allowed as pass through on return on equity only. Here, in the case of transmission business, 14% income tax is allowed by the Commission on RoE worked out on the basis of regulated rate base, irrespective of actual equity invested by TSTRANSCO. Therefore, we request the Hon'ble Commission not to entertain TSTRANSCO'S claim for income tax on normative basis, but confine to return on equity actually provided by TRANSCO. When return on equity @ 14% is allowed, income tax on the same can be borne by the company concerned. I request the Hon'ble Commission to consider to dispense with the practice of allowing income tax to be paid by TSTRANSCO as pass through to be collected from the consumers as a part and parcel of transmission charges.

With regard to Return on Equity and Taxes, Regulation 5 of 2005 stipulates that:

"Return on Equity and shall be determined at the beginning of the Control Period after considering CERC norms, Transmission Licensee's proposals, previous years' D/E mix, risks associated with distribution & supply business, market conditions and other relevant factors"

"Taxes on Income, if any, on the income stream of the licensed business of the Transmission Licensee shall be treated as an expense and shall be recoverable through ARR."

As per the Tariff Order for 3rd MYT Control Period from FY 2014-15 to FY 2018-19, the Hon'ble APERC and TS ERC have considered "Return on Equity" @14% on 25% portion of Regulated Rate Base. Accordingly, the licensee has claimed "Return on Equity" @14% on 25% portion of Regulated Rate Base calculated as per the methodology prescribed by the Hon'ble Commission. The corresponding income tax on the proposed Return on Equity was considered as expense in the ARR as per the Regulation 5 of 2005.

Further, it is to inform that the income tax component was estimated with the existing Minimum Alternate Tax (MAT) rate, since the Company is paying Minimum Alternate Tax during last 4 years. The CERC Regulation also stipulates that, in case transmission licensee is paying MAT, the tax component is to be considered with MAT rate only.

8. Regarding exemption of transmission charges for solar, wind and mini-hydel power generators, TSTRANSCO has pointed out certain contradictions in between the tariff order given for the years 2017-19 by the Commission and solar policy of the State Government. TRANSCO has requested the Commission to limit the exemption of transmission charges as per the Government policy to only captive solar developers who commission their plants within the operative period, i.e., five years from the date of policy (up to 31.05.2020) and exemption of upto 10 years from the date of commissioning of the plant with a proper reimbursement mechanism from the Government. This request of TSTRANSCO is fully justified. When Government wants exemption of transmission charges for any power

plant/plants, that burden should not be imposed on the DISCOMs and their consumers of power. It should be borne by the Government. Extending such exemption to other generators of wind, mini hydel and solar for third party sale also by the Commission is irrational and unfair for the following reasons, among others:

TSTransco reply:-

Suggestive and TSERC may take a view.

9. TSTRANSCO has submitted that the DISCOMs have projected their installed capacity as their contracted capacity and that the demand from open access consumers has been estimated and added to the total contracted demand of the DISCOMs. Compared to the growth of contracted capacity, what have been the growth of operating expenses and the percentages of employees' cost out of total operating costs for the period from 2014-15 to 2018-29, year-wise? As a part and parcel of improving efficiency, expenses need to be regulated to prudent levels.

TSTransco reply:-

The following is the position of total operating expenses and share (%) of employees cost for the period from 2014-15 to FY 2018-19 (Provl.)

(Rs. in crores)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Operating & Maintenance Exp.	298.01	392.45	491.83	502.66	713.48	2398.43
Employees Cost	206.28	253.80	315.17	337.57	511.37	1624.20
% of Employees Cost	69%	65%	64%	67%	72%	68%

10. TSTRANSCO has submitted that as per the existing transmission charges billing methodology, transmission charges are being levied on TSDISCOMs for the approved contracted capacities given in transmission tariff order. However, due to under-generation in thermal power projects and hydel projects due to coal shortage and low inflows to reservoirs, etc., there used to be shortage of power. To cope up this shortage of power, TSDISCOMs purchase power under short-term

power purchases from sources which are not mentioned in transmission tariff order. If TSTRANSCO levies transmission charges on these purchases also, TSDISCOMs will have to pay transmission charges for their long-term capacities and also for short-term purchases made from intra-State and inter-State sources. This will become double billing on DISCOMs and the revenue received by TSTRANSCO will become more than the revenue required. Therefore, TSTRANSCO has requested the Hon'ble Commission to exempt the DISCOMs from payment of transmission charges on short-term purchased made from both intra-State and inter-State sources as long as their peak load is within their approved contracted capacity given in transmission tariff order. It is a fair proposal to avoid undue burden ultimately on the consumers of power. I request the Hon'ble Commission to give its approval to this proposal of TRANSCO.

TSTransco reply: -

Suggestive, Hon'ble TSERC may take a decision.

11. TSTRANSCO has submitted that, as short-term open access transactions, especially inter-State and IEX transactions, take place only for some days or hours, it is better to determine rate of transmission charges in the units of MW/Hr. At present, the rate of transmission charges is being given in KW/month units and TRANSCO is converting the rate in KW/month into rate for MW/Hr by using the formula given by it. TRANSCO's request to give transmission charges both in KW/month and MW/Hr units in the transmission tariff order needs to be considered by the Hon'ble Commission.

TSTransco reply:-

Suggestive, Hon'ble TSERC may consider the submission.

12. TSTRANSCO has submitted that depreciation has been calculated for every year on all the fixed assets capitalized up to the previous year considering the rates notified by the Ministry of Power, Gol. It has proposed to increase depreciation amounts from Rs.899.66 crore in 2019-20 to Rs.1666.36 crore in 2023-24. Higher rates of depreciation lead to frontloading of tariff. Permitting recovery of depreciation charges over the useful lifespan of the assets would ensure a fairer

recovery of the same by TSTRANSCO, though over a longer period of time. We request the Hon'ble Commission to allow least possible depreciation rates, or at least, the lowest depreciation rates as per the regulations and norms of CERC or Ministry of Power, Gol, whichever are lower.

TSTransco reply:-

The licensee has claimed depreciation on all the fixed assets from the date of put to use on Straight line method with depreciation rates notified by the Ministry of Power, Govt. of India. The Hon'ble Commission is requested to consider the same while fixing the tariff for 4th Control Period.

In this regard, it is to submit that the depreciation amount claimed through tariff is being utilised for repayment of term loans. The Financial Institutions are sanctioning term loans with repayment period of 10 to 12 years only. As such, there is a cash outflow of 7% to 8% of outstanding term loans every year. Allowing lower rates of depreciation will have an impact on the working capital/cashflows of the licensee. Hence, the Hon'ble Commission is requested to consider the depreciation rates as per Ministry of Power, Govt. of India.

13. Para 8.1 of national tariff policy states that implementation of multi-year tariff (MYT) framework "would minimize risks for utilities and consumers, promote efficiency and appropriate reduction of system losses and attract investments and would also bring greater predictability to consumer tariffs on the whole by restricting tariff adjustments to known indicators on power purchase prices and inflation indices. The framework should be applied for both public and private utilities." Experience has confirmed that in the case of APTRANSCO in the undivided Andhra Pradesh and also in the case of TSTRANSCO that the claimed objectives of MYT are belied. Irrespective of claims of efficiency improvement, MYT has led to collection of excess tariffs by TSTRANSCO, as was the case with APTRANSCO, from the DISCOMs. We request the Hon'ble Commission to review implementation of its MYT order by TSTRANSCO, SLDC and the DISCOMs annually by holding public hearings and take further necessary action periodically, including revision of tariffs annually, if necessary.

TRANSCOs are initially needed to file annual ARRs but to enable them with alertness in future expansion plans, the multi year tariff (MYT) is stipulated by the Electricity Act 2003.

Hon'ble TSERC in its Tariff Order for the 1st MYT control period on ARRs of Transmission Tariffs (FY 2006-07 to FY 2008-09) & SLDC Charges (FY 2006-07) decided to go in for a multi year tariff framework in accordance with the National Electricity Policy and accordingly notified on 30.11.2005, the APERC (terms and conditions for determination of Transmission Tariff) Regulation 5 of 2005. As per this regulation, the Transmission Licensee has to make all the filings, hitherto for a control period, generally of 5 years, the first control period, however for 3 yrs (2006-07 to 2008-09).

Accordingly erstwhile APTRANSCO submitted ARR filings for the 2nd MYT (FY 2009-10 to FY 2013-14), 3rd MYT (FY 2014-15 to FY 2018-19).

Due to bifurcation of the erstwhile Andhra Pradesh into Telangana & residuary Andhra Pradesh in the year 2014, TSTRANSCO submitted the ARR filings for the balance period of 3rd MYT i.e., for FY 2017-18 & FY 2018-19 on 30.11.2016 and Hon'ble Commission issued orders in May 2017 & June 2017.

TSTRANSCO submitted ARR filings for 4th MYT period from FY 2019-20 to FY 2023-24 on 30.11.2019.

14. In view of the above explained situation, I once again request the Hon'ble Commission to consider need for long-term load forecast and thoroughly examine with due diligence and determine realistically the capacity addition required both in generation and transmission based on a realistic long-term load forecast, resources plan and procurement plan that should be submitted by the DISCOMs, and give its order after holding public hearings. Based on that, the Hon'ble Commission should direct both the DISCOMs and TSTRANSCO to confine their projections of, and plans and investments for, requirement of energy, purchases and capacity additions to permissible extents and give its approvals accordingly to

ensure orderly development of power sector and reasonable tariffs to consumers. Based on that and as per applicable regulations and parameters, capital investment, revenue requirement and transmission charges proposed by TSTRANSCO for the fourth control period should be pruned and determined realistically.

TSTransco reply:-

Suggestive.

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REPLIES TO SLDC POINTS:

1. In the subject proposals, TSTRANSCO has shown a total deficit of Rs. 19.69 crore and sought it under true-up for the period 02.06.2014 to 2018-19 after adjusting special appropriation of Rs.20.75 crore trued down by the Commission in the earlier MYT order, due to lesser capitalization of fixed assets than envisaged in the tariff order for SLDC issued by the Commission. However, during the same period, the employee cost increased by Rs.52.03 crore than what was determined by the Commission in the tariff order. After reduction of administration, general, repairs and maintenance expenditure, it has shown an increase of Rs.37.36 crore in operating expenses. Employees' cost increased from Rs.24.75 crore for the year 2015-16 as permitted in the tariff order to Rs.59.69 crore for the year 2018-19. While employees' cost, as permitted by the Commission, for the year 2015-16 works out to 71.78%, it increase to 89.49% for 2018-19 out of total operating expenses. Compared to reduction in expenses under other heads of operating expenses, the increase in employees' cost is substantial, both in absolute terms and as a percentage. In view of higher employees' cost vis a vis lesser capitalisation and lesser expenditure on other items. I request the Hon'ble Commission to direct the utility to confine employees' cost to prudent levels. TSTRANSCO has shown a reduction of Rs.13.13 crore in capital cost, an increase of Rs.22.41 crore of revenue and of other income by Rs.2.20 crore than what was permitted by the Commission for the said period.

TSTransco reply:-

The main reason for increase in Employees Cost is due to revision of pay scales to regular employees with effect from 01/04/2014 and 01/04/2018 during 3rd MYT Control Period. Further, there is an increase in Dearness Allowance (D.A.) rates than projected for the period from FY 2014-15 to FY 2018-19.

However, while estimating SLDC Operating charges for 4th MYT Control Period, the Employee Cost is estimated based on actual for FY2018-19 duly restricting to proposed staffing pattern. Hence, there is decrease in Employee Cost Projections for 4th MYT Control Period for SLDC Business.

2. TSTRANSCO has proposed a total capital cost of Rs.47.375 crore for the 4th control period for SLDC. It has proposed an interest rate of 11% on loans to be taken for the purpose. In view of reduction of interest rates by Banks and financial institutions, interest rate of 11% is obviously on the higher side. I request the Hon'ble Commission to determine the interest rate realistically in tune with market trends.

TSTransco reply:-

The licensee has projected cost of debt (interest rates) at 11% p.a., The rate of interest 11% was proposed based on the prevailing lending rates in the financial debt market. As suggested by the objector, every effort is being made to minimize the interest rates and negotiating with Financial Institutions from time to time to reduce the interest rates according to the debt market conditions. Further, the high cost term loans (if any) are being liquidated from time to time based on the internal cash flows of the company, to reduce the interest cost burden.

TSTRANSCO has proposed annual fee per MW per annum for SLDC based on 3. total generation capacity, including open access capacity, for the 4th control period, to the tune of Rs.3844 for 2019-20, Rs.4708 for 2020-21, Rs.5233 for 2021-22, Rs.4890 for 2022-23 and Rs.4662 for 2023-24. If substantial surplus power is available during the 4th control period from the existing capacities and capacities proposed to be added, generation capacity may remain idle proportionately due to backing down and their inability to compete in the market and sell surplus power. In other words, it results in under-utilisation of SLDC services but with full payment of annual fee and operating charges for the entire generation capacity, if added fully within the stipulated timelines, as has been the case with transmission and distribution charges. Therefore, in order to avoid such unwarranted payments and to ensure putting into use of generation, transmission and distribution capacities, as well as SLDC services, a realistic determination of long-term load forecast and resources and procurement plan and ensuring timely completion of projects and works relating to generation, transmission and distribution, as well as SLDC, need to be ensured.

The Planning criteria Generation and transmission capacity is planned to meet the Peak Demand. The demand pattern in the state is not uniform throughout the day or throughout the year. Generation is being back down to maintain load generation balance particularly during off peak hours and solar generation period.

The Demand particulars for the year 2018-19 & 2019-20 upto (December 2019).

Year	Max Demand (MW)	Min Demand (MW)	Max Energy	Min (MU)
2018-19	10818	2950	233.44	122.80
2019-20	11703	4685	241.67	136.84

The Demand varied from Minimum 2950 MW to Maximum 10818 MW in the year 2018-19 and 4685 MW to 11703 MW in the year 2019-20. Also energy varied from minimum 122.80 MU to Maximum 233.44 MU in the year 2018-19 and 136.84 MU to 241.67 MU in the year 2019-20. The Demand pattern of Telangana state varies from Off Peak to Peak in a day from 1500 – 3000 MW depending on Seasonal Loads particularly Agriculture. In the State there are two farming crop seasons i.e., Kharif and Rabi. Further, during Rabi Season, Summer demand also gets added to Agricultural demand.

After the formation of Telangana State, as per the RE policy, Solar Generation is integrated aggressively into the system to meet RPPO obligation. The total solar generation installed capacity during the year was 3489 MW in year 2018-19 and 3650 MW in year 2019-20. This Generation is available in the day time in a ramp up/ramp down pattern with variation on hour to hour and the day to day basis, which is mostly uncertain.

So far, there is no forecast and scheduling mechanism is established in the State. The generation from Solar whatever it comes has to be absorbed and it has to be treated as must run. The balancing has to be carried out only by varying conventional Thermal Generation by way of backing down/recall and hydel if available.

Under these circumstances, to handle off Peak to Peak demand variations of 1500 - 3000 MW and 3000 MW availability variation due to Solar in the day time backing down of conventional generators is inevitable during Off Peak and Maximum Solar generation period.

In addition to this the Lift Irrigational loads are seasonal and vary depending up on various parameters. From the above it can be concluded that, utilization power system network vary depending up on demand pattern of various consumers. It can't be construed that it is underutilized. Therefore, the YTC and SLDC charges are to be recovered on yearly basis for the total system built.

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